AN INVESTIGATION OF THE LINKAGES BETWEEN LEADERSHIP, LEARNING AND STUDENT ENGAGEMENT

Submitted by

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a thesis submitted in partial fulfilment of the requirements of the degree of

Doctor of Education

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May 2011

Statement of Authorship and Sources

This study contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma. No other person's work has been used without due acknowledgement in the main text of the study. This study has not been submitted for the award of any degree or diploma in any other tertiary institution. All research procedures reported in the study received the approval of the relevant Ethics/Safety Committees.

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Abstract

Education, or specifically, the nature of the learning experiences occurring in the classrooms of today, has been a fertile area for researchers and commentators as the discourse engages with the need to provide authentic learning experiences for students of the 21st century. This study explored the experiences of participants in a change project conducted in a Catholic secondary and primary school. The project entitled InteL, (an abbreviation of Integrated Learning), was part of a larger venture involving the Australian Catholic University and a further eight schools in four Catholic Dioceses across New South Wales. This venture was called Leaders Transforming Learning and Learners (LTLL). Using InteL as its base, this study examined the linkages between leadership and learning as it affected student engagement in two schools. The research is significant because it explored the relationship between leadership, learning and student engagement.

This study looked at a broader definition of leadership which moved beyond the formal school leadership of the Principal or the Assistant Principal to leadership that was both distributed and transformative in nature (Crowther, 2004; Fullan, 2003b; Harris, 2005, 2008, 2009a; Leithwood and Jantzi, 2005a). It explored the impact of leadership on authentic learning experiences and student engagement. The focus was on leadership for learning. The emphasis was on an investigation of leadership that had an impact on and increased the engagement of students through authentic learning experiences.

The conceptual framework derived from the literature drives the research through the discovery of the participants' experiences in the InteL project. The framework grew from the scholarly literature reviewed and coalesced around the central concepts of authentic learning, leadership, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability.

The research paradigm used in this study was that of interpretivism and the epistemology was constructionism. The theoretical perspective of symbolic interactionism was appropriate for this study because of the creation of meaning through social interaction. As a research method, case study was used because it allowed the researcher to explore the experiences of the participants in their own context.

Data was initially collected in a questionnaire and subsequently through focus group interviews, observations and document analyses throughout 2007 and through professional discussion. Ongoing professional dialogue with some of the participants benefited this study by maintaining a more current perspective throughout 2008 and 2009. Theory grounded in these data has informed the findings and resulted in recommendations for future directions.

The conceptual framework of this study was used to present the data. As such, the constructs of leadership, beliefs and values expressed as spirituality and moral purpose, vision and sustainability were used to discuss their impact on the creation of authentic learning experiences in a high school and a primary school.

The findings of this research and the recommendations that flow from it are detailed in Chapter 6. This information is structured around the original concepts that shaped this study: leadership, learning and student engagement. Under the heading of leadership it is suggested that a different construct of leadership called *"connecting leadership"* is required to react to the needs of today's learners. A new conceptual framework was developed to more adequately explain how authentic learning experiences could be created in school environments. Following from this, the implications for schools, systems and universities are outlined.

Acknowledgements

I would like to thank my principal supervisor Associate Professor Charles Burford, for his support, guidance and patience over the last six years. His involvement in this study and the Leaders Transforming Learning and Learners (LTLL) project has ensured the growth of authentic learning experiences in many schools. I also acknowledge Dr Annette Cunliffe, my co-supervisor, for her knowledge of science as well as her wisdom and assistance. To my 'second best friend', Associate Professor Denis McLaughlin, thank you for your robust encouragement in the early stages of the research and to Associate Professor Mick Bezzina for similar encouragement towards the end of the process. Dr Roger Vallance, thank you for demystifying statistics and crunching the numbers for me.

I acknowledge the assistance and generous support of the two schools that participated in the study, particularly the Principals, teachers and students who were directly involved in the LTLL project as well as this study. As leaders you are making a positive difference.

Thank you to my former colleague Melanie Pacheco. This study would not have been completed without your generous assistance. To Dr Michael Maroney who commenced the Ed. D journey with me, your encouragement and moral support kept me focussed during the difficult times, thank you.

Finally, to my family, I appreciate your encouragement. Thank you, especially to my daughter Caitlin who is responsible for the graphics in this study, and to my wife Jayne, without whose love, belief and unwavering support none of this would have been possible.

This study is dedicated to my parents, Sid and Bev, whose dream for me was a university education.

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CHAPTER 1: THE NATURE OF THE STUDY

1.0   INTRODUCTION

Over a twenty-nine year period in education, experiences as a teacher, middle leader, Assistant Principal and Principal in six secondary schools across the western and south-western suburbs of Sydney and the Illawarra have framed this researcher's perspective on how schools should operate. Put simply 'schools are for kids', and 'it is all about learning and teaching'. These statements are significant because they shift the focus of education to where it should be, on the student as learner. It is not so much about how teaching occurs, as it is about how students learn. Implicit in this statement is the significance of relationship, the conduit between the teaching and the learning, or more importantly, the teacher and the learner. From this belief arose questions about the role leadership plays in fostering this learning.

The research is embedded in a project conducted through a partnership between the Flagship for Creative and Authentic Leadership at the Australian Catholic University and the Diocese responsible for the two schools at the centre of this study. The joint University/Diocesan project was entitled Leaders Transforming Learning and Learners (LTLL) and involved nine NSW Catholic schools from four dioceses coming together to work with the University in a pilot project focussed on leadership for learning and learners. The purpose of the project was to impact on the quality of learning by linking leadership and learning.

LTLL had as its basis a text by R.J. Starratt titled Ethical Leadership (2004), which presupposed that, within the context of a school, ethically based decisions lead to the creation of authentic learning experiences. In this sense, ethical decisions refer to the "underlying beliefs, assumptions, principles, and values that support a moral way of life" (Starratt, 2004, p.5). In order to give expression to these principles it is necessary to question

whether there is a "moral vacuum of the school that empties the work of students and teachers of its authenticity and significance" (Starratt, 2004, p.2) and then, as Starratt asserts, puts into place processes that create change and lead to authentic learning.

The fundamental belief that underpinned the LTLL project was that authentic leadership could transform learning in schools (Bezzina, Burford and Duignan, 2007; Bezzina and Burford, 2010). Starratt (2004) outlined seven goals which focused on how authentic leadership can help to transform schools to ensure that authentic learning and teaching not only occurs, but that it is sustainable. At the heart of the LTLL project was the principle that, if teachers become authentic and ethical in leadership, then this must transform the teaching within schools, which must also be authentic and ethical. In essence, it is leadership transforming learning.

1.1   CONTEXT OF THE STUDY

This study was situated in two schools, a high school and a primary school within a Catholic Diocese in New South Wales and was supported by the Australian Catholic University. The Diocesan Catholic Education Office responsible for the two schools encouraged their involvement in the project because it was believed that it would provide an avenue to explore the learning and teaching agenda in a new and innovative way. As a result of their participation in the LTLL Project the two schools developed a project titled Building Rich Integrated Diverse Growing Experiences (BRIDGE). BRIDGE was an innovative transition program between a secondary and primary school incorporating the creation and implementation of a joint learning program across the Year 6 – Year 7 transition period. It was implemented for the first time in the 2006 school year. As is explained in more detail later, an evaluation of the project toward the end of 2006 saw BRIDGE reborn in 2007 as Integrated Learning or InteL. BRIDGE, within the LTLL framework, was the platform for research that explored leadership and student learning and their interrelationship in this context.

The research was set in two schools identified as Regional Catholic High School and Feeder Catholic Primary School. Regional is a co-educational Year 7 to Year 12 school of almost 1000 students, situated in a semi-rural coastal area south of Sydney. Feeder had around 400 students, Kindergarten to Year 6 and is situated adjacent to the high school. It is the main contributor to the high school's Year 7 intake.

Traditionally there has been little movement of teaching staff in either school and a large number of staff has been at both schools for a significant number of years. Therefore the schools experience tensions specific to this environment. This fosters a relatively traditional curriculum where the focus can be on teaching rather than learning and a reluctance to change practice. The present situation has reinforced the thinking of those teachers reluctant to explore change in the area of learning and teaching.

Despite the opening of two new high schools nearby, enrolment applications at Regional have been largely unaffected. Each year the school has received consistent interest in enrolment for the following Year 7 cohort and has remained a six-stream school. This reflects some of the conservative characteristics of the parents who opt to send their children to Regional, believing that it is established and has a good 'track record' with Higher School Certificate results.

It was a similar story for Feeder where over the past few years the growth in student numbers has placed pressure on the number of classes offered per year. It is anticipated that within the short term Feeder will grow from a two to three stream school.

To challenge this perceived conservatism in the high school, in October 2004, Regional was selected to be the Diocesan representative in a project that focussed on 'authentic leadership for transforming learning in Catholic schools'. This was to be conducted in partnership with the Flagship for Creative and Authentic Leadership at the Australian Catholic University and

the project was entitled Leaders Transforming Learning and Learners (LTLL). The Diocesan Office encouraged Regional's involvement in the project. After discussions between Regional's leadership team and Diocesan personnel, it was decided that Feeder should also join the LTLL project in order to create a collaborative venture between the schools.

To support the school based teams in the development of their individual projects The Australian Catholic University provided presentations, seminars and electronic networking. There was also a School Self Reflection Tool (see Appendix 1 p.204) that required participants to focus on the Values of Catholicity, Excellence, Justice, Transformation and Common Good, as well as the Ethics of Authenticity, Presence and Responsibility, and the Educational Leadership components of Distributed Responsibility, Evidence Based Practice, Professional Learning, Sustainability, Culture and Community, Change Management, External Networking and Capabilities. In essence, the InteL project at the heart of this study was the shared vision for these two schools that grew from participation in the broader LTLL project.

The conceptual framework of the LTLL on the following page was used as a reference point for both schools when identifying a specific project for implementation. The schools' Principals were aware of the need to create more meaningful communication between the campuses and establish genuine relationships to facilitate learning between staff and students across the campuses of both schools. Management teams were formed in both schools consisting of the Principal and Assistant Principal and two teachers. Meetings commenced in Semester 2, 2005 to discuss what form the project would take.

Out of these discussions the Building Rich Integrated Diverse Growing Experiences (BRIDGE) project was born. The project itself was constructed around the creation and implementation of a joint learning program across the Year 6 – Year 7 divide and was implemented in 2006. BRIDGE within the LTLL framework was the platform for research that explored leadership and learning and their interrelationship in this context. An explanation of the

underlying concept of the project can be found in Appendix 2 (p.238) and an outline of the theoretical underpinnings and further curriculum content is listed in Appendix 3 (p.241).

AUTHENTIC LEADERSHIP FOR TRANSFORMING LEARNING IN CATHOLIC SCHOOLS

VALUES	ETHICS	LEADERSHIP PRIORITIES	LEARNING PROCESSES	
Catholicity	Authenticity	Distributed responsibility	Curriculum standards and targets	Transformed Learner
Excellence		Evidence based practice	School and class organisation	
Justice	Presence	Professional learning	Pedagogy	
Transformation		Sustainability	Intervention programs	
Relationship		Community and Culture	Monitoring, assessment and reporting	
Common Good	Responsibility	Change management		
		External networking		

Figure 1.0   The conceptual framework for LTLL

The core focus of BRIDGE was the development of the learning program across Years 6 and 7. The idea was to utilise enquiry based learning to create sustainable learning environments in order to develop reflective, self-directed learners who engage in a range of learning opportunities that address specifically identified learning outcomes. It was anticipated that this process would create experiences that would encourage all participants in the project to grow as learners and leaders. It also acknowledged the assertion that "learners and learning have changed" (Caldwell, 2005, p.3) and schools will be organised around students "and that the self in self-management is the student" (Caldwell, 2005, p.3). These ideas also resonate with enactivist

theory that places the student, not the teacher, at the centre of learning (Begg, 2002). At the conclusion of each semester all student projects were published to an audience of their peers and at the end of the year, the audience expanded to include parents and invited guests from the community. The ultimate goal was to "enhance students' progress, achievement and development, to prepare them for a changing world" (Stoll, 1999, p.504). What BRIDGE did was to place the "focus on learning first, then achievement, then testing" (Hargreaves and Fink, 2006, p.32) to ensure that the learning remained authentic.

BRIDGE was regularly reviewed both formally and informally during its first year of operation. The students completed a mid-year survey and then again at the end of the year (see Appendix 4, p.245 and Appendix 5, p.247). Following the analysis of the surveys the staff met and discussed the findings. What occurred was a wide-ranging discussion that focussed on the data. The trends that emerged were analysed with a view to developing the program further.

The result was to create InteL, a project that maintained the integrity of BRIDGE but also responded to student and staff concerns. The change in the name of the program was important because BRIDGE had come to represent the broader relationship between Regional and Feeder and incorporated activities other than the classroom program. Integrated Learning or InteL, more accurately described what occurred in the classrooms where the Year 6 and Year 7 students worked together. For the purpose of this study the term InteL is used as a generic descriptor of the project unless it is necessary to make a clear delineation between BRIDGE and InteL. It was decided that InteL would still utilise an enquiry learning approach, but that the teaching of skills would become more explicit than was previously the case. It was hoped that this would encourage skills transfer to other arenas. Combined with this was a more structured, hierarchical approach to skill development that made use of the students' existing skill base. In conclusion, the changes to the program were generally structural in nature and were designed to enhance

the engagement of the students and ensure that authentic learning experiences were achieved.

1.2   LEARNING IN THE 21ST CENTURY CLASSROOM

A review of topical media reports demonstrated that education often holds centre stage (Lovey, 2000).   Whether the text was an exposition of the generational differences between teachers and students (Doherty, 2005), an attack on outcomes based education (Jones, 2005), another story on league tables (Dempster, 2005; Irvine, 2009), a discussion of the recently introduced federal reporting grade scales (Donnelly, 2006) or the continued development of the MySchool website (Peatling, 2010), each pitched a particular ideology at the classroom that had implications in terms of teaching and learning. The focus on learning answers, examination and assessment and a high stakes testing regime has become a worldwide phenomenon (Hargreaves, 2003, 2009; Starratt, 2004; Stoll, Fink and Earl, 2003).

There is a shortcoming in real learning as opposed to inauthentic learning for inauthentic assessment (Barth, 2001; Beare, 2006a; Starratt, 2004) that borrows teaching methods from the medieval and industrial periods (Beare, 2006b). Leadership of the curriculum "is meant to respond to the demands of the future" (Gross, 1998, p.2) and if schools do not do this by providing authentic learning experiences, then they risk becoming irrelevant to today's learners as they disengage from their learning (Gross and Burford, 2006; Campbell, 2007). Authentic learning is explored in more depth in Section 2.5 (p.39) of this study. Briefly, it is learning that goes beyond rote memorisation; it engages the learner in deep reflection and connects with the world outside the classroom (Caldwell, 2006; Starratt, 2004; Stoll et al., 2003; Warner, 2006); it is learning more in tune with the 21st century. A lacuna exists between authentic learning focussing on the needs of the child's life and the 19th century learning occurring in many schools with an overt focus on assessment and examination.   This study tests the nature of authentic learning through the experiences of the participants in the InteL program

offered at Regional Catholic High School and Feeder Catholic Primary School.

While the types of stories covered by the media that were listed above may surface or disappear according to the whim of commentators and the media, the literature has a sustained focus on the relevance of what occurs within the walls of a classroom. Researchers have been calling for a re-examination of the nature of teaching to ensure that it is ethical and engages students in a more authentic fashion (Burford, 2005; Duignan, 2005; Fisher, 2009; Hargreaves, 2009; Starratt, 2004). The contextual influences that impact on this study are explored in greater depth in the review of the literature in Chapter 2 (p.16). This review demonstrates the importance of articulating the influences impacting on the learning and teaching agenda in schools.

1.3 RESEARCH PROBLEM DEFINED

The research problem concerns the dissonance between the principles of the conceptual model (see Figure 1.0 p.5) that underpins the Leaders Transforming Learning and Learners (LTLL) project and its actual implementation in schools. While the literature (Barth, 2001; Bezzina and Burford, 2010; Duignan, 2005; Starratt, 2004) points to the benefits of implementing such a model, the reality of implementation is not a simple process. The lacuna is an exploration of a possible link between leadership and learning. Are leaders able to implement change processes that impact on the learning outcomes and engagement of the students in their schools? This problem needs to be explored through the complexity of schools and their cultures. Each individual school context is shaped by its specific culture. Both culture and context combine to make a school a complex organism (Caldwell, 2005; Fullan, 2001; Starratt, 2004). Change, therefore, can be problematic in any situation. In a school with an overcrowded curriculum, governments and systems fixated on standardised testing and measurable results, it can be more so. The LTLL project contends that a shift from inauthentic to authentic learning can be effected through ethical leadership

because if a leader is ethical and present to the educational needs of the students in his/her care, then this must have an effect on student learning (Bezzina et al., 2007; Duignan, 2006; Starratt, 2004). Throughout this study, authentic learning is defined as learning that draws on "real world experiences, which make[s] the content relevant and engage[s] the learners in their own meaning-making" (Andersson and Andersson, 2005, p.424).

Educational leadership as a construct was examined through the literature. From this review of various leadership models, transformative leadership (Crowther, 2004; Dimmock and O'Donoghue, 1997; Leithwood and Jantzi, 2005a, 2005b) emerged as the primary focus because it was aligned more easily with the goals of the LTLL project. For leadership to be effective, it requires a vision that is shared by all participants and this will foster the growth and acceptance of the project (Lambert, 2003). Beliefs and values expressed as spirituality and moral purpose (Duignan, 2003a Fullan, 2001) were identified as other motivators for the project. The goal was to create authentic, ethical learning experiences for all of the learners involved in the project. This cannot be achieved without acknowledging the role that spirituality plays in leadership (Korac-Kakabadse, Kouzmin and Kakabadse, 2002) as demonstrated through beliefs and values. Finally, sustainability (Fullan, 2005; Hargreaves and Fink, 2006; Lambert, 2003) was a key factor, as the project itself continued to develop over time in response to the needs of the participants. Each of these concepts was further explored in the review of literature and formed the basis of the conceptual framework for this study.

The intent of this research was to explore how leaders of learning, in both formal and informal positions, while engaged in the LTLL and/or InteL project, utilised the concepts of leadership, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability to provide an understanding of the linkages of these concepts with the authentic learning experiences of their students.

1.4   THE RESEARCH PURPOSE

The purpose of this research was to explore how educational leaders understand change processes introduced to improve the authentic learning outcomes of students. This was done through the exploration of the Leaders Transforming Learning and Learners (LTLL) project and its implementation within the specific context of a Catholic primary and secondary school in the form of InteL. The aim of the LTLL project was to create processes that have an impact on leadership for learning within a specific framework.

It was intended that this study would investigate the LTLL project as it was implemented at the schools identified as Regional and Feeder. This required the researcher to look at the experiences of the participants; students and teachers, to ascertain what theory was emerging from the research, if any, and to discover what the experiences of the participants tell us about the linkages between learning and leadership.

This study examined leadership in the two schools and searched to see whether there was an impact on student engagement and the nature of learning. Leadership was interpreted through a broad lens and incorporated formal, informal and student leadership. The research was explored by the grounding of theory in the conceptual framework on the nature of change that emerged from the literature (see Figure 2.2, p.45). The four key components: leadership, beliefs and values expressed as spirituality and moral purpose, shared vision, and sustainability were examined to see what role they played in the creation of authentic learning. InteL (Integrated Learning) within the LTLL project was the vehicle through which questions concerning the conceptual framework and the links between leadership and learning were explored.   It enabled the researcher to interact with the LTLL project management teams and teachers who were deliberately trying to create learning experiences that were ethical, authentic and had a positive impact on student engagement and learning.

1.5   THE RESEARCH QUESTIONS

Emerging from the research purpose of this study was a central question followed by a number of sub-questions.   The specific research questions shaped and guided the focus of this study and, in part, informed the questions used at focus group interviews.   These questions explored the nature of teachers in their role as educators, the idea of student engagement and the impact of leadership on learning.   The questions and their sub-questions looked beyond the implementation of the project to the four key components of the conceptual framework of this study as they emerged from literature: leadership, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability.

The central question that overarched all of the questions and sub-questions was:

> What can be learnt about the linkages between leadership, learning and student engagement through the experiences of school communities in an educational change project?

From this overarching question stem more specific sub-questions.

1.   What issues regarding student engagement in learning emerged for participants from the implementation of InteL within the LTLL framework?
      - How has the involvement of the teacher participants in InteL affected their understanding of learning?
      - Has the teacher and student participants' understanding of learning been applied in other contexts?

While the general focus of this question concerned student and teacher learning and how it is understood, the sub-questions looked to authentic learning and the relationship with student engagement.

2.   How have the experiences of the student and teacher participants in the InteL and LTLL project influenced their perspectives of the linkages between leadership and learning?

- How have the InteL and LTLL experience contributed to these perspectives?

This question looked to examine the impact that leadership could have on learning. This referred to both formal and informal leadership and how it was developed and expressed.

3. Has the involvement of the teacher participants in InteL changed how they view teaching and learning?
   - In what ways has this involvement affected their teaching practice in other classes?
   - Which of these changes should be sustained?

This question explored change on a number of levels, asking teacher participants if their view of themselves had changed and what impact this change had, if any. Beneath this was the idea of leadership at all levels of school. It then shifted to the concept of sustainable change.

4. What vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?
   - Have your vision or values of learning and teaching changed as a result of your involvement in the project?

Moving beyond spirituality as the driver, the moral purpose of leadership was explored here as participants were asked to share the vision and values that motivated their actions.

1.6   SIGNIFICANCE OF THE RESEARCH

There have been a number of studies that examine the effect of leadership on student outcomes and specifically, the effect of the Principalship on student learning. Many of these have been brought together in meta-analysis (Hattie, 2009; Marzano, Waters, and McNulty, 2005; Robinson, Lloyd and Rowe, 2008). The Marzano et al. (2005) study, examined quantifiable research, where "academic achievement was measured by standardized achievement test or a state test" (Marzano et al., 2005, p.28). This high stakes testing

regime is considered to conflict with authentic learning as expressed by Caldwell (2005), Hargreaves and Fink (2006), and Starratt (2004). Another meta-analysis examined the impact of different types of leadership on student outcomes (Robinson et al., 2008) finding instructional leadership more effective. While Hattie's (2009) synthesis of over 800 meta-analyses focused on factors that influence achievement of students.

There is a body of research (Caldwell, 2005; Duignan, 2004; Hargreaves, 2003) that suggests that education has lost sight of its primary purpose and is too focused on learning for testing as opposed to learning that is ethical, authentic and has purpose for the learner (Starratt, 2003). The measurement process has primacy over the learning and it is the 'number' that is important and what is lost is "deep and broad learning, as the price of short-term targets and results" (Hargreaves and Fink, 2006, p.196) must eventually be paid.

1.7   OVERVIEW OF STUDY

The introductory chapter presented the focus of this research and the questions that it attempts to answer. It provided the context for the LTLL project that was the vehicle for this study as well as the context of the schools involved. It clearly outlined the research problem and the significance of the research undertaken.

Chapter Two presents a review of literature relevant to this study. It is structured around what have been identified as the key components of a change process to create authentic learning: leadership, values and beliefs expressed as spirituality and moral purpose, vision, and sustainability. These concepts combined to create the conceptual framework for this study.

The research design is explained in Chapter Three. It includes a rationale for the use of case study, a description of the participants, an account of data collection methods, an outline of the limitations of this study and ethical concerns.

Chapter Four presents the data collected throughout this study. This chapter is divided into five sections; the first examines the statistical analysis of the student questionnaire. The remaining sections are structured around the four research questions that framed this study, each section presenting the data relevant to the specific focus of the question.

The analysis, interpretation and discussion of data are presented in Chapter Five. This was done using the conceptual framework that grew from the review of literature and guided this study. In its presentation it became clear that the framework needed to shift from its original orientation and this is discussed in the final chapter.

Chapter Six presents the findings mapped against the three key constructs that are entwined in the title of this study: leadership, learning and student engagement. It also offers a new model for leadership and a new conceptual framework to demonstrate the linkages between leadership, learning and student engagement.

1.8   DEFINITION OF KEY TERMS

It is pertinent to include a glossary of selected terms. Below is a list of words that are of significance to this study. Accompanying those terms is the definition used within the context of this study and is seen through the lens of an educational setting.

1.   **Authentic learning:** "implies real world experiences, which make the content relevant and engage the learners in their own meaning-making" (Andersson and Andersson, 2005, p.424).

2.   **Authentic leadership:** facilitates authentic learning by challenging others to identify in the curriculum, in teaching and learning what is worthwhile and finding a way of working together to achieve it (Duignan, 2006).

3. **Informal leadership:** leadership capacities demonstrated by those not appointed to formal positions of leadership within the school.

4. **Leadership:** "essentially about children learning and teachers creating an environment where learning happens morally and ethically" (Burford, 2005, p.2).

5. **Moral purpose:** acting to make a positive difference in the lives of students and society (Fullan, 2001).

6. **Shared vision:** involves dialogue with others and shifts from the leader to the organisation and becomes a "call to joint action" (Fink, 2005, p.27).

7. **Spirituality:** "the process of finding meaning and purpose in our lives as well as living out one's set of deeply held personal beliefs" (Lips-Wiersma, 2002, p.498).

8. **Student Engagement:** is an active process where the learner is willingly involved in developing skills and knowledge through tasks and experiences that are connected to their world that lead to improved learning.

9. **Sustainable leadership:** looks beyond the present to preserve and develop the deep learning and sophisticated teaching required for the future (Hargreaves and Fink, 2003).

10. **Sustainability:** develops and preserves what matters through positive non-harmful processes that will endure (Hargreaves and Fink, 2006).

11. **Vision:** the ability to see and understand what a school needs to move forward to a better place.

CHAPTER 2:   A REVIEW OF THE LITERATURE

2.0   INTRODUCTION

The purpose of this section is to provide an overview of the scholarly literature that contributes to an understanding of this study. Since the LTLL project was focussed on leadership, change and authentic learning, so too was the literature examined (Bridges, 2002; Duignan 2005; Fullan, 2003b, 2005; Hargreaves and Shirley, 2009; Harris, 2008), generally, although not exclusively, in educational contexts. Only by changing the dominant pedagogical practice evident in many contemporary classrooms can authentic learning that caters to the learner of the 21st century be created (Beare, 2006a; Caldwell, 2005; Hargreaves, 2003).

Leadership theory has moved away from theories that provide for a charismatic leader or saviour (Fullan, 2003a; Hargreaves and Fink, 2006; Harris, 2001, 2008; Southworth, 2005; Youitt, 2004). Prominent theories now centre on the concept that leadership needs to be shared for it to encourage individuals to participate in the process of creating change in the culture of an organisation as discussed in Crowther, Kagan, Ferguson and Hahn, 2002; Fullan, 2008; and Hargreaves and Fink, 2004. Lambert (2003) suggested that "a philosophy that reserves the work of leadership for formal authority roles [will] … produce short-term, shallow, and unsustainable results" (p.32). This does not mean that the role of the Principal is diminished, quite the contrary, the "Principal's influence is important precisely because it intersects with and, at its best, galvanises the leadership efforts of others" (Hargreaves, Moore, Fink, Brayman and White, 2003, p.2). Principal leadership was also examined through its impact on student achievement (Hattie, 2009; Marzano et al. 2005, Robinson et. al., 2008). Effective leadership in schools connects people and experiences to ensure the leadership capacity of an organisation is constantly growing (Sergiovanni, 1987, 1996) and sustainable and that student outcomes are enhanced.

Whether the leadership exhibited is called distributive, transformative, instructional, steward or teacher leadership (see Table 2.0, p.22), each theory has at its centre a focus on people and relationships (Crowther, 2004; Fullan, 2008, Hallinger, 2005; Lambert, 2003; Spillane and Orlina, 2005). The core process is to work collaboratively to exert influence to change the learning outcomes for the students. For this to occur, "trusting productive relationships" (Avenall, 2009, p.31) need to be established at all levels of the process. Central to this, is the importance of a leader's values and beliefs expressed as spirituality and moral purpose (Caldwell, 2009; Fullan, 2001). Spirituality is the process of clarification and moral purpose is the resultant action of that process and together they are fundamental to change and are intrinsically tied to education. It is about answering a call, a challenge to fix something. In observing the end point rather than the process Hargreaves et al., state, "leadership is, in many ways, our first and last hope for successful change" (2003, p.2). In short, "leadership matters" (Reeves, 2008, p.18) and is a key factor in the conceptual framework developed from the literature and is the focus of Research Question 2 which looks to the experiences of the participants and their understanding of the linkages between leadership and learning.

2.1   LEADERSHIP

Education has long found itself at the whim of political expedience and vote buying and as a result has suffered from change overload where the next initiative is being 'funded' into place before the previous one has been successfully established or laid to rest (Beare, 2010). This has been evidenced by the Howard led Liberal Federal Government (1996 - 2007) push to introduce a standardised grade scale for reporting to parents, where funding was tied to the introduction of the initiative. The Howard government stopped negotiating with systems and dealt directly with individual schools in an effort to bring about the desired change. In other countries there was an attempt by governments to "bypass leadership altogether and go straight to

the classroom" (Hargreaves and Shirley, 2009, p.95). A change in government from Liberal to Labour at Federal level in 2007 has not altered this mode of operation. Indeed, the new Labour Government negotiated directly with schools on a number of initiatives, from increasing the student-computer ratio in 2008 through to refurbishment programs and the construction of new facilities as a part of the Building Education Revolution in 2009 (Kennedy, 2009); all underpinned by the 2008 Melbourne Declaration on Educational Goals for Young Australians. Despite this, it is leadership, whether at systemic or school level, that is responsible for the implementation and ultimate success of such changes.

Change itself is often seen as the face of leadership as it is the formal leader who is responsible for embedding the process for change. Leadership is a slippery word and definitions range from broad umbrella terms that are almost meaningless to narrow industry specific definitions. For the purpose of this study leadership in education is seen as being "essentially about children learning and teachers creating an environment where learning happens morally and ethically" (Burford, 2005, p.2), it has a focus on the core business of learning and teaching.

Fullan (2001, 2003a, 2005) examined leadership through the capacity to solve problems that are yet to be confronted. In this sense, it is leadership that creates change. Leaders, therefore change cultures (Fink, 2005; Fullan, 2003b; Hargreaves and Shirley, 2009; West, Ainscow and Stanford, 2005), contexts and situations, while it could be argued that managers maintain the status quo. Leaders manage, but managers do not always lead. There is, however, another side to this, Fullan (2005) and other commentators (Harris, 2004a; Southworth, 2005; Youitt, 2004) support the view that it is leadership, not an individual leader that is the key to change. As teaching is a relational process and not just something done to others, it follows that leadership is not "solely the function of the role-incumbent" (Gunter and Fitzgerald, 2007, p.7) and is also relational in focus.

The underlying tenet of Starratt's (2004) concept of authentic leadership is that it centres on action, not inaction, leadership not management. Rather than accepting an intolerable situation the educational leader is expected to challenge it and ask, 'what can I do'? Leadership is seen as enabling, as mobilising the teachers in the community into action. The need for this action, for leadership, stems from the belief that too many schools, particularly secondary schools, have entrenched practices that do little more than perpetuate the process of the inauthentic learning (Beare, 2006b; Stoll, 1999). Authentic educational leadership is responsible for the cultivation of a climate for learning that is fulfilling and socially responsible. Again, change is central to this definition, but it is born out of a moral responsibility to act, to challenge (where necessary) what has always been done (Duignan 2004, 2005; Starratt, 2004, 2006).

Leadership in education is about leading change, it is "contributing to, learning from, and influencing the learning of others" (Lieberman in Lambert, 2003, p.vii) or put another way, it is "reciprocal, purposeful learning in community" (Lambert, 2003, p.54). It has been suggested that "leadership is reserved for those activities that administrators and teachers either design to influence others, or that others understand as intended to influence them, in the service of the organisation's core work" (Spillane and Orlina, 2005, p.159). Defining leadership through its intended activities provides for a much broader scope, it is no longer "identified with the qualities of an individual" (Harris, 2005, p.202) but reflects a series of behaviours that garners action towards a common goal or goals. The focus remains with the behaviour not the position and as such, recognises the strength of influence of informal leadership (Leithwood, Mascall, Strauss, Sacks, Memon and Yashkina, 2007; Stoll et al., 2003) from those who lead without title or formal position.

Leadership viewed through the LTLL project, has the ideal of influencing learning in a positive way. This influence is not confined to the student-teacher relationship; all of the participants in the project at Regional and Feeder considered themselves to be learners. Anyone who influences the learning of another is a leader and "leading is a form of learning" (Lambert,

2003, p.55). "Successful leadership is sustainable leadership" (Hargreaves and Fink, 2003, p.700) in the context of the LTLL project.

Not all of the literature identified the need to examine leadership styles and much of it focussed on other aspects of leadership entirely. Fullan (2001, 2003b) drew on the work of Goleman (2000) to highlight the importance for leaders to be aware of, and manage the style of leadership that they exhibit according to the situation. Anecdotal evidence suggests that effective leaders adapt their style according to the situation and/or need (Harris, 2004b). An effective leader understands that no single "leadership style is appropriate for all followers and all situations and accurately discerns which styles are appropriate for which followers in which situations" (Marzano et al., 2005, p.18).

There is a need to develop leaders at all levels of an organisation to ensure widespread commitment (Fullan, 2003b). This is transformative leadership in action and refers to behaviours that inspire "new levels of energy, commitment, and moral purpose" (Hattie, 2009, p.83) from teaching staff. It is leadership that transforms "followers into leaders" (Burns, 1978, p.4). This is done "by creating a shared sense of direction, clear goals and support and encouragement for peoples' work" (Leithwood and Jantzi, 2005b, p.185). Power is ascribed to those in the organisation that are able to inspire their colleagues towards these predetermined goals (Leithwood and Jantzi, 1999). Clearly positive relationships are central to transformational approaches to leadership as is fostering the development of capacity (Leithwood and Jantzi, 2005a; Sergiovanni, 1987) and as a result, greater productivity. Ultimately the development of any organisation will be judged on the development of its leaders, because without the continual development of leaders the cultural framework will not be maintained and commitment will wane. If, however, the development of leaders at all levels of the organisation occurs then it becomes a self-sustaining organism and change becomes the culture (Fullan, 2003a; Hargreaves, 2005a; Stoll, 1999) although Hattie (2009) warns that leadership types other than transformational have a stronger impact on student achievement.

The LTLL project is predicated on the concept of transformative leadership. It differs from distributive leadership in that the latter proposes that responsibility for leadership is distributed throughout the organisation creating different levels of leaders presiding over areas of specific responsibility. Distributive leadership is often referred to as democratic or collaborative leadership (Spillane and Orlina, 2005). Simplistically, it could be viewed as levels of leadership within a traditional hierarchy, but a broader perspective would suggest that sharing the leadership focuses more on the school as a learning community and less on a hierarchy of control. "Distributed leadership concentrates on engaging expertise wherever it exists within the organisation rather than seeking this only through formal position or role" (Harris, 2004b, p.13). In the first instance, distributive leadership seeks to 'engage' leaders whereas transformative leadership attempts to create leaders, who in turn produce more leaders, generating a sustainable process. This could be viewed as a hierarchy in itself. The first stage is to build the relationship, the second to encourage leadership throughout the organisation and the third to build the self-efficacy and confidence of these leaders to, in turn, foster other leaders.

Leadership has also been identified as a transitional process, implying that leadership "needs to be informed, not just in a technical sense, but in a deeply personal way" (Loader, 2005, p.45). Leading is as much about establishing the relationships as it is about managing change. If leaders do not understand the people with whom they work, they will have difficulty in convincing them to commence the (often) uncomfortable journey of change. Equally this applies to the work of teachers as they attempt to change the attitudes and understandings of the students in their care.

Given the nature of schools, it is valid also to consider servant leadership. Robert Greenleaf's theory of servant leadership or stewardship places the leader, not at the top of the hierarchy, but at the centre of the organisation (Kefford, 2004). "The central dynamic of servant leadership is nurturing those within the organisation" (Marzano et al., 2005, p.17). The basis of servant

leadership is relationship, understanding those within the organisation and ensuring their development. Entwined with this is the concept of creating the conditions for the success of those in the organisation (Fullan, 2008).

Leadership Theory	Key Features
Authentic	Based on moral/ethical decisions, focused on learning
Distributed	Distributes leadership to all levels of an organisation
Instructional	Leadership from the top of the hierarchy
Productive	Alignment of pedagogy, curriculum and assessment
Teacher	Focuses on students but grows beyond the school
Transformative	Develops leaders at all levels of an organisation
Steward	A relational focus on the leader as servant

Table 2.0   An overview of types of leadership

As schools have become more accountable it has been posited that the instructional leadership model has re-established a foothold as a prominent theory of educational leadership, although it requires modification to be successfully adapted into a secondary school (Hallinger, 2005).   The importance and positive impact of instructional leadership on student learning outcomes has also been reported (Hattie, 2009; Robinson, 2007; Robinson et. al., 2008). Indeed, Robinson et al. (2008) propose five leadership dimensions that have a variable impact on student outcomes (see Table 2.1 page 23).

During the 1980s instructional leadership was almost exclusively the domain of the Principal and, unlike the theories previously discussed, was rarely associated with the middle leaders of a school. The school as an organisation was the responsibility of its charismatic, heroic leader. In its re-emergence in the 21st century instructional leadership acknowledges that leadership is too onerous a task for one person and has shifted towards 'shared' instructional leadership. Although instructional leadership has been reported as having a more significant effect on student outcomes than transformational leadership (Hattie, 2009; Robinson, 2007; Robinson et al., 2008)

> *"transformational Principals, are needed to invite teachers to share leadership functions. When teachers perceive Principals' instructional*

leadership behaviours to be appropriate, they grow in commitment, professional involvement, and willingness to innovate. Thus, instructional leadership can in itself be transformational"

(Marks and Printy in Hallinger, 2005, p.234).

Leadership Practice	Meaning of Dimension	Effect Size
Establishing goals and expectations	Includes setting, communicating and monitoring learning goals, standards and expectations. Staff involvement to ensure clarity and consensus about goals.	0.42
Strategic resourcing	Involves aligning resources and allocation to priority teaching goals. Includes provision of appropriate expertise through staff recruitment.	0.31
Planning, coordinating and evaluating teaching and the curriculum	Direct involvement in the support and evaluation of teaching through regular classroom visits and provision of feedback. Direct oversight of curriculum and alignment to school goals.	0.42
Promoting and participating in teacher learning and development	Leadership that promotes and participates with teachers in formal or informal professional learning.	0.84
Ensuring an orderly and supportive environment	Protecting time for teaching and learning by reducing external pressures and interruptions and establishing an orderly and supportive environment.	0.27

Table 2.1   Robinson et al., (2008, p.656) Leadership dimensions

Teacher leadership is sometimes described as a form of distributive leadership, where the Principal is accountable for the overall task of strategic planning - the big picture, while teachers are responsible for the pedagogy of their classrooms (Harris, 2005, 2009a). The difficulty with teacher leadership as a construct is that it can be viewed in such broad terms. Teachers as leaders are expected to lead both in the classroom and the staff room (Hipp, 2004). They are "chiefly concerned with securing enhanced instructional outcomes, generating positive relationship with staff and students, and creating enabling conditions for others to learn" (Harris, 2005, p.204). Clearly teacher leadership draws from all of the models reviewed and Crowther et al. (2002, p.iv) view it as the way forward as schools make the leap into a new world.

Productive leadership as a term came out of a research project entitled the Queensland School Reform Longitudinal Study (Queensland Government, 2001). Researchers from the School of Education, The University of Queensland, conducted it in the period 1998 to 2000. Productive leadership is described as occurring when there is an "alignment of pedagogy, curriculum and assessment" (Queensland Government, 2002). Although it was described as curriculum leadership, Gross (1998) also identifies the importance of achieving the right balance between curriculum, assessment and instruction. Both of these examples relate to the LTLL project as it too examines the relationship between leadership and learning.

2.1.1 Summary

In summary, the context of the organisation, its culture, is what will determine the type of leadership exhibited by the Principal and the leadership team (Fullan, 2005; Hallinger, 2005). This raises questions about the prevailing cultures of the two schools under study and how the work of the Principals could impact upon the creation of the learning environment. Certainly each of the theories explored, has, as its centre, learning. The idea of learning-centred leadership (Southworth, 2005) could be absorbed into any of the models.

While transformative leadership is central to the LTLL project, it is critical to note that the nature of relationships within the school is the crucial factor underpinning all models of leadership. Without positive relationships as the foundation, any attempt at leading will founder. Each leadership theory discussed cannot be separated from the quality of relationships, each seeks to create change, each creates new leaders within the organisation and each focuses on learning. At the heart of each leadership model is the concept of improving learning outcomes for the students, whether this is viewed in terms of school improvement by "raising the bar and closing the gap" (DuFour, DuFour, Eaker and Karhanek, 2009), or through creating communities of learners (Jackson, 2000). There are many other outcomes "of schooling, such as attitudes, physical outcomes, belongingness, respect, citizenship, and the love of learning" (Hattie, 2009, p.6).

Leadership is an organisational behaviour as opposed to a specific role for one person (Youitt, 2004) and focuses on creating quality learning experiences for students. It is a case of many paths leading to the one destination, and, while travelling those paths, a leader may adopt different styles depending on the situation (Barker, 2005). Research has demonstrated that distributive leadership (Harris, 2004b, 2009a), instructional leadership (Hallinger, 2005, Robinson et al., 2008), transformative (Leithwood and Jantzi, 2005) and teacher leadership (Crowther et al., 2002; Harris, 2005) can all have a positive, if somewhat variable effect, on pedagogy and student outcomes, whether this is a mediated or direct effect. Authentic leadership is also an amalgam of styles that varies depending on the situation (Duignan, 2006; Starratt, 2004). In the schools involved in the LTLL project, leadership was focussed on children being engaged in class through "teachers creating an environment where learning happens morally and ethically" (Burford, 2005, p.2). This relates to the central question of this study and the examination of leadership, learning and student engagement through the experiences of school communities. It will be interesting to note what style of leadership, if any, emerges as being more significant than any other.

2.2 BELIEFS, VALUES AND SPIRITUALITY

Starratt (2004) contends that the Principal is the state in action because she/he is a public servant fulfilling state mandated educational requirements. This is certainly true in New South Wales as the state government through the Board of Studies mandates the syllabuses to be implemented. The schools in this study act on behalf of the state as well the system to which they belong. "While for some schools, spiritual capital has a foundation in religion, in other schools, it may refer to ethics and values shared by members of the school and its community" (Caldwell, 2009, p.10). This can be linked to the notion that the aims of all levels of education systems need to be in synergy (Fullan, 2003b, Stoll et al., 2003) to bring about effective, sustainable change to current learning practice. Further, leadership at all levels of education is a

product of the system or the culture and to demonstrate a spiritual dimension must be "embedded in the hearts and minds of the many" (Hargreaves and Fink, 2003, p.699).

Starratt (2004) states that we need to look beyond the job of teaching to examine who we are as people, to question what motivates us. In part, this is necessary because it is not always possible to separate the private and public from the life of work. "Our passions are fuelled from the fire of the heart as well as from the wellsprings of the soul" (Duignan, 2003a, p.9). While moral purpose (which will be examined in the next section of this study) may provide the 'public' inspiration for teachers to want the best for their students, it is beliefs and values that manifest through 'private' spirituality that moves beyond the minds to capture the hearts. This spirituality is not from a religious perspective, but draws from "a sense of connectivity" (Burke, 2006, p.15) and is based on relationship. Martin Luther King jnr. once said, "the best leaders operate on the souls of their followers" (in Shields, 2004, p.41) and Duignan stated: "authentic leaders use their hearts and souls" (2003a, p.3) to do it.

In essence we are motivated by our spirituality and this underpins all that we do. For the purpose of this study, spirituality is defined as "the process of finding meaning and purpose in our lives as well as living out one's set of deeply held personal beliefs" (Lips-Wiersma, 2002, p.498). The moral purpose associated with wanting the best for the students in our classrooms can be viewed as a subset of those deeply held beliefs; it is the action associated with living out those beliefs and values. Spirituality as a subject is much more prevalent in our professional lives because of the turbulent times in which we live and the fact that the difficult questions are answered only by spiritual reflection (Wheatley, 2002).

We are defined and identified by our moral purpose and how this is translated through our beliefs and values into the choices we make and what we do every day (Fullan, 2003b; Starratt, 2004). An authentic person acts from moral purpose and this can be tied back to a sense of spirituality. "All of the in-depth studies of leaders found a small number of personal characteristics

that were akin to the spiritual…and that gave leaders meaning in life" (Fullan, 2003c, pp.3-4). In other words, "most of us signed up for this profession because we want to use our hearts as well as our minds in order to promote young people's learning" (Barth, 2001, p.ix).

The obsessive standardised testing agenda has taken soul and spirit from the classroom (Fink, 2005; Hargreaves, 2003). It has the ability to crush teacher spirit and initiative, rendering work in the classroom content based and formularised (Hargreaves, 2003; Hargreaves and Fink, 2006; Hargreaves and Shirley, 2009). In this type of teaching, moral purpose can be reduced to achieving test scores; there is little spiritual dimension for teacher or student. Indeed, many students feel "a profound sense of disenfranchisement" (Fourre, 2003, p.77) a fact also borne out by research conducted by Gross and Burford (2006). In short, classroom practice becomes neither authentic nor sustainable (Duignan, 2004; Starratt, 2004). It removes meaning, and "meaning is what motivates people" (Wheatley, 2002, p.3). Yet, commonalities among the definitions of spirituality point to the fact that it "can breathe new life into endeavours; recreate individuals and groups; and restore hope" (Korac-Kakabadse et. al., 2002, p.166). Clearly, an acknowledgement of beliefs and values expressed as spirituality is what is required in order to revitalise teaching and create authentic learning experiences.

Terms such as 'spirit' and 'soul' can be aligned with leadership (Beare, 2006a). While it is contended that "the spirituality of leadership and leadership from the soul belong together," (Beare, 2006a, p.12) there is a distinction to be made between these terms and moral purpose and ethical leadership. The latter, pertains more to a code of right and wrong. The spirituality of leadership is about living out beliefs and understanding the part we play in the big picture of life. Chittister (2001) has suggested, "the ability to give meaning to life is of the essence of spiritual leadership" (p.2). Leadership of the soul relates to the understanding a leader has of themselves and hence their purpose. Throughout his monograph Leadership for a New Millennium, Beare (2006a) draws on literature that cited examples of great leaders like Ulysses, St Hildegard, Buddha and Jesus through to

Martin Luther King jnr. and Bob Hawke. "The great persons we admire and want to follow have both a sense of deep self (soul), and a sense of destiny and cosmic purposes (spirit)" (Beare, 2006a, p.12). Perhaps the leaders in today's schools might not see themselves on the same plane but the fundamental issue of spirituality in leadership remains.

In collating the perspectives of other theorists, Korac-Kakabadse et al., (2002, pp.172-173) have created an eight-point list of the elements of spiritual leadership. These elements can be linked to three of the core components of the conceptual framework of this study (see Table 2.2). The fourth factor is the beliefs and values (spirituality) that the eight elements are describing.

The Eight Elements	Conceptual Framework
Building shared values	Shared vision
Vision setting	Shared vision
Sharing meaning	Shared vision
Enabling others	Sustainability
Helping others feel powerful	Sustainability
Intuition	Sustainability and/or Leadership
Service	Leadership
Transformation	Leadership

Table 2.2   **A comparison of elements of spiritual leadership (Korac-Kakabadse et al., 2002) and the conceptual framework.**

All of these elements are common to education. The word 'educate' is derived from the Latin 'educere', which means 'to lead forth' (Delbridge, 1990). Education then is about leadership and at its very core it concerns leadership for learning. If beliefs and values, expressed as spirituality, give rise to moral purpose and shared vision and this influences what is seen as worthwhile (Lips-Wiersma, 2002), then teachers should be leading learning and teaching processes that breathe life into the pursuits of the classroom.

This in itself is authentic leadership and authentic leadership is underpinned by spirituality (Bhindi, 2005).

Although McRae-McMahon (2002) differentiates between spiritual leadership and moral and ethical leadership, she believes that true spiritual leadership includes a moral and ethical dimension. Further, she states that spiritual leaders are contemplative and use reflection to search for a new view of things or to understand the impact a decision may have on all stakeholders. "They consult widely … and then take the responsibility of acting. Their view of situations is long-term and universal" (McRae-McMahon, 2002, p.158). If leaders are authentic then they will need to be spiritual as well because "the spirituality of leadership and leadership from soul belong together" (Beare, 2006b, p.12).

2.2.1 Moral purpose

Moral purpose forms the basis of the actions of all leaders, because its underlying intent is to act to make a positive difference to all in the community (Burford, 2005; Duignan, 2006; Starratt, 2004). For the benefit of this study, moral purpose is defined as those factors that motivate teachers to want the best for the students in their care. All teachers have a moral purpose to improve the lot of the children with whom they work. That is not to say that moral purpose is all goodness and altruism. It is acknowledged that a mixture of motives drives effective leaders, so egotism and altruism are opposite sides of the same coin. Both provide very powerful emotions, so moral purpose often provides the action that propels an organisation toward its intended purpose (Fullan, 2001).

Leaders in service organisations, such as schools, should possess the capacity to encourage and sustain creativity and commitment, at the same time raising the level of interaction between community members to a new plane of motivation and morality (Duignan, 2003a; Shields, 2004). While authentic leadership is concerned with ethics and morality, the core motivation is the heart or the spirit. It is the beliefs and values of spirituality that gives life

to action and, unless "beliefs are clear" (McDougall, 2002), the vision will never be clear.

To be authentic, a leader must be genuine and be open to the passion and spirit within him/herself and in those with whom he/she works (Duignan, 2003a). There is recognition that work and life cannot be separated and as such, organisations like schools need to accept this and embrace it (Duignan, 2003a; Stoll, 1999). The passion and morality that a leader brings to an organisation is a part of his/her being and the leadership that he/she demonstrates, if it is authentic, grows from that (Shields, 2004; Thompson, 2004). Leadership is entwined with change and morality and the empowerment of individuals within an organisation. As Fullan (2003b) stated:

> *"Moral purpose of the highest order is having a system where all students learn, the gap between high and low performance becomes greatly reduced, and what people learn enables them to be successful citizens and workers in a morally based knowledge society."* (p.29)

2.2.2 Summary

There is a difference between moral purpose and spirituality (Caldwell, 2009); there is a difference between authentic leadership and spiritual leadership. Moral purpose becomes the action and our beliefs and values expressed as spirituality are the foundation on which that motivation is predicated. Educators have a moral purpose to teach and to do it well, to help their students to learn and achieve. It is not possible to teach well without passion or without creating relationships with those students. It is here where spirituality makes the difference. Spirituality is the driving force; it is based on connection and relationship (Burke, 2006) and the desire to take the learners further, especially those disadvantaged by the system. In the conceptual framework that drives this research, beliefs and values expressed as spirituality and moral purpose sit side-by-side as one grows from the other; they are inextricably linked. In honouring one, the other must also be acknowledged.

Leading, from a spiritual perspective, means leading from the deeper levels of "experience, meaning and purpose than a strictly materialistic vantage point would offer" (Thompson, 2004, p.62). Questioning actions in the light of the values of justice and honesty, or how decisions impact on relationships is referred to as the "spiritual aspects" (Duignan, 2006, p.14) of work. There are clear links between this type of decision-making and authentic leadership (Duignan, 2006; Shields, 2004; Starratt, 2004). Spirituality and moral purpose have a significant role to play in the leadership and decision making processes of the LTLL project because unless learners and leaders in "schools are learning to change themselves and their world for the better, their learning will be inauthentic" (Bezzina et al., 2007, p.4). As Teilhard de Chardin maintained, "we are not human beings on a spiritual journey. We are spiritual beings on a human journey" (Bryant, 2001, p.90).

The reality for this study was how do the concepts of beliefs, values and spirituality contribute to what occurs in the classroom? Would the participants verbalise the importance of spirituality in what they do each day, or would the strict, formalised curriculum influence their perspective on the experiences they construct for the students in their care? These questions related to Research Question 4: what vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?

2.3 SHARED VISION

The then Liberal Premier of New South Wales, John Fahey, became infamous for his 1994 quote that "vision is bullshit". However, while commenting on the government's leadership, one researcher found that decision making processes lacked vision and strategic planning, which led to a stagnation of purpose and inaction beyond that of seeking re-election (Johnston, 2002). None of the literature reviewed would support what former Premier Fahey had to say; in fact, quite the contrary. Vision, in whatever guise or name, is a foundation stone of leadership and of change (Leithwood and Jantzi, 1999). Moreover, leadership and change are words that are inextricably linked.

Effective leadership implies change and challenge and planning to meet the demands of the current age.

'Vision' from a popularist perspective could be interpreted as the ability to see into the future (almost), to understand what a school, or a company or a country needs to move forward, often, it is implied, to a better place. Taking a slightly different perspective, Jackson (2000), believes that shared values come before vision. He argued that vision was something that evolved on the developmental journey. This view, while understandable in the broader context of school change, in that some people may begin the journey of change and acquire the vision along the way, still implies that someone – a leader – must possess the vision to begin with or else there would be no journey to commence. "Leadership is responsibility and requires vision" (Hipp, 2004, p.62), although it is not specified what type of leadership, formal or informal, or at what level the leadership resides within an organisation, it is clear that there must be a vision before any journey or change process can commence and before vision becomes shared leadership (Hipp, 2004).

There is agreement among researchers that vision is required to facilitate change and that before change can occur there must be a vision established (Harris, 2000; McDougall, 2002; Stoll, 1999). It must be clear and "linked to high quality support … [and] needs to be shared and regularly reconfirmed" (Harris, 2000, pp.5-6). In terms of leadership the vision can come from within an organisation, or from without, as external agency can be a "crucial component of successful school improvement" (Harris, 2001, p.267). From wherever the vision emanates it must be clearly articulated and grounded in the core work of schools (Durrant, 2004; Harris, 2005).

While expressions like, 'the big picture' are still prevalent in the literature they are more grounded and lack the mystique that 'vision' once implied. That does not mean, however, that theorists today believe that effective leaders do not have the capacity to effect change; it is just that vision has often been connected to expressions like passion (Duignan 2003a), justice (Shields 2004), moral purpose (Fullan 2001), values (Jackson, 2000), ethics and

authenticity (Starratt 2004) and even resilience (Hargreaves and Shirley, 2009). Whatever term is selected to articulate the beginning of the change process, or an acknowledgement that the existing culture or framework needs to be challenged, it requires the leader/leaders to possess an understanding of what is to be changed and how and why. Any shift from the old to the new requires some form of vision and if that shift is to be successful then that vision needs to be shared by those involved in the process.

Vision, like change, is an evolving concept; it is not something that is static. In a post-modern world a vision, once shared, takes on a form and life of its own as it is translated through the experiences of another person. Once a new culture is embedded in a school, or a change process comes to an end, what was once visionary is commonplace. The next level of change will bring with it a new vision. The key to this is to keep the vision in sight of everyone (West et al., 2005).
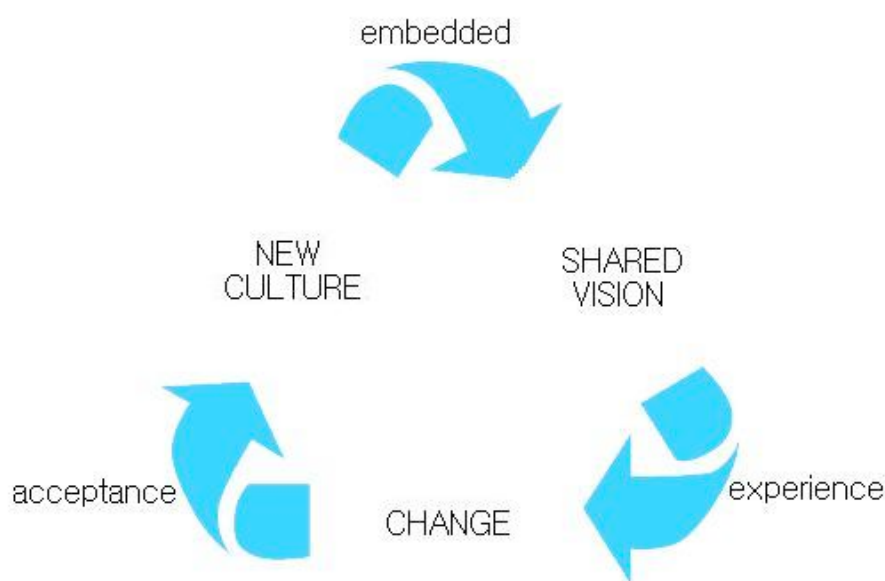
Figure 2.0   A simplified change cycle

Figure 2.0 illustrates a simplified cycle of change. The starting point will depend on what stage one engages with change. To begin at the point where change has been embedded would be to commence with the current culture. A shared vision can bring about an alteration to that culture. The experience of the participants as the vision is shared leads to growth and change. The

acceptance of that change brings about a new culture. Once the new culture has been embedded it has become the *status quo* and a new vision can commence the process again.

2.3.1   Summary

An old proverb states, "A vision without a plan is just a dream. A plan without a vision is just drudgery. But a vision with a plan can change the world" (cited in Marzano et al., 2005, p.98). To change the world is quite an ambition, but the LTLL project has the capacity to change the world of its participants because "a *shared* vision based upon the core values of participants and their hopes for the school ensures commitment to its realisation" (Lambert, 2003, p.6). In the context of this study one of the questions that required verification related to the sustainability of the vision and what would happen if there was no vision to commence the process? This related to Research Question 4: what vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?

2.4   SUSTAINABILITY

The application of sustainability as a concept is much wider than the education sector. The move to sustainability in wider society has often been associated with an anti-consumer culture, but this can be applied in an educational context.   Our educational past has been focussed on consumables; it has been as much a part of the 'throw away society' as anything else. If the reform of schools were tracked over the last thirty years or so, according to Beare (2010) it would reveal a history of initiative piled upon initiative.   This equates to the 'use and dispose' culture that has developed in western society.   In fact, this is what happens to educational leaders after the implementation of their initiative eventually begins its decline – they burn out, or are cast aside as the search for the next new consumable initiative of school improvement commences (Hargreaves and Fink, 2006).

Educational leaders have a responsibility to ensure that the learning in place in their schools engages all students intellectually as well as socially and emotionally (Hargreaves and Fink, 2004; Starratt, 2004); this is what Duignan (2003a) and others referred to as authentic learning. Fullan (2003a, 2005) and Hargreaves and Fink (2004, 2006) expand this construct to include the term sustainability. Effective educational leadership must also be sustainable; otherwise the gains made with one leader may soon be lost or forgotten. Sustainability, however, does not mean maintainability; it is more than just ensuring that change lasts (Hargreaves, 2005a). Therefore, sustainability refers to both the learning agenda and to leadership. Sustainable leadership "is about the impact and importance of leadership as a process and a system" (Hargreaves, 2005a, p.173). In that way it ensures that the leadership and change endure over time.

Within the context of this study sustainability is defined as something that develops and preserves what matters through positive non-harmful processes that will endure (Hargreaves and Fink, 2006) and has application at all levels of society. This is different to sustainable educational leadership because the latter is focussed on schools and looks beyond the present to preserve and develop the deep learning and sophisticated teaching required for the future (Hargreaves and Fink, 2003).

Fullan (2005) does not believe that true sustainability at school level has ever been achieved. This perspective has its foundation in the fact that Fullan (2003b, 2005) believes sustainability must be based on large-scale systemic reform. Fundamentally this requires an alignment between the individual, the school, the region and society (Fullan 2003b, p.30). It is no wonder that sustainability is sometimes considered the holy grail of education. Its perceived lack of achievability lies in the assertion that "the natural bias of policymakers is toward short-term accountability rather than mid- or long-term capacity building" (Fullan 2005, p.96). While Hargreaves (2005b) is not dismissive of large scale reform, he believes that sustainability should permeate all life because it is steeped in moral purpose and that imposed short term targets created by governments are its antithesis. Sustainability, at

its heart, is a "moral concept and a moral practice" (Hargreaves and Fink, 2006, p.18).

Transformative leadership aligns with sustainable leadership, "the main mark of an effective Principal is not just his or her impact on the bottom line of student achievement, but also on *how many leaders he or she leaves behind who can go even further*"(Fullan, 2005, p.31). Hargreaves and Fink (2003, p.700) state that "successful leadership is sustainable leadership" and that sustainable leadership is all about leadership for learning (Hargreaves and Fink, 2006). This differs from Fullan (2005) in that the latter leadership model was distributive. Leadership is sustained by "establishing and maintaining high leadership capacity and supporting and developing leadership among new teachers" (Lambert, 2003, p.41). Without the development of leadership capacity the tendency is to manage rather than lead and to continue to do what has been done, creating a stagnating not sustaining culture.

Sustainable leadership "is about the impact and importance of leadership as a process and a system, not as a set of personal, trainable and generic competencies and capabilities that are possessed by individuals" (Hargreaves, 2005a, p.173). Leadership, classified as sustainable, must spread beyond the individual school to other schools and, eventually throughout the system. Lambert (2003) describes this simply as being responsible for our own learning as well as that of our colleagues and our students. This process of growth is also described as auto-catalysis, where "the behaviour of one system stimulates certain behaviours in another system that, in turn, stimulates another … returning to motivate the original system thereby reinforcing a cycle of development and learning" (Fullan, 2003a, p.40). Auto-catalysis can also occur on a micro scale within the domain of a single school commencing in one classroom with one project and branching out from there.

The paradigm of sustainable leadership for this study suggests it is a process not an event, and it relies on the many rather than the few. Sustainability, in this sense, draws from a number of leadership models to ensure that leaders

are nurtured from within the system to ensure the ongoing development and change of the system itself. Like much in the field of education, the process is more important than the product. It is not possible to be a leader and believe in sustainability behind the closed door of your own classroom, any more than it is possible to be a leader of learning from the behind the closed door of a Principal's office. For sustainable leadership to be effective it must be concerned about the bigger picture, whether that is the whole school, the whole system or the whole state or country.

Fullan (2003b) believes that one of the issues surrounding sustainability is lack of succession planning. He contends that it is not the change in leadership that is the problem, but the "mindless replacement of leaders" (2003b, p.24). Successful succession is implemented "when there is careful planning, adequate preparation and decent, humane management of all aspects of the succession process" (Hargreaves et al., 2003, p.80). There is general agreement that to maintain continuity, to consolidate change, is a core property of sustainability, but this does not mean careless internal appointment.

There is a difference between sustainability and sustainable change or sustaining leadership. The latter two ensure that the new program grows and develops, that the change is maintained. Sustainability is, however, much larger; it is the big picture and is tied to leadership. It may not be the total alignment of the varying levels of the education system (Fullan, 2005) but it is far deeper than maintaining the development of leaders as advocated by Lambert (2003).

All of the theorists reviewed agree sustainability takes time. It is not about a quick fix solution, the 'heroic leader' cannot accomplish it. In fact, it is often about the accumulation of leadership successes. If the aim of educational change is sustainability, then the classroom must be de-privatised and doors must be opened. Further, school leadership needs to be actively supporting classroom initiatives (Robinson, 2007). Teachers need to enter into a

conversation with each other about their classroom practice, their successes and their failures and this dialogue should be based on current research.

While it is acknowledged that sustainability is worthwhile, there was some difference in what the theorists saw as the pre-conditions or principles of sustainability. Three of the theories are outlined in Table 2.3 below.

Lambert (2003, pp.94-95)	Fullan (2005, p.14)	Hargreaves and Fink (2006, p.18-20)
1. Sense of purpose 2. Succession planning 3. Enculturation 4. Development 5. Practice as policy	1. Public service 2. Change context 3. Build lateral capacity 4. Accountability 5. Deep learning 6. Commitment to results 7. Cyclic energising 8. Leadership	1. Depth of leadership 2. Lasting leadership 3. Breadth of leadership 4. Justice 5. Diversity 6. Develops resources 7. Honours conservation

Table 2.3   An overview of the principles of sustainability

Lambert (2003) focussed on five conditions for sustainability and examined it as a function of school operation. Fullan (2005) espoused eight elements of sustainability and his theory was linked to systems change. Hargreaves and Fink (2006) listed seven principles of sustainability and, like Fullan, looked beyond the individual school to the wider community, although their theory was grounded in the original environmental construct of sustainability and how it is manifested through leadership.

2.4.1   Summary

All of the theorists discussed agree that sustainability that matters, takes time. It is not about a quick fix solution. Ultimately all theories have the same end point, to ensure the ongoing, self-sustaining growth of schools and the systems of which they are a part. In short, sustainability views education as a growing, life-giving, self-sustaining organism.

The major problem in cultivating genuine sustainability at school level is that it requires reflection and analysis of the processes and the data. Providing time within the school day to allow self-reflection will ensure that sustainable change becomes a part of the regimen. Self-reflection requires questions to be asked and, while this happens, the *status quo* cannot go unchallenged. If the *status quo* is challenged then there will be change and further development (Bridges, 2002). It will become a process of auto-catalysis (Fullan, 2003a). The LTLL project by its collaborative design (Bezzina and Burford, 2010), its focus on a community of learners, is designed to ensure that sustainability will occur and that the doors of the classroom are opened to the wider community.

One question for this school community was: could auto-catalysis develop to ensure the development of sustainable change in an already over-crowded curriculum? Or would the program already in place stay within the narrow context of the Year 6 and Year 7 classroom? This linked to Research Question 3: has the involvement of the participants in InteL changed how they view teaching and learning?

2.5   AUTHENTIC LEARNING

A basic tenet of education is that the core business of schools is learning. Some commentators have taken this a step further and looked at the type of learning that occurs in schools, making a distinction between authentic and inauthentic learning (Duignan, 2006; Starratt, 2004; Stoll et al., 2003). 'Authentic' generally refers to something that is reliable or trustworthy. When associated with learning and achievement, it is real and genuine, or true, as opposed to something false or fake. For the purpose of this study authentic learning is defined as learning that utilises "real world experiences, which make the content relevant and engage the learners in their own meaning-making" (Andersson and Andersson, 2005, p.424). Inauthentic learning is often associated with the more traditional classroom "where the responses of a worrying number of students have been to express boredom" (Stoll, 1999,

p.504) because they view the passive reception of information (Hamilton, ND) as irrelevant in their world.

The creation of authentic learning experiences is inherent to the learning process itself. If the processes focus on rote memorisation and the learning of facts rather than "learning how and where to access knowledge, how to handle it and judge its significance" (Beare, 2006b, p.22), then it is inauthentic learning and is more associated with the 19th century rather than the 21st century. In a school context this distinction can be taken further by examining the difference between authentic achievement, which means "intellectual accomplishments that are worthwhile, significant and meaningful" (Wehlage, Newmann and Secada, 1996, p.23) and the kind of achievement often associated with the passing of tests that requires little of the learner beyond the identification and regurgitation of facts. Authentic academic achievement is defined through three criteria: construction of knowledge, disciplined enquiry and value of the achievement beyond the classroom (Wehlage et al., 1996, p.24).

Barth uses the term "legitimate learning" (2001, p.54) to describe the teacher-dominated classroom where the student passively completes tasks created and assessed by the teacher. The teacher is the expert and possesses all the knowledge (Bransford, Brown and Cocking, 2000). There is little opportunity for the beneficial process of open communication or collaboration amongst the students (Munns and Woodward, 2006; Shields, 2004). This process does not relate the formal curriculum to the world outside the classroom and does not take into account the experiences of the children in that classroom. It is cogent to acknowledge, "the tools of learning extend beyond the classroom and need to cater to the breadth and complexity of young people's experience" (MacBeath, 2006, p.18). Learning that is reduced "to getting the right answers to someone else's questions" (Starratt, 2004, p.2) is inauthentic learning and is based on dualistic thinking where learning is 'right or wrong' (Begg, 2002).

Authentic learning must extend beyond the rote memorisation of tests and quizzes; it must add value to the lives of the students beyond the classroom (Starratt, 2003). It

> *"demands patient questioning, reflection, interrogating several potential explanations, and developing familiarity with several sides of a problem, question, or issue … it is learning connected to something meaningful in the world outside school"* (Starratt, 2004, p.57).

It is not simply a matter of chasing test scores or working out what the teacher wants and then regurgitating information in a specified format or acquiring "inert knowledge" (Barth, 2001, p.39) that will never go anywhere or be used in any purposeful fashion. The interpretation of what authentic learning actually looks like in a classroom will vary from school to school and teacher to teacher, as programs will be fashioned around individual purpose and need (Stoll, 1999). However, in general terms it means giving the students a voice (Gross and Burford, 2006) and providing them with student-centred activities that are rich, real and relevant (March, 2008) and despite the many educational reforms of recent times it is the students who are most silent (Gunter and Fitzgerald, 2007).

The classroom of today should demonstrate "reflective practice for teachers, constructivist thinking, cooperative learning strategies, student assessment, building a portfolio, multiple intelligences and active student learning" (McDougall, 2002, p.225). There is a theory challenging the place of constructivism in the classroom, that of enactivism. The latter views learning as transformation as it expands the learner's range of action. It expresses learning as part of a system, combining knowledge, activity and identity as it affects the entire web of being (Begg, 2002). Regardless, it should be difficult to separate good teaching from good learning because they should be so intertwined.

2.5.1 Summary

Authentic learning is at the heart of the LTLL project; if leaders are ethical and responsible then it follows that the learning that occurs in their schools must be also be authentic (Bezzina and Burford, 2010; Bezzina et al., 2007;

Starratt, 2004). It is learning that is relevant to the learner and does not rely on the transmission of knowledge (Barth, 2001) but looks to asking questions, finding solutions and creating responses (Andersson and Andersson, 2005). "It is learning that engages students in every sense – intellectually, socially, emotionally and spiritually (Hargreaves and Fink, 2006, p.33). If this occurs the students could enter the state of flow (Csikszentmihalyi, 2010) where they are "deeply absorbed in an activity that is intrinsically enjoyable to them" (Shernoff, Csikszentmihalyi, Schneider and Shernoff, 2003, p.160).

Authentic learning is a process that involves a "rich, multidimensional, committed kind of learning that engages the curriculum in its depth and complexity" (Starratt, 2004, p.56). Authenticity in learning is about connecting the "learner's search for meaning and purpose in their lives to a variety of personal experiences in the academic curriculum" (Bezzina et al., 2007, p.3). By ignoring their experiences we are encouraging them to remain silent (Shields, 2004). It is "not simply an intellectual activity but a moral activity as well, for it engages the learner in an authentic relationship with what is being learned" (Starratt, 2004, p.140).

If it is assumed that authentic learning was achieved through the InteL program, the focus then shifts to whether this had an impact in other classrooms throughout the school? Did the learning in InteL assist other more traditional classrooms to embrace the challenge of authentic learning? These questions are related to Research Question 1: what issues regarding student engagement in learning emerged for participants from the implementation of InteL within the LTLL framework?

2.6   CONCEPTUAL FRAMEWORK

The stimulation for the conceptual framework (Figure 2.2, p.45) of this study came from the Framework for Leadership (Figure 2.1 p.43) by Fullan (2001, p.4) although it has been adapted to emphasise other aspects of the process of change. Fullan (2001) provided a framework for leadership that resonated,

given the particular context of the two schools involved and the fact that the LTLL project was about leadership and leading change. Fullan (2001, 2003b, 2005) views the role of the leader as that of an agent of change and his framework provides an avenue to focus on "leading complex change" (Fullan, 2001a, p.3). True leadership in education has at its heart change management; otherwise it is merely maintaining the *status quo* (Duignan, 2005).
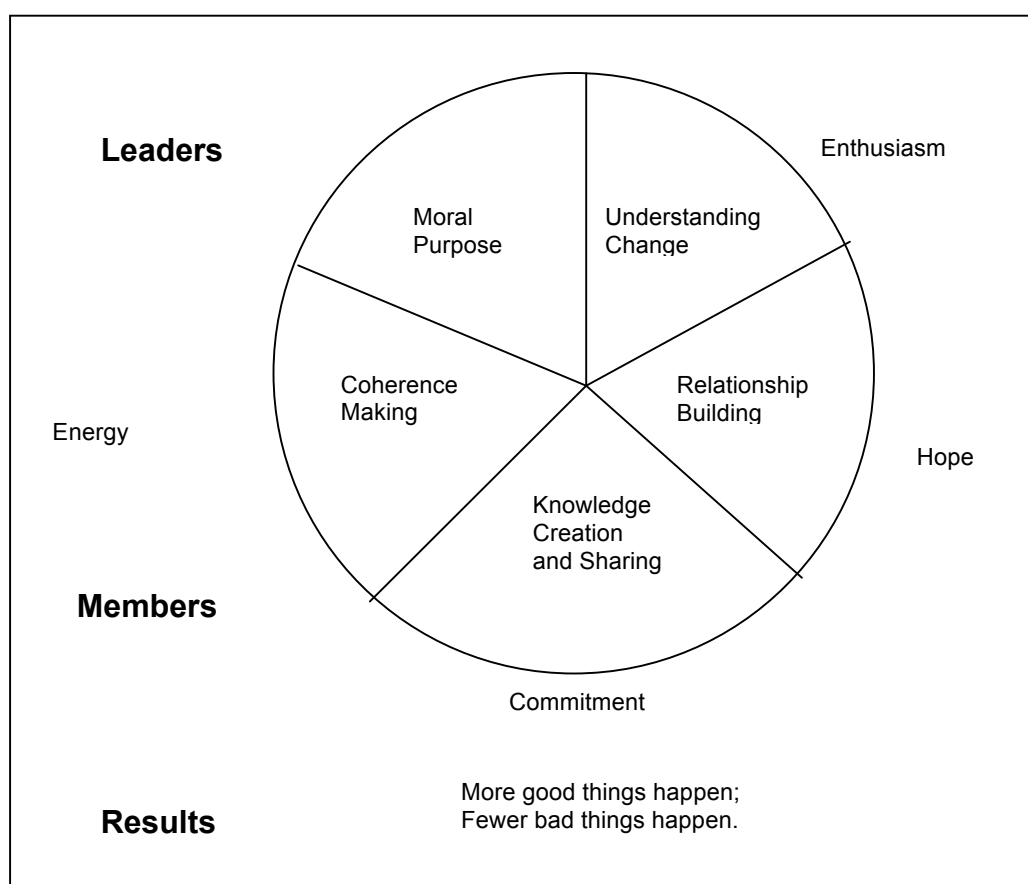
Figure 2.1   Fullan's Framework for Leadership (2001)

There are five main components to Fullan's framework (2001). The first is moral purpose and is a key motivator for all teachers as they strive to make a positive difference in the lives of the children they teach. The need to understand change is fundamental to the process, although it is conceded, "change cannot be managed. It can be understood and perhaps led, but it cannot be controlled" (Fullan, 2001, p.33). There is an acknowledgement that

the whole change process hinges on relationships. In a later publication this is expressed as "love your employees" (Fullan, 2008, p.21). Knowledge building within the organisation is essential for change and is predicated on trust and sharing experiences. Coherence-making extracts the learnings from the change process.

While accepting the validity of Fullan's model (2001) an examination of the literature that focussed on change leadership identified other key concepts that appeared to be crucial in creating and leading effective change processes. These concepts and those drawn from the work of Fullan (2001) form the basis of the conceptual framework of this study and have been outlined earlier in this chapter. The framework draws on the metaphor of a propeller with each component being a blade of the propeller with change at the centre of the diagram as the drive shaft. The blades that drive change are: leadership, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability. Each blade has an individual quality of its own, but it is only when the blades work together that they can produce movement. Without the drive shaft, the blades are unable to move at all, so it is the drive of change that galvanises the other concepts to move the school communities towards the goal of authentic learning.

It is clear that "moral purpose is concerned with direction and results" (Fullan, 2004a, p.5), although it has been suggested earlier in this study that this is not sufficient motivation and that moral purpose runs deeper than just being results-focused and is the action of spirituality. It is accepted that "understanding change, building relationships, and knowledge building honour the complexity and discovery of the journey" (Fullan, 2004a, p.5) but they are behaviours that can be subsumed within the attributes of leadership and shared vision.
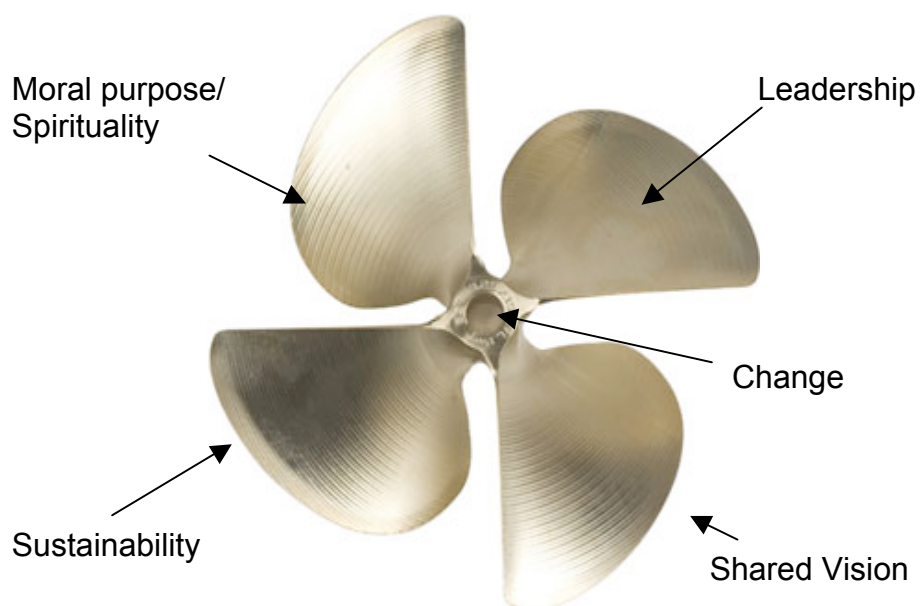
Figure 2.2   The conceptual framework of this study

To the same extent, coherence-making can be incorporated into sustainability. Fullan's model (2001) focussed on leadership to create change and implied change can become a part of a continuous process. The addition of 'sustainability' is crucial because educational leadership is about the dynamic and continuing quest for school improvement, stronger student engagement and better learning outcomes. Sustainability is about creating sustaining and sustainable leadership that in turn fosters sustainable learning (Hargreaves and Fink, 2006). For continuous change to be successfully embedded within a school culture, sustainability must be present.

Enthusiasm, hope, energy and commitment are listed on the outside of Fullan's (2001) leadership wheel. They do not explicitly feature in the conceptual framework of this study as it is assumed that they are implicit in the process of teaching and live within the ideals of leadership and moral purpose.

2.6.1   Summary

Schools are complex organisations (Whitby, 2010) and to bring about successful change culminating in authentic learning a number of factors need to be present. These factors, as identified by the literature are:

- Leadership
- Beliefs and values expressed as spirituality and moral purpose
- Shared vision
- Sustainability

Each of these factors has been captured in the Research Questions outlined earlier in this study.

The LTLL project was based on the tenet that leadership could have a positive effect on learners and learning by facilitating change to classroom practice. To do this there must be a shared vision for change. The processes that are put into place are mediated through, or grow from the beliefs and values expressed as spirituality and moral purpose of those involved.

Following the collection and analysis of data the conceptual framework was tested to see whether it provided a useful model to explain the relationship between InteL and the literature on leadership, learning and student engagement. In doing so, the initial question relating to what could be learnt about the linkages between leadership, learning and student engagement was answered.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.0 INTRODUCTION

The purpose of this section is to outline the research design adopted in the exploration of the impact of educational leaders on the creation of authentic learning experiences for students. Each of the participants, regardless of their role as learner, leader, or both, needed to be able to describe the effects that the LTLL project and/or InteL had on their learning and, specifically, in the case the teachers, the impact on teaching experiences. The individual opinions and understandings of each participant were considered worthy and valuable within the context of this research.

As discussed in Chapter 2, there is a significant amount of literature that supports the philosophy underlying the nature of this research. Duignan (2004, p.15) summed it up thus,

> *"too many schools, especially secondary schools, still operate using traditional structures and modes of delivery… They are locked into compartmentalised structures for learning based on classical, reductionist models of knowledge - subjects and departments".*

The InteL project was designed to break down the barriers of compartmentalised learning, to span the gap between primary school and secondary school and in doing so to create authentic student learning experiences.

As a result, the research invited a mixed method approach that allowed the researcher to gain an understanding of the meaning that the participants had created through their own actions and interactions with each other as the InteL project was implemented. It made allowance for the fact that this research was discovery based and that the theory stemmed from the findings. O'Donoghue (2007) identified four research paradigms that are based on significantly different epistemologies. Epistemology is the study of how

knowledge is generated and accepted as valid. It is, therefore, relevant to discuss the epistemology and research paradigm that underpinned the nature of this research. Table 3.0 provides an overview of the elements of the research design and subsequent sections of this chapter address each area in turn.

3.1 Theoretical Framework	Interpretivism
3.1.1 Epistemology	Constructionism
3.1.2 Theoretical Perspective	Symbolic Interactionism
3.1.3 Research Methodology	Case Study
3.2 Participant selection	Purposive sampling ❖ Theoretical sampling
3.3 Data Collection	Factor analysis Questionnaire and survey Interview Participant observation Document analysis

Table 3.0   The research design

3.1   THEORETICAL FRAMEWORK: INTERPRETIVISM

The research paradigm used in this study is that of interpretivism. A paradigm is a model or a framework of the dominant worldview of a particular area of thought and the assumptions that are associated with it (Punch, 1998). In terms of research, this carries with it the assumption that one particular paradigm is more suited to one form of enquiry than another.

The interpretivist paradigm "emphasises social interaction as the basis of knowledge … [which] is constructed by mutual negotiation, and it is specific to the situation being investigated" (O'Donoghue, 2007, pp.9-10). It is the researcher's role to attempt to understand how the participants have constructed their own reality in their particular social situation. Central to this study are the concepts of leadership, learning, student engagement and educational change, each of which has been described previously. The interpretivist paradigm suits this study as this researcher is attempting to understand, through interaction with the participants in their social setting, how they make sense of these concepts in their own world. The action and interaction of the participants must be understood and interpreted through the social context in which, or through which it occurs (O'Donoghue, 2007).

There are four major assumptions associated with the interpretivist paradigm. Firstly, that everyday human activity is the basis of society; secondly, that activity is always accompanied by some level of freedom or autonomy; thirdly, that everyday activity includes interaction with others and that this is often interpreted through the actions of others; fourthly, the negotiation of meaning is a continuous process (O'Donoghue, 2007, pp.16-17). Ultimately, the interpretivist perspective posits that the individual cannot be understood without understanding the society in which he/she lives. For this study, that has meant that the specific context and culture of the schools that the participants attend was interpreted in terms of their relationship with it, the external pressures on it and the people who pass through it.

3.1.1 Epistemology: Constructionism

Epistemology is the branch of philosophy that deals with the nature and origins of knowledge (Creswell, 2003, Strauss and Corbin, 1998). An epistemology "is a way of understanding and explaining how we know what we know" (Crotty, 1998, p.3). In this sense, constructionism as an epistemology has a distinct set of rules that define how knowledge is acquired and how we interpret and understand that knowledge. When questions pertaining to knowledge, its characteristics and acquisition are postulated they are called epistemological questions (Crotty, 1998).

Objectivists subscribe to the view the data already exists and must be discovered to support reality. Constructionists, on the other hand, believe that theory grows from the data. "There is no objective truth waiting for us to discover it. Truth, or meaning, comes into existence in and out of our engagement with the realities of our world" (Crotty, 1998, pp.8-9). The sense we make of the world is constructed not discovered. It is accepted that the participants in this study have constructed their own meaning in response to phenomena they have experienced throughout the LTLL project and/or InteL. Therefore, from a constructionist perspective, the underlying approach of this study was to develop understandings and insights from the data (O'Donoghue, 2007, p.58). In reality, none of these activities occurred within a vacuum and the entire research process was interactive.

3.1.2 Theoretical Perspective: Symbolic Interactionism

If constructionism is the chosen epistemology, then the related theoretical position is that of symbolic interactionism. Where epistemology is concerned with knowledge, the theoretical perspective is the philosophical underpinning of the methodology; it is how we make sense of the world (Crotty 1998). Symbolic interactionism holds that there is a reason for all human action and each action is the result of an intention. Each intention is directly related to the perceptions held by an individual (O'Donoghue 2007). Clearly, this will have an impact on the "choice and particular use of methodology and methods [as this] is something that reaches into the assumptions about reality that we bring to our work" (Crotty, 1998, p.2). By questioning these assumptions, we are questioning our own theoretical perspective.

Symbolic interactionism is "both a theory and an approach to the study of human behaviour, it examines the symbolic and the interactive together as they are experienced and organised in the world of everyday lives" (O'Donoghue, 2007, p.175). At a theoretical level, symbolic interactionism is the creation of meaning through social interaction. Meaning is created through a dynamic process as a person constructs his/her own view of reality as it is filtered through his/her own life experiences and interpreted through

his/her own actions and interactions with others. Meaning, therefore, is subjective, as a person creates his/her own understanding of reality. This was made clear in the data as the participants described differing perspectives of the benefit of InteL. All meaning becomes a product of external interactions, and our view of self will determine how we interact in any given situation.

Any meaning that is developed by an individual is subjective and is the result of that particular experience in combination with the other experiences of life and "these meanings are varied and multiple, leading the researcher to look for the complexity of ideas, rather than narrowing meanings into a few categories or ideas" (Creswell, 2003, p.8). It is the purpose of this study, to explore the human actions of specific individuals at Regional high school and Feeder primary school. In doing so, their understanding of leadership and learning will be explored. These actions, interactions and responses to given situations become the data that create the concepts that lead to the identification of theory.

3.2   RESEARCH DESIGN

The research design of this study was predicated on two factors. The first was both schools' involvement in the LTLL project and how that developed into a specific program for change through InteL in this particular setting. The second was the review of the literature. It was analysis and synthesis of the literature that informed the conceptual framework (Figure 2.2, p.45). The "conceptual framework serves as an anchor for the study" (Baxter and Jack, 2008, p.553) and was adopted to explain the elements that contribute to the creation of a successful change project. They are:

- Leadership,
- Beliefs and values expressed as spirituality and moral purpose,
- Shared Vision, and
- Sustainability.

In these two schools these elements combined to create a change in pedagogy to facilitate authentic learning.

The research design offered all participants, Principals, teachers and students, from both schools, the opportunity to articulate their beliefs and opinions as interpreted through the research questions of this study.

3.2.1 Research Methodology: Case Study

Case study is not defined by the methods of enquiry employed; rather it is defined by a particular interest in the case (Stake, 2005). In this instance, the researcher's interest developed through involvement with the LTLL project. Case study is a method of enquiry that allows the researcher to explore a program in depth as he/she collects detailed information using a variety of data sources (Baxter and Jack, 2008; Creswell, 2003, Yin, 2003). Unlike other qualitative approaches, case study research allows investigators to "collect and integrate quantitative survey data" (Baxter and Jack, 2008, p.554) assisting in the creation of an holistic understanding of what is being studied.

The case in this study involves two schools participating in a change project and the only genuine way to find out what is actually happening in a school is to "go in and observe and interview" (Bassey, 2000, p.119). It is the researcher in qualitative research that is the main data gathering 'instrument' and it is that same researcher who acts as the main organiser and interpreter of the data collected (Baxter and Jack, 2008; Charmaz, 2005). A case may have boundaries of time, place and activity and a researcher may choose to study more than one case, in order to investigate a phenomenon (Yin, 2003; Lovey, 2000; Stake, 2005).

As a research method, case study is appropriate because it draws on the nature of a particular case while acknowledging the historical background and setting of the two schools involved, as well as recognising the political climate in which they operate (Stake, 2005; Yin, 2003). It is about the development of understanding and insights from the data, filtered through the cultural context of the case. The process of data collection "involves using multiple stages …

and the refinement and interrelationship of categories of information"
(Creswell, 2003, p.14). Data collection and analysis are simultaneous
processes, each informing the other (Baxter and Jack, 2008; Charmaz, 2005).
In terms of this study it meant collecting data from questionnaires and
interviews, analysing and coding that data, searching for categories and
subcategories and ultimately allowing the data to shape theory.

While the researcher may come to the study with some preconceived ideas, it
is what is important to the participant that is of significance (O'Donoghue,
2007). Consequently, the participants shaped the gathering of data and its
analysis. The focus group questions grew from the participant responses to
the questionnaire and the questions used on the questionnaire were
developed from the central research questions. In this case study, the data
was collected to help understand the experiences of the participants in a
change project. It is this understanding that is important rather than the ability
to generalise beyond the case (Stake, 2005).

3.3   PARTICIPANT SELECTION

To a certain extent, some of the participants in the InteL project selected
themselves. (For copies of information and consent letters see Appendices
11-14, pp.262-268). Regional high school was chosen to be a part of the
LTLL project. One of the parameters of involvement in this program was that
the Principal and Assistant Principal of the school be directly involved in its
implementation. The rationale behind the selection of the remaining two
members of the LTLL school management team took into account such
issues as gender balance, teaching experience, subject specialisation and
willingness to be involved. Given that it was necessary to conduct six classes
it was decided to offer an open invitation to all staff to join the project. While
not all staff that requested involvement could be accommodated all of the
participating teachers were volunteers. Aside from the committee of four
there were four other classroom teachers involved at the high school.

The teacher selection process at the primary school followed similar lines. The Feeder primary school committee consisted of Principal, Assistant Principal, a coordinator and a Year 6 teacher. Beyond that, the other Year 6 teacher was also involved in the teaching of the program. The need to include both teachers of Year 6 was justified, as this was the cohort that was going to be working with the high school. They too were willing participants.

As with the teachers, student selection was decided by the nature of the program. The InteL initiative involved all students from Year 6 and Year 7 as outlined in Table 3.1. During the initial year of implementation, 2006, no students were excluded from the program. This was not always the case and in the year the data was collected, 2007, twelve students from the high school did not participate in InteL. These students had specific learning needs and during the time InteL was programmed they were withdrawn to work on intensive programs of study.

	Regional Catholic High	Catholic Feeder Primary
LTLL Committee	4	4
Teachers	6* * included 2 members of the committee, 2 teachers sharing a class and 1 teacher who has 2 classes	2* *included 1 member of the committee
Students	176	61

Table 3.1   Participant involvement in the LTLL project

The numbers in Table 3.1 are based on the implementation of the project in 2007. Of the teachers interviewed, three had been involved in the project in both 2006 and 2007, and one teacher was interviewed who was involved only in 2006. While the direct involvement of 225 students contributed to the generalisability of the study, a large amount of data was generated. For example, the LTLL committee's first attempt at evaluating the program was

done in the form of a student survey. This can be located in Appendix 4 (p.245) and the responses can be found in Appendix 5 (p.247) of this study.

The questionnaire contained thirteen individual questions and while this data was not collected for the purpose of this study and this researcher was not bound to use what the LTLL management teams collected, case study is an ongoing process of data collection and to disregard the wealth of information generated would not have been in keeping with this theory.

In an attempt to limit the amount of information collected by this researcher following the use of a questionnaire in the first instance, it was decided to employ a more selective process. In essence, this meant the purposive sampling of participants. Merriam (1998) identifies 6 types of purposive sampling, but warns that the researcher must first establish criteria to guide the selection process. O'Donoghue (2007) favours theoretical sampling where the data collected at stage one directs the researcher to the next person to be interviewed.

After the initial analysis of the questionnaire was completed, participants were selected for interview on the basis of providing a broad cross section of responses. In part this was a random process as more students were identified for interview than could be accommodated. Invitations for interview were sent out to more students than could participate in the focus groups and the first ten students from each school who submitted their forms were interviewed. It was deemed important to vary the type of informant, until the full range of perspectives was covered. There was a genuine attempt to seek "out negative cases" (O'Donoghue, 2007, p.60) to ensure all perspectives were honoured. A teacher from each school finalised the groups for interview.

3.4   DATA COLLECTION

Data collection for this study is located in five main categories: questionnaire, focus group interview, observation, document analysis and factor analysis.

The use of an online questionnaire reflected change processes and the shift towards the utilisation of new technology in schools. The questions that were used in the online questionnaire were the first major point in the process of data collection for this study. They were derived from the research questions that framed the focus of this study.

3.4.1   Questionnaire

While a questionnaire or survey may allow the researcher to direct the thinking or focus the attention of the participant, the resultant amount of data that is generated can be problematic (Neuman, 2003).   Indeed, Gillham (2005) says that questionnaires are easy to do badly and difficult to do well, but can provide pointers for further research.   These instruments (see appendices 6 and 7 pp.256-257), therefore, were used initially to gather the perspectives and understandings of the participants.   Following this, theoretical sampling, based on the responses, was used to select candidates for interview (O'Donoghue, 2007) with a representative from each participating school organising the students for interview.

The questionnaire was administered online through the 'Myclasses' suite of programs where there was a facility to post a survey or questionnaire. The page administrator strictly controlled access to the questionnaire, which in this case was the researcher. An Internet capable computer was required to gain access to the relevant page. Once it had been completed the participant was able to 'save' her/his responses that resulted in the data being recorded. The questionnaire page was then rendered inaccessible to that respondent.   In that way each participant could only complete one response sheet.

The participants maintained anonymity, therefore, the number of respondents can only be viewed as a percentage of those involved in the project and cannot be broken down into high school/primary school or any other sub-grouping.   This level of security made it impossible to ascertain which students or teachers had not completed the questionnaire. The questionnaire followed a generic format where a number of statements were listed and

participants were requested to respond to each item using a five point Likert scale (see Appendix 6-8, pp.256-258).

There was also a facility to add further commentary at the end of each statement and another at the conclusion of the survey. Most respondents chose not to avail themselves of this facility, although the data collected here also contributed to the creation of the focus group questions. The questions were specific to the respondents' level of participation in the project. There were fourteen statements for the student participants (see Table 3.3 p.58) and ten for the teacher participants and Principals (see Table 3.2 below). These questions were used at the focus group interviews and can be tied back to the four initial research questions that framed this study demonstrating the link between the research purpose, the literature review and the original questionnaire that was presented to the participants.

1	Students in InteL classes are better behaved than in regular classes
2	Student engagement in learning activities in InteL is stronger than in regular classes
3	My involvement in InteL has changed my understanding of learning
4	Things I have discovered about how students learn during InteL I have utilised in other classes
5	As a result of my experience in InteL my view of the nature of teaching has altered
6	My involvement in InteL has resulted in me making adjustments to my teaching practice
7	InteL provides more opportunities for students to demonstrate leadership within the classroom
8	I have become more aware of how teacher leadership impacts on student learning
9	My view of the linkage between formal leadership within the school and learning at a classroom level has changed as a result of my experiences in InteL
10	The InteL experience should be expanded within the school

Table 3.2   Teacher questionnaire statements

The total sample size for the teacher participants from both schools was a maximum of fifteen. However, due to changing circumstances this number was reduced to twelve. One staff member relocated interstate and was not able to be contacted. It was decided following discussion with the school management team that the teacher replacement had insufficient time working

with the students to make a worthwhile contribution to the questionnaire and did not complete it. The other person eligible to participate in the questionnaire was this researcher. Due to the obvious conflict of interest, which is explained later in this chapter, the researcher did not complete the questionnaire. The response rate for the teachers was 83%. The data has been reported as a percentage of the total number of responses (see Appendix 4, p.256).

1	InteL has helped me improve my skills in information technology
2	InteL has helped me improve my skills in research
3	I look forward to going to InteL more than other classes
4	When researching topics in InteL, I prefer to work in a group
5	I enjoy the opportunity to choose my own area of research in InteL
6	My involvement in other subjects is different to InteL because it deals with topics that are relevant to me
7	I am more involved in InteL because I like the freedom to choose topics
8	I don't work as hard in InteL because I am able to choose the pace at which I work
9	InteL is more practical than other subjects
10	I am more responsible for my own learning during InteL
11	I now learn differently in other classes because of my experience in InteL
12	I help other students with their work more often during InteL classes
13	InteL has helped me improve my social skills
14	InteL is different to my other classes

Table 3.3   Student questionnaire statements

With regard to the student questionnaire the possible number of responses for Regional high school was 176 and at Feeder primary school it was 61. Due to a number of competing factors there was a small group of special needs students from Regional who were withdrawn to participate in other programs. Therefore the total sample size was 225, with 148 students submitting completed responses. This represents a return rate of 66%. The data has been reported as a percentage of the total number of responses. Due to the rounding of numbers not all columns neatly total 100% and consequently there is a slight variance with some statements (see Appendix 5, p.247).

3.4.2   Factor Analysis

The Student Questionnaire yielded only 148 responses and as such is a small sample (66%). It was decided to conduct a factor analysis on the results to determine "how various items are related to one another and form clusters or factors" (Salkind, 2004, p.300). The number of responses was considered adequate for an initial factor analysis, having more than ten responses per item to be analysed (Darlington, 2001). Factor analysis is a "mathematically complex method of reducing a large set of variables to a smaller set of underlying variables referred to as a factor" (de Vaus, 2002, p.186). The 14 items of the student questionnaire were analysed for "general factors that underlie answers to individual questions" (de Vaus, 2002, p.186).

There are four steps involved in factor analysis:

     1. selecting the variables to be analysed;

     2. extracting an initial set of factors;

     3. extracting a final set of factors by 'rotation';

     4. constructing scales based on the results at step 3 and using these in further analysis

     (de Vaus, 2002, p.187).

The variables analysed were the fourteen items of the Student Questionnaire. Although eigenvalues are commonly used to choose the number of factors extracted (de Vaus, 2002, p.188) an inspection of the Scree Plot (Figure 3.0, p.60) suggested that two factors were appropriate for this data set.

The eigenvalue "indicates the amount of variance in the pool of original variables" (de Vaus, 2002, p.188) that a factor explains. The next stage of analysis was to make the "factors more interpretable" (de Vaus, 2002, p.190) through factor rotation. "Ideally rotation will result in factors on which only some variables load and in variables that load on only one factor" (de Vaus, 2002, p.190). The rotation method used was varimax with Kaiser normalisation.
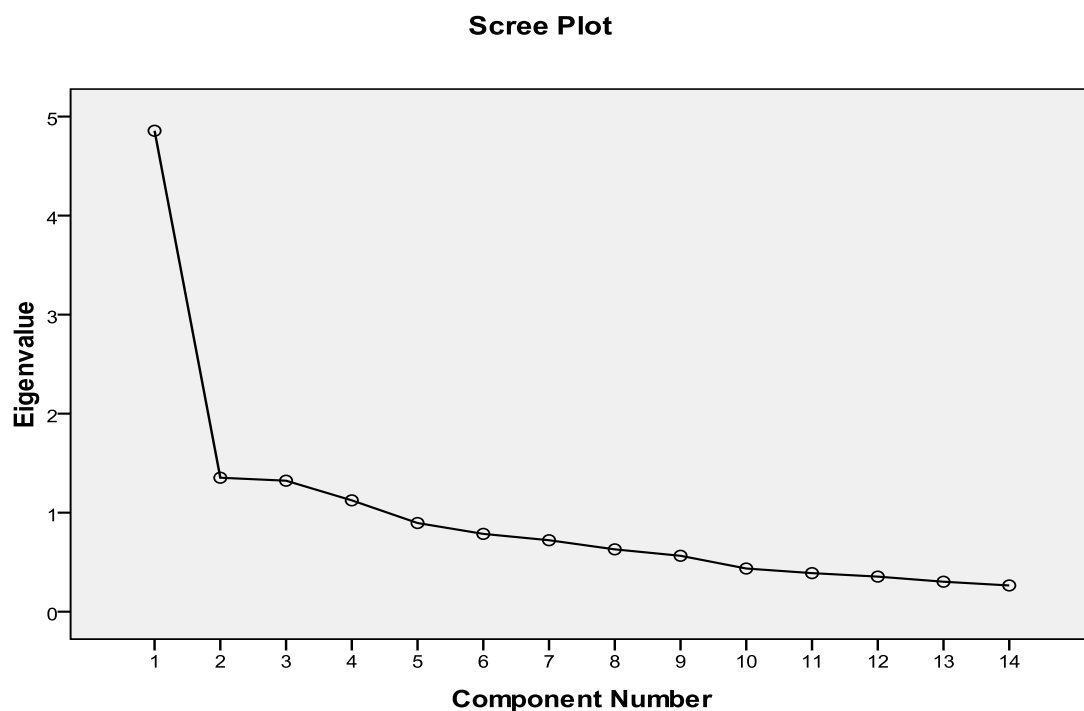
Scree Plot

Figure 3.0   The scree plot of the student questionnaire

The next step was to create a factor-based scale, in this instance, using the ten items that grouped together. The scale was calculated as a weighted factor score. For each respondent, the items' responses were weighted by the item factor loading and the summed weighted items were recorded as the respondents' scale score (de Vaus, 2002).

The final step in the statistical analysis was to compute Cronbach's alpha coefficient based on the ten items that emerged as a single factor. Cronbach's alpha is used to determine "whether items on a test are consistent with one another in that they represent one, and only one, dimension, construct or area of interest" (Salkind, 2004, p.282). As such, they are a measure of reliability and the "higher the figure the more reliable the scale" (de Vaus, 2002, p.184).

The statistical data will be presented in more detail in the next chapter.

3.4.3 Interview

As Given (2004) pointed out, "the personal interview is one of the most commonly used methods in qualitative research" (p.2), however the transcription and decoding of the participants' ideas, beliefs, thoughts and feelings often became problematic because of the technology available. Today, digital technology provides far more effective tools that allow clear voice recording that can be transferred immediately to a computer and converted into a word document. To that end this researcher used a Denpa MP38 Digital Voice Recorder to expedite the process of recording and transcribing interview data.

The focus group interview aligns with case study because it gives "responsibility for determining the structure to the interviewee, who has to 'lead the way' and 'tell the story'" (Gillham, 2005, p.45). Although set questions derived from the questionnaire were used to stimulate discussion the interaction of participants ensured that the theory was generated from the data. With 225 students involved in 2007, theoretical sampling (O'Donoghue, 2007) was used after an initial questionnaire was completed and coded. As already stated the students were selected for interview on a relatively random basis. An intermediary at both schools conducted this process and the researcher was not involved. With regard to the teaching staff, all who were available and currently involved in the teaching of the InteL program were part of the focus group. One staff member who had been involved in the program previously was also included.

The interviews were carried out on a regular school day. Due to timetabling constraints the availability of the teachers involved in the project became problematic. The teachers from the high school were interviewed in two separate groups. The first group was interviewed in the Principal's office and the second group in a designated meeting room. Both rooms were within the Administration area of the school and were private and comfortable. Four of the teachers had been involved in the project over the two years of the transition from BRIDGE to InteL, one had been involved in BRIDGE only and another two had been a part of InteL only.

Due to staff changes and leave it was not possible to interview both of the participating class teachers from the primary school. Although one of the primary school teachers responded to the questions online it was not possible to have a face-to-face meeting. Therefore, the data collected, predominantly expresses a high school perspective despite the fact that the classes were of a mixed nature. The anonymity of all staff has been maintained although some responses have identified a participant as being associated specifically with the primary or high school. These comments have not been excluded because they added depth to the research or made a significant statement about the nature of a high or primary school. The teacher participants that were interviewed were given a number (T1, T2 and so on to T8) to enable readers to see the different responses and to allow the tracking of responses.

While it is acknowledged that the minor primary voice could be viewed as problematic with regard to the perspective of the teachers, the study sought to examine the linkage between leadership and learning and this should be largely unaffected by primary/high school boundaries.

Both Principals were interviewed, but due to the unpredictability of the school day and the busy nature of any large school it became necessary to conduct the interviews separately. This may have had some bearing on the data, as the participants were not able to hear the other's perspective. The Principals were interviewed in their respective offices and have been recorded as P1 and P2. Although the Principals were interviewed as well, it should be noted that the ratio of high school to primary school interviews was 4:1; the same ratio of high school teachers to primary school teachers involved in the program. While it appears that there is a dominance of high school interviews the number reflects actual participation in the program.

The focus group involved the use of unstructured and open-ended questions that were designed to allow the participant to further expand on perspectives outlined in the questionnaire. The responses of the participants guided the direction of the study. The interviews were conducted in the environs of the

schools involved. In the case of the high school the students were interviewed in a vacant classroom. The primary students were interviewed in their library, their chosen venue. Carlsen (2005) reminds us of the importance of laughter and the significance of establishing a rapport with the person being interviewed. As this researcher was formerly an employee of the high school, existing relationships were used as the foundation of the interviews.

There were no difficulties associated with interviewing either group of students. The decision was taken to interview the high school students and primary school students separately in case the younger students felt intimidated by their older peers.

The students from the high school were interviewed in a vacant classroom and were quite comfortable with the process. The high school students were, in some cases, so keen to respond that it almost became a competition to express a point of view, or to put a counter view. It was, therefore, necessary to place some parameters around their ability to provide an answer and to agree or disagree with other students so as to mediate those who might otherwise have dominated the group. Each student was given the opportunity to respond to the question and, after all students had expressed their opinion, there was an opportunity for individuals to build on what had already been recorded. The high school students have been coded HS1 through to HS10.

A similar process was used with primary students although they were interviewed in their school library. They too were comfortable with the process and suggested we sit on cushions on the floor. Of the initial ten students to be interviewed two withdrew on the day because they did not have parental permission to be digitally recorded. The primary school students have been coded PS 1 through to PS8 in order to delineate responses from the high school students.

It was noted earlier that there was seemingly an imbalance in the ratio of high school teachers and primary school teachers interviewed, although the ratio did reflect the actual level of involvement in the project. With regard to the

students involved in the focus group interviews the numbers were almost the same, ensuring an equal voice across both schools.

The research questions that framed this study could be linked back to the focus group questions used for the teachers and the same applies to the questions asked of the students. The focus area for Research Question 1 was student engagement and the application of knowledge learned in the InteL program in another context. This relates directly to focus group questions 1, 2 and 3 that referenced learning, skill development and working as a part of a group. Research Question 2 is focused on leadership, as is focus group question 6. Changed practice as a result of participation in InteL was the subject of Research Questions 3 and 4 and this has been echoed with questions 4 and 5 in the focus group interviews. Again, there is a clear link between the research questions, the literature and the data collected by questionnaire that helped frame the questions for the focus group.

3.4.4   Observations: Participant and Non-participant

As there were eight InteL classes operating once a week, with eight different teachers, there were many opportunities to observe the students in situ. As a result, observational notes were recorded by participating teachers (Creswell, 2003) as well as the researcher who was involved in the teaching of the program in 2006. Angrosino (2005) noted that contemporary observational research tends to be characterised by the observer attempting to become a part of the community that they are studying. In this research, all observers with the exception of Catholic Education Office personnel were a part of the immediate communities of Regional high school and Feeder primary school.

Prior to the formal research commencing some students had been selected for interview on camera by the LTLL management team at the schools. There were two presentations created, one in 2006 and the other in 2007. The former group was selected to create a presentation for the staff of the schools to allow the student voice to explain what InteL was all about. The latter group of students was chosen to create a DVD for presentation at a Diocesan Principals' meeting. The intended purpose of the presentation was to

stimulate discussion between other high schools and their primary feeder schools. The InteL teachers selected the students, based on their ability to articulate an opinion and their willingness to be involved. They were interviewed and filmed by other students. Their opinions were also be included for analysis.

3.4.5   Document analysis

During the research process a number of documents were collected that were also useful as data (Baxter and Jack, 2008; Creswell, 2003; Yin, 2003). These included, the minutes of the LTLL management committee meetings, the minutes of school LTLL team meetings and minutes of the meetings involving the classroom teachers of the InteL project.

There was also a review of the project conducted at the end of semester 1, 2006 and at the beginning of the following year. This review was in the form of a student questionnaire and although it was not an official part of the data collected by this researcher, the findings are referred to in Chapter 4. The questionnaire was designed by the InteL project class teachers (see Appendix 4, p.245) and reflected the intention to gain an understanding of the nature of the experiences of their students. Due to the busyness of both schools the second survey was administered at the beginning of the 2007 school year. That could possibly account for the level of detachment in some of the second round responses. For a variety of reasons, not all students completed or submitted the survey. Semester 1 results were based on 110 respondents (49%) and Semester 2 results on 114 respondents (51%). All figures in percentages have been rounded up or down.

Further to this, the subtext was to create discussion about what changes, if any, were to be made to the implementation of the InteL project for the following year. While this questionnaire was distributed and analysed prior to clearance from the Australian Catholic University Research Projects Ethics Committee, it was considered that this type of evaluation was a part of the evaluative role of the teachers involved in a new school based project. The researcher did not participate in the formulation of the questions, or the

distribution of the questionnaire. The InteL class teachers completed these tasks.

3.5   DATA ANALYSIS

In any case study the researcher is highly involved in the collection and interpretation of data (Creswell, 2003; Lovey, 2000; Stake, 2005). Although the analysis of data allows the theory to develop, no researcher commences with a blank mind and no analysis of data is neutral (Baxter and Jack, 2008; Charmaz, 2005). In the case of this study the exploration centred on how educational leaders may transform learners and learning through a change project. It was about leadership and learning and the links that connect them. It was also about listening to the voice of the students to ascertain what it was that they valued in their learning experiences and comparing this to the reality of the everyday classroom. In doing this, the intention was to follow the Chicago school of sociology method, explained in Table 3.4 below, it "assumes human agency, attends to language and interpretation, views social processes as open-ended and emergent, studies action, and addresses temporality" (Charmaz, 2005, p.521).

Establish	familiarity with settings and events
Focus	on meanings and processes
Engage	in a close study of action
Discover	the social context
Listen	to the language of the participants

Table 3.4   Chicago school method of naturalistic enquiry (Charmaz, 2005)

Coding is the "fundamental analytic process used by the researcher" (Corbin and Strauss, 1990, p.12); it is the process by which transcripts of the

interviews are turned into theories. In coding the data, the researcher played an active part in the process, and could not be neutral. It is the researcher who made the decisions to include or exclude, to "intervene, manipulate, act on, conceptualise, and use specific techniques to generate or discover theory" (Walker and Myrick, 2006, p.550). O'Donoghue (2007) has followed Corbin and Strauss (1990) in his explanation of coding and recommends the use of three basic methods. Each stage of coding: open, axial and selective is designed to achieve a different purpose, each building on the other. In essence, the coding process has been summarised as follows: in open coding the data are fractured, that is, broken down into concepts to be continually compared and contrasted; in axial coding the method used is to relate and integrate data. This means attempting to make sense of the data by establishing relationships between categories and their subcategories, and in selective coding, the process is to select and integrate (Walker and Myrick, 2006), to unify all categories around a central core or theme.

Open coding is the first step in the process of data analysis. Data were interpreted and broken down into concepts to be continually compared and contrasted. It could be a line-by-line or word-by-word process. Through constant comparison, events and incidents were analysed for similarities or differences and conceptual labels were attached. Given the wealth of information that emerged, code notes were used to help describe and explain concepts as they were identified. These concepts were grouped into categories and sub-categories. In turn, these became the basis for sampling in the next round of observations (Corbin and Strauss 1990). While open coding of data was being conducted, the question, "what category or property does this incident indicate?" (O'Donoghue 2007, p.91) was continually being asked by the researcher.

Selective coding is the integration of data, and the unification of all categories around a central core or theme. "The core category represents the central phenomenon of the study" (Corbin and Strauss, 1990, p.14). In this case that was leadership.

3.6 VERIFICATION

The verification of mixed method research findings is often discussed in terms of dependability and trustworthiness (Baxter and Jack, 2008). Verification refers to the processes used during the research to "incrementally contribute to ensure reliability and validity and, thus, the rigour of the study" (Morse, Barrett, Mayan, Olson and Spiers, 2002, p.9). As Lincoln and Guba (2005) suggest, validity is not the same thing as objectivity and, when associated with a qualitative study, can become a hotly contested issue. The question should not be concerned with objectivity, as the results of a quantitative study may be, but should ask are the findings authentic? While case study may not be used to predict phenomena, as would be expected with a positivist paradigm, the findings may be used to compare, or to identify themes and commonalities across sites. Creswell (2003) explains:

> *Overall, however, reliability and generalisability play a minor role in qualitative enquiry. Validity, on the other hand, is seen as a strength of qualitative research, but it is used to suggest determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account* (pp.195-196).

Building on this, a factor analysis was carried out using the results from the Student Questionnaire and, subsequent to this, Cronbach's alpha coefficient, balancing the qualitative nature of this study with some quantitative analysis.

Charmaz (2005), Creswell (2003), Denzin and Lincoln (2005) and O'Donoghue (2007) all provide a checklist for verification. While there is some commonality across the theorists' suggestions, the five strategies suggested by Morse et al., (2002) listed in Table 3.5 (p.69) resonate more naturally with case study.

Verification occurred during the process of the research as well as at its conclusion so that any threat to validity was immediately corrected (Morse et al., 2002). It is important to note that strategies that evaluate trustworthiness may be helpful in the research process although "they do not in themselves

ensure rigour. While standards are useful for *evaluating* relevance and utility, they do not in themselves *ensure*" (Morse et al., 2002, p.9) the usefulness or relevance of the research. The role of the researcher and a heightened awareness of the nature of reliability and validity were paramount to ensure that the study undertaken was both relevant and useful. Indeed, the response of the investigator to the data is the key to any project. "It is the researcher's creativity, sensitivity, flexibility, and skill in using the verification strategies that determine the reliability and validity of the evolving study" (Morse et al., 2002, p.10).

Methodological coherence	Question matches method which in turn matches data and the analytic processes used.
Appropriate sample	Selection of participants, centres on those who best represent the research topic. This ensures saturation of categories and data, ensures replication. Replication ensures verification.
Concurrent data collection and analysis	Continual concurrent data collection and analysis creates interaction between what is known and what is needed to be known.
Thinking theoretically	Allows ideas to emerge from data that can be reconfirmed in new data, giving rise to new ideas that must be verified in data already collected.
Theory development	Theory is seen as an outcome of the research process, and as a template for further development of that theory.

Table 3.5   Verification strategies (Morse et al. 2006, pp.12-13)

3.7   ETHICAL ISSUES

As this study was being conducted the rights of the participants: the students and teachers were considered to be paramount. Prior to the selection of participants, ethical approval was sought and granted from the Australian Catholic University Research Projects Ethics Committee. Ethical considerations included the protection of the participants' identity, the

establishment protocols for informed consent and disclosure about the nature of the project and specifically, the role of this researcher (Schram, 2003). Given the significant amount of data that was collected, the security of data storage and the maintenance of confidentiality were also of prime concern and protocols were established to ensure this occurred.

Disclosing information about the nature of the InteL project is complicated by its duality. At one level, there is a project that focuses on the use of learning styles; Multiple Intelligences theory (Gardner, 1995), Bloom's taxonomy and enquiry based learning to improve the learning and teaching experiences of students and staff. On another level, there is the investigation of these learning experiences, and their link to leadership. Consequently, it was important that the students understood the difference between the two projects. While they had a choice of whether to participate in the research, they did not have a choice about their participation in InteL as a classroom activity.

A letter was sent home to the parents of all year six and year seven students outlining the nature of the research project (Appendix 9, p.259). It was made clear that participation in the research side of the project was entirely voluntary (Glesne, 2006) and that they and their child had every right to refuse involvement.

All participants have remained anonymous and what was recorded through the questionnaire and later in the focus group interviews was kept confidential. No student or teacher was named in this study, nor were the schools identified. From time to time it may be possible to identify a comment as being specifically from a high school perspective or conversely from a primary school perspective. This level of identification was permitted on the basis that to remove the high/primary school reference would have altered the comment and decreased its value.

All interviews were conducted during normal school hours at either Regional high school or Feeder primary school, so as not to inconvenience either staff

or students. The interviews were conducted in a variety of locations, depending on the availability of rooms, but the comfort of the participants was considered at all times (Lovey, 2000).

Given the amount of data generated, storage was an issue. In accordance with the requirements of the Ethics Committee, it was stored in two locations. All computer-generated information was stored on this researcher's computer, access to which requires a password. Written material generated by questionnaires, surveys and interviews was stored off-site in a locked filing cabinet at the Australian Catholic University.

3.8   LIMITATIONS AND DELIMITATIONS

The role of the researcher needs to take into account an understanding of symbolic interactionism. Reality is a social construct and we are responsible for constructing our own perspectives, it is therefore important to acknowledge who we are and what biases and subjectivity we might bring to the study (Gillham, 2005). The researcher's role in the creation of the research design, what data were collected, how it was collected, the methods of analysis, and the selection of participants must be considered. As researcher we filter "data through a personal lens that is situated in a specific socio-political and historical moment. One cannot escape the personal interpretation brought to qualitative data analysis" (Creswell, 2003, p.182). Cherryholmes (1993) made a similar point, although the article was directed at how one might read a text, rather than the voice of the researcher. He pointed out that voice, class and context, each make a contribution to the reading of a text as they do to a researcher's context. It is therefore imperative that researchers acknowledge their own context so as to limit bias.

Lapadat, Mothus and Fisher, (2005) examined the relationship of roles within research. They discovered, to their initial surprise, that role perception, and the relationships of the co-researchers had a significant impact on their study. Two key points were made, firstly inequities in power became evident via

"what we chose to value, [and] who could speak" (Lapadat et al., 2005, p.14) and to whom we listened. Secondly, the acknowledgement that the role of the researcher is a social construct, "grounded in meanings, aims, and values that are shared or inferred, and also within personally held values, aims and theories that are implicit and not shared, or only partly shared" (Lapadat et al. 2005, p.15). The lesson from this is that the researcher cannot be separated from the research.

Given the nature of the research and of the multiplicity of roles that this researcher had in the planning and delivery of the InteL project, it is not a simple task to separate the role of the researcher from that of participant (Lovey, 2000). It is necessary, then, to state my involvement and the level at which that involvement occurred.

Initially my participation, commenced as a member of the management committee of the Leaders Transforming Learning and Learners project as representative of the system by which I was employed. On another level, I was the Assistant Principal of a school directly involved in the LTLL project. In this role, I participated in the selection and recruitment of the teachers, who would be working in the classroom. Beyond that I was a member of the LTLL team at school level. This group was responsible for the design of the InteL project. I was also an InteL teacher in 2006 and attended the team meetings of the classroom teachers where implementation of the program was formulated and specific teaching points were discussed. Once again, I had an interest in ensuring the success of the project. Given that my time at the school concluded the year prior to data collection I do not believe that my former association had a significant impact.

To a certain extent, this last point also applied to the students. It is possible that some students may be unable to separate the role of the researcher from that of the teacher, with the latter role assuming dominance. This being the case, some students may have proffered answers that were designed to please, rather than being honest in their interpretation. I am no longer employed at that school. The Year 7 students who were interviewed were not

known to me and had extremely limited contact with me the previous year. Given that I was no longer involved with either school, or that the students interviewed initially came from a variety of primary schools, not just Feeder, there should have been minimal impact.

By giving name to my reality, I have acknowledged my context, and my biases. "The qualitative researcher systematically reflects on who he or she is in the enquiry and is sensitive to his or her personal biography and how it shapes the study" (Creswell, 2003, p.182). While this was a significant thing to do, it was also of major import to ensure that these issues did not overly influence or colour the research. One way to minimise this as an issue, was to use an external person in the role as a peer briefer (Creswell, 2003). My supervisors, as well as a trusted colleague assumed this role.

3.9   OVERVIEW OF RESEARCH DESIGN

The purpose of this mixed method study was to explore how leadership impacted upon the experiences of teachers involved in InteL, and to examine the authentic learning experiences of Year 6 and Year 7 students at a Catholic high school and primary school through the design of a specific learning experience. This chapter has outlined the particular theoretical framework within which this study is situated, and the research methodology that was used. It examined the significant issues associated with data collection and analysis, the selection of participants and the ethical dilemmas that face qualitative researchers. The role of the researcher was examined to ensure that any biases or personal interests were clearly identified. Finally it confronted the potentially contentious area of legitimation and will use the five point criteria suggested by Morse et al., (2002) to achieve verification during the process.

CHAPTER 4:   THE PRESENTATION OF DATA

4.0   INTRODUCTION

As outlined in Chapter 3 the methodology utilised was that of case study. The research invited a mixed method approach that allowed the researcher to gain an understanding of the meaning that the participants, both teacher and student, created through their own actions and interactions with each other as the LTLL project was implemented. The purpose of this study was to explore the linkages between leadership, learning and student engagement through the implementation of a change project. Data were collected from the students and teachers at the two schools that were jointly involved in the project through questionnaire and survey, focus group interview and analysis of two DVD presentations. The data is presented in two ways. Firstly, the statistical data associated with a factor analysis and Cronbach's alpha coefficient of the student questionnaire is presented. Secondly, the data is explored descriptively as a response to the four research questions that framed this study.

Question 1.   What issues regarding student engagement in learning emerged for participants from the implementation of InteL within the LTLL framework?

Question 2.   How have the experiences of the student and teacher participants in the InteL and LTLL project influenced their perspectives of the linkages between leadership and learning?

Question 3.   Has the involvement of the teacher participants in InteL changed how they view teaching and learning?

Question 4.   What vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?

4.1   Factor Analysis of the Student Questionnaire

The Student Questionnaire (Table 3.3 p.58) contained fourteen items. Despite being only a relatively small sample of 148 (66% return rate), the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.836 (Table 4.0) and is above the mark of 0.7 that suggests the "correlations, on the whole, are sufficiently high to make a factor analysis suitable" (de Vaus, 2002, p.188).   Bartlett's test of Sphericity (Table 4.0) further suggests that factor analysis of this sample is appropriate.   The descriptive statistics listing mean and standard deviation are included in Appendix 10, page 261.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.836
Bartlett's Test of Sphericity	Approx. Chi-Square	674.758
	df	91
	Sig.	.000

Table 4.0   KMO and Bartlett's test

The initial principal components analysis using SPSS ver.17 revealed that a four factor analysis was possible as there were eigenvalues with values higher than 1.0 (de Vaus, 2002).   The total variance of the data is listed in Table 4.1 (p.76).   Although it was possible to complete a four-factor analysis, it was decided that the variance accounted for by a two-factor analysis (44%) would also be worth investigating as was demonstrated by the Scree Plot (Figure 3.0, p.59).   "The aim of factor analysis is to represent a set of variables as simply as possible, the best factor analysis will have as few factors as necessary" (de Vaus, 2002, p.188).   The two-factor analysis yielded one factor with ten items and the second factor with three and one final item that was not connected to either factor.   The rotated component loading is recorded in Table 4.1 (p.76).   The second component was disregarded, as there was no easily explainable link between the three items.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.857	34.690	34.690	4.857	34.690	34.690	4.714	33.671	33.671
2	1.353	9.663	44.353	1.353	9.663	44.353	1.495	10.682	44.353
3	1.323	9.448	53.801						
4	1.124	8.030	61.831						
5	.895	6.395	68.226						
6	.786	5.613	73.839						
7	.722	5.155	78.994						
8	.629	4.496	83.490						
9	.564	4.032	87.522						
10	.436	3.114	90.636						
11	.389	2.781	93.417						
12	.354	2.530	95.947						
13	.303	2.162	98.108						
14	.265	1.892	100.000						

Table 4.1   Total variance explained in a two factor principal components analysis

The items on the questionnaire were structured around the core concepts of this study: student engagement and leadership through the creation of authentic learning experiences. Item 5 did not correlate with any other item.

5	I enjoy the opportunity to choose my own area of research in InteL.

Table 4.2   Student questionnaire item 5

Items 4, 8 and 14 constituted the second factor and although the intent of the statements was to explore learning and student engagement, the analysis revealed no obvious link between them.

4	When researching topics in InteL, I prefer to work in a group.
8	I don't work as hard in InteL because I am able to choose the pace at which I work.
14	InteL is different to my other classes.

Table 4.3   Student questionnaire items 4, 8 & 14

The creation of authentic learning was at the heart of this study and the latent variable identified in this small sample, which is worthy of note, can be identified as authentic learning. Although the questionnaire items were originally crafted to focus on the areas of leadership, learning and student engagement, the sample size was not large enough to allow these latent variables to be resolved. While further analyses, including confirmatory factor analyses, may have been useful, it would be unlikely due to the small sample size and the lack of development of the scale in a quantitative manner. In the context of this study's overall intentions, these data have been indicative but not conclusive.

Item		Component	
		1	2
1	InteL has helped me improve my skills in Information Technology.	.813	-.171
2	InteL has helped me improve my skills in research.	.667	.053
3	I look forward to going to InteL more than other classes.	.700	.067
4	When researching topics in InteL I prefer to work in a group.	-.117	.745
5	I enjoy the opportunity to choose my own area of research in InteL.	.391	.368
6	My involvement in other subjects is different to InteL because it deals with topics that are relevant to me.	.652	.166
7	I am more involved in InteL because I like the freedom to choose topics.	.690	.177
8	I don't work as hard in InteL because I am able to choose the pace at which I work.	.008	.365
9	InteL is more practical than other subjects.	.624	.101
10	I am more responsible for my own learning during InteL.	.512	.380
11	I now learn differently in other classes because of my experience in InteL.	.785	-.019
12	I help other students with their work more often during InteL classes.	.449	.133
13	InteL has helped me improve my social skills.	.736	.042
14	InteL is different to my other classes.	.197	.633

Table 4.4   Rotated component matrix of two factor principal components analysis

The first factor was analysed for reliability using Cronbach's alpha coefficient. "As a rule of thumb alpha should be at 0.7 before we say a scale is reliable" (de Vaus, 2002, p.184). In this case, Cronbach's alpha for this 10 item scale

was quite satisfactory, with α = 0.865 demonstrating the reliability of the scale. This high alpha means that the 10 items did function as a scale. This is further evidence that the three smaller threads of leadership, student engagement and learning, did not resolve themselves into cohesive scales due to the small sample size.

Cronbach's Alpha	Number of Items
0.865	10

Table 4.5   **Cronbach's alpha coefficient of reliability**

The following items form the latent variable of authentic learning.

1	InteL has helped me improve my skills in information technology.
2	InteL has helped me improve my skills in research.
3	I look forward to going to InteL more than other classes.
6	My involvement in other subjects is different to InteL because it deals with topics that are relevant to me.
7	I am more involved in InteL because I like the freedom to choose topics.
9	InteL is more practical than other subjects.
10	I am more responsible for my own learning during InteL.
11	I now learn differently in other classes because of my experience in InteL.
12	I help other students with their work more often during InteL classes.
13	InteL has helped me improve my social skills.

Table 4.6   **Student questionnaire items forming the latent variable**

InteL through the LTLL project aimed to create authentic learning experiences for the students involved in the project. These items are all directly associated with this aim. Therefore the link that brings these ten items together as a factor was authentic learning.

4.1.1 Summary

The Student Questionnaire proved to be a rich of source data. Designed to collect information on student attitudes to learning, leadership and engagement in the classroom a two-factor analysis revealed that 10 of the 14

items coalesced around the broader issue of authentic learning. Further testing demonstrated the reliability of this factor.

4.2 Research Question 1: What issues regarding student engagement in learning emerged for participants from the implementation of InteL within the LTLL framework?

This question had a clear focus on student engagement and its relationship with authentic learning.

4.2.1 Teacher Response

The responses of the teacher participants were collected through questionnaire and focus group interview and are outlined below.

4.2.1.1 Questionnaire

Of the ten statements two were associated with student engagement.

Statement 1: Students in InteL classes are better behaved than in regular classes.

50% of the teachers indicated that students were better behaved and only 20% disagreed. One teacher identified some concerns regarding the Year 7 students and their behaviour when returning to their previous primary school for their InteL class. Four comments related to behaviour suggested that InteL had been "a most enjoyable experience" and that this was perhaps due to that fact that students were "interested in what they are doing". There was also a belief that the interaction between Year 6 and Year 7 was helpful regarding behaviour because of the "positive socialisation" between the year groups.

	Statement	Strongly agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
1	Students in InteL classes are better behaved than in regular classes.	10	40	30	20	0
2	Student engagement in learning activities in InteL is stronger than in regular classes.	10	60	10	20	0

Table 4.7   Teacher questionnaire items – engagement (n=10)

Statement 2: Student engagement in learning activities in InteL is stronger than in regular classes.

The responses demonstrated that student engagement in InteL classes was believed to be stronger than in regular classes by 70% of the respondents with one teacher commenting, "one of the most positive aspects is that when assisted with a task [the students] will invariably decide to continue working on it to achieve a higher grade rather than to leave it".

4.2.1.2 Focus group interview

The data collected through the questionnaire were used to formulate the questions used at interview. The number preceding the question indicated the order in which it was asked.

> *1.   The responses to the questionnaire describing students in InteL classes included words such as: enthusiastic, engaged, self-directed and better behaved. Did your experience of InteL students match this? What do you think might explain the reasons for such behaviour?*

A variety of responses were proffered to this question and discussion moved from individual classes through to an assessment of the program itself. One teacher (T1) was concerned that by using terms such as 'enthusiastic, self-directed and better behaved' that a "whole class group" was being labelled. T1 went on to say that "those positive qualities were there" but not necessarily for every student. In general, there was agreement around this point, "those words would describe the classes that I had but it took an effort to get them to that point. … It was probably similar to any other class situation" (T2). From

the teacher who was not involved in InteL but had been a part of BRIDGE the previous year, "once they got a project that they were happy with engagement happened, but it took a while to click for the kids who might have had special academic needs or behavioural problems" (T6). Two other teachers were more adamant; "they've definitely been more engaged" (T7) particularly in relation to "other subject learning areas" (T4) and with regard to the previous cohort. "I teach a lot of those kids for Science as well … you can see that they're enthusiastic because they can see that they are achieving something" (T7). Only one teacher disagreed, "I haven't found them to be what I call enthusiastic" (T5) although it was conceded, "there are some who are" (T5).

After the initial conversation there was an examination of why InteL promoted a change in the students' attitudes. It was suggested, "the main fact was that the content was interesting and the structure [of the program] with technology was interesting and that they were able to pursue something of their own interest" (T2). The question was posed by one teacher, "Is it making more students enthusiastic and self-directed relative to other subject learning areas? Yes, it is from what I've observed" (T4). Again, there was the belief that providing the students with choice, with a voice and some measure of control over their learning created a more positive atmosphere and subsequently a more engaged learner. It was acknowledged that initially students struggled with ability to "choose their own area of interest to do their research on" (T1).

The teacher newest to the program summed it up thus:

> *"there's a different perception of the … teacher and … there's a group dynamic that's happening that … I don't experience in normal classrooms and it's very positive. A lot of the kids, I think, regard the teacher as more of an advisor and more of a collaborator rather than a person who is going to impart information and because of that change then there's a real positiveness that comes across"* (T3).

Positive student engagement in learning has an effect on student behaviour. It was explained that some teachers had described this cohort of students in

negative terms, and complained that they were a difficult group to manage "but I never see that when they're interacting" (T3) with the other students. It was recognised that in previous years this group had experienced "tightly controlled teacher-directed learning" (T8) accompanied by "strictly managed behaviour" (T8). While this type of environment may affect the students' learning, it too easily acknowledges the negative impact a teacher can have and too readily dismisses the positive. Another teacher summed up the 'difficult group' thus, "they've been better behaved and I think that … they're motivated because they're choosing what they want to do" (T7) even though it was indicated that there was more structure around the choice available compared with previous years.

The positive behaviour that the students exhibited was attributed to their own attitude towards learning. If they were "interested in their learning and wanted to experience new ways and new ideas they were comfortable" (T8) with the different structure and "were engaged and enthusiastic and therefore better behaved" (T8). While there is an element of truth in this, again, such comments do not recognise the significant role of the teacher and the impact that relationship can have on student motivation, learning and behaviour.

There was recognition of the importance of support from the formal leaders of the schools through the provision of resources and other forms of educational and professional support. This included time, technology and the 'right' teachers being involved. One of the InteL teachers suggested that difficulties often arise when embedding new projects into a school culture because of a lack of support from formal leadership, or through a lack of engagement of the staff involved. "Other KLA coordinators have said to me [that] it is often … the teacher may not be motivated or technology may not be there, but we've set up InteL" (T2) so that these things are not a concern. The end result of which is that "on the whole, 90 – 100% of students were engaged and self-directed and enthusiastic" (T2) although some students viewed the situation differently.

In summary, the participating teachers' views regarding student engagement were positive and most felt that there had been increased motivation on the

part of the students that resulted in improved attitudes towards learning and, in comparison with regular classes, a more positive classroom experience. The response of the Principals was also positive but not being directly involved in the project meant that their understanding was mediated through those with whom they communicated.

4.2.2   Principal Response

When asked:

> *1.   The responses to the questionnaire describing students in InteL classes included words such as: enthusiastic, engaged, self-directed and better behaved.   Did your experience of InteL students match this? What do you think might explain the reasons for such behaviour?*

One Principal stated that "the kids have been far more engaged" (P1) and part of this was attributed to the fact that some of the students had experienced the program before at Year 6 level.   It was acknowledged that this belief was gleaned from discussion with staff and from "walking past, occasionally going to the library" (P1) where some classes were held.   It was also put forward that at Year 7 level InteL allowed all teachers to see the different skill sets that students from different primary schools possessed.   This provided a discussion base for teachers in regard to what skills needed to be factored into the Year 7 curriculum.

The other Principal referred to "the enthusiasm" for changing campuses when going to class but reported, "as far as the learning language, I haven't heard that as much as I did from last year's children" (P2).   The comments then became year specific and focussed on why there could be such a difference in the attitude towards learning from one year to the next.   It was stated, "we've had a lot of problems with them … I just wonder whether, because they've been managed, they haven't become independent learners" (P2). This referred to the impact that teacher expectation could have on a group, rather than raising expectation it was lowered and the behaviour of the students was managed through "chalk and talk and teach" (P2).   Upon further reflection it was conceded that there was "a select group of kids that have just

loved" (P2) InteL but the predominant focus appeared to be on student behaviour and not student learning.

In summary, each Principal was only able to respond to the question in terms of their individual school campus. Neither had the direct involvement in the classroom that would have enabled them to comment more fully on levels of student engagement. As such, their responses were mediated through the experience of others.

4.2.3 Student Response

There were several data collection sources used with the students: questionnaire, focus group interview, survey and DVD interview.

4.2.3.1 Questionnaire

The students responded to fourteen items on their questionnaire and the following six statements are related to engagement.

	Statement	Strongly Agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
3	I look forward to going to InteL more than other classes.	6	23	26	26	20
6	My involvement in other subjects is different to InteL because it deals with topics that are relevant to me.	5	34	41	15	4
7	I am more involved in InteL because I like the freedom to choose topics.	18	33	30	12	7
8	I don't work as hard in InteL because I am able to choose the pace at which I work.	16	36	27	19	3
14	InteL is different to my other classes.	43	41	11	3	3

Table 4.8   **Student questionnaire items – engagement** (n=148)

Statement 3: I look forward to going to InteL more than other classes.

It had been assumed that following the observation of increased levels of student engagement in InteL classes that the students would report that they looked forward to attending InteL more so than other subjects. This turned out not to be the case with 46% of students disagreeing and only 29% agreeing with statement three. This statement elicited polarised reactions.

Students either felt that InteL was "boring" because "we don't do much work" or that it was "fun" because "it is better than most classes".

Statement 6: My involvement in other subjects is different to InteL because it deals with topics that are relevant to me.

This statement drew a mixed response with 39% of students agreeing but a larger number of students, 41%, reported that they were undecided. Due to the existing climate in the two schools where students' opinions on curriculum were rarely sought and where traditional content driven curriculum maintained prevalence, the relevance of the work completed in class was possibly not something that many students considered.

Statement 7: I am more involved in InteL because I like the freedom to choose topics.

This linked engagement in class with the ability to choose the topic of research. 51% of respondents agreed that they were more involved in InteL because they could choose their area of research, although a further 30% were undecided. Perhaps this result was influenced because the topics of involvement and freedom were linked.

Statement 8: I don't work as hard in InteL because I am able to choose the pace at which I work.

Due to the self-directed nature of the learning in InteL there was concern by some staff that students may not work as hard as in their formal subjects. This was confirmed by 52% of students agreeing with the statement. During later discussion some InteL teachers reported their disappointment at this revelation. In the year of the data collection InteL was not a part of the formal reporting process to parents. This situation changed the following year in an effort by the InteL teachers to place it on an equal footing with other subjects in the eyes of non-involved staff and the students themselves. Comments of a negative nature were reflected by "it's a bludge" and "I don't work as hard in InteL because it's easier than other subjects". However, almost as many students disagreed, believing the statement was "rubbish" and responding "I still work hard in InteL".

Statement 9: InteL is more practical than other subjects.

The key to this statement is the interpretation of practical as 'useful' for the students. This can then be linked to authentic learning being real and relevant. 43% of students agreed with the statement and 24% disagreed, although 34% were unsure, perhaps indicating some uncertainty with the terms used.

Statement 14: InteL is different to my other classes.

This produced the strongest result of all fourteen items with 84% of students agreeing and only 4% disagreeing with the statement. The main areas for mention were to do with technology, "we get to use computers" and the interaction between the two schools "because we work with the Year 7s".

In summary, the student responses to the questionnaire did not reflect the positive statements made by the teachers and the Principals, although the data collected at focus group was more encouraging.

4.2.3.2 Focus group interview

The data collected through the questionnaire were used to formulate the questions used at interview. The number preceding the question indicates the order in which it was asked.

> *4. A lot of people indicated that they enjoyed InteL more, felt freer or were more involved than in regular classes. Was this your experience and if so what did you enjoy about InteL?*

As with the original questionnaire most students were able to identify positive factors associated with InteL and as such, generally agreed that they gained more enjoyment from it in comparison with regular class activities (HS2, HS3, HS4, HS6, HS7, HS8, HS10, PS2, PS3, PS5, PS8). The reasons for enjoyment were quite varied and ranged from socialisation and transition through to a change of environment. Given the opportunity, students identified positives and negatives in both InteL and classroom instruction (P1,

P2, P3, PS6, PS7, P8, HS5) and four other students acknowledged that they preferred their regular classroom experiences to InteL (HS1, HS9, PS1, PS4).

One student commented "even though I'm not going to Regional high next year I've made a lot of friends that I have worked with … that's why I like InteL"(PS2). This theme was continued, "I do like it because it gives us the chance to meet the people that we will see next year in high school" (PS7). Other students developed this idea further by incorporating the importance of change in the learning environment, stating how much they enjoyed working at the high school; one student suggested they worked better as a result of moving from the primary campus to the high school. This response too concluded with a statement about the importance of socialisation in the transition to high school, "we get to meet new people and next year … if most of our class doesn't go to Regional we will know people in Year 8. Like if we see them we can have conversations with them instead of being by yourself" (PS8).

The importance of choice, or a student's ability to be involved in the planning of his/her own learning surfaced as an item of significance, "I enjoy InteL because you get to choose what you want to do. You get to choose subjects in InteL that you might not be able to do in normal primary school" (PS5). This was also echoed in listing the assignments and activities as "fun" (PS6, HS2, HS6) and "we get choices … it's really enjoyable because it's not just researching" (HS6). Taking this idea further this student talked about the importance of creating a piece of work from the choices that were available, not just producing another document. Inherent in the ability to choose work areas and groups was the ability to "work at your own pace," (HS2) although this view was not shared by the primary students. One high school student summed it up, "when you're working in a group you don't have to rush to do all the work like in other subjects" (HS3).

Further commentary relating to this question seemed to reflect a disparity between the primary students' view of learning in comparison with the high school students. There was a much narrower view of learning and the

importance of what was occurring in the classroom as expressed by some of the older students, "I don't like InteL it's pretty boring. You're just researching a project and that's basically all you do, it's projects" (HS9). The same student a moment later, "all the skills we're doing now we learned last year … we're not learning any new skills" (HS9). However, there were students who could see beyond the classroom,

> *"I agree that we do learn things from research and it will be helpful in other classes and when we need to learn and do research at home by ourselves. InteL is making us more independent with the computer not just at school but at home"* (HS1).

In recognition of life-long learning,

> *"we're going to be using them [research skills] at home and through our school years and when we're at work and we're using the skills that we learned because we'll never forget them and they'll be with you your whole life"* (HS5).

This was countered by, "I disagree … in a few years you might forget and it's good to revise and remember what we've learned" (HS8). It would appear that the view of learning as fact acquisition is well established by the time a student reaches Year 7.

Several areas were identified by the students as having a negative impact on their enjoyment of InteL classes. Most of these were related to pedagogy (PS2, PS6) and the fear of transition from primary to high school or of the inability to meet the requirements of the course (PS1, PS3, PS4, PS8). One student expressed their dislike of InteL,

> *"I got stressed out a lot times and I find the projects much more harder than the ones we got down in primary school … I felt like I had to get going straight away and then also like I might not understand something and I could tell the teacher but I feel like maybe they will yell at me because they have said it a million times and I still don't get it"* (PS1).

Another student reinforced this statement and insisted he/she felt more comfortable at the primary school (PS4). Two others also reported they were "stressed" (P3, PS8) by the workload associated with InteL, but one went on

to say there were also times when the assignment was completed and there was nothing to do except to "go on the internet and see what's on there" (PS8). There were obviously questions to be raised around work balance and maintaining student focus once the main task had been completed.

Further developing the pedagogical concerns another student pointed out that at times assignments were "rushed" (PS3) due to time constraints. There was also the view that was expressed in response to an earlier question that InteL was repetitious, "because some of the tasks, I think, are just like what we do all the time" (PS7). Another student suggested that active student focussed lessons were more fun than being forced "to sit and write all lesson" (PS6). HS4 identified "just letting your brain rot away in front of the computer" as being a concern.

In general, the enjoyment factor associated with InteL was consistently linked to socialisation, group work and the ability to choose the area of research – all of which confirms the data from the questionnaire. The negatives were predominantly identified by primary students and were related to transition and the level of work. Each of the concerns raised by the students was valid and may perhaps have influenced their response to the next question that looked at work ethic.

> *5. Over half the people surveyed said they didn't work as hard during InteL compared to other classes. Was this your experience? Do you think that you learned as much in InteL classes as in regular classes? Why?*

Of the ten secondary students interviewed three said that they worked just as hard during InteL classes (HS1, HS2, HS9), six said they did not (HS3, HS4, HS5, HS7, HS8, HS10) and one student discussed work ethic (HS6) but did not indicate whether he/she worked harder or not. In the primary context three students said they worked as hard during InteL classes (PS1, PS2, PS6), two said they did not (PS3, PS7), and three (PS4, PS5, PS8) provided a qualified response that implied their work ethic depended on other factors not just what class they were attending.

The students who agreed that their work ethic did not change all had similar things to say, "I did work as hard … because I think InteL is just a normal class" (HS1) and "I do work as hard in InteL as in other classes" (HS2). Or, "I have worked pretty hard" (PS2) and "I do work harder at InteL because there is more work to do … in a shorter period" (PS6).

Two students further qualified their answer, one with "I don't learn as much but I improve my skills" (HS2) and the other, "it's stuff I've learned before so … you get to relax and stuff. Do a project I'm interested in so it's just easy" (HS9). There was a separation of learning from skill acquisition.

Another two respondents who said they worked just as hard during InteL were very honest in their assessment, one stating, "I think I could work a bit harder" (PS1) and the other "except in the last InteL lesson, I have been mucking around a bit and laughing with my partner" (PS2) but went on to say "we got the work done" (PS2).

These statements were also echoed in the responses put forward by the students who assessed themselves as not working as hard in their InteL classes. "I don't think I worked as hard … because up at InteL I talk to my friends a lot" (PS3) and "I worked a little less hard because I like to push, what I have to achieve, like in InteL, with all the high schoolers talking and stuff, it's harder to concentrate so I get less focussed" (PS7). Another student, in a comment that reflected on where the responsibility lay for the learning said, "I don't work as hard in Intel because there wasn't always a teacher nagging you … to see what you're doing" (PS8).

The other reasons put forward for not working as hard in InteL tended to coalesce around the amount of time available to complete the work and the repetitive nature and relative ease of the work. Students from the high school said, "I don't work as hard because in other subjects you don't have as long a time" (HS3) to complete the work and "because there's a big time frame … some people completed it [the project] in one week … and so people have got nothing to do" (HS7). In addition other students remarked that InteL lessons

were boring "because all we do is sit in a computer lab for a whole term" (HS8), or as one student observed, "you just sit there and just type away to nothingness … I don't work as hard as I should because it's just easier than all the other subjects" (HS4) pointing to the need for constant challenge.

Two students believed that they "would work harder" (PS4, PS5) if they were not working in a group. Despite the fact that this contradicted statements they made previously both indicated that the workload is shared so it's easier.

Within the high school focus group the discussion moved to the length of time available to complete the projects and how this time was being used. One student suggested that the way time was utilised once the project has been completed was a personal choice and that the individual chooses to focus their attention on another area of work or waste time (HS10). Another added that the presentations that followed a research project were a "drag" (HS7) and perhaps another method of presenting and validating work should be explored. "People work at different paces" (HS5, HS9) reminded a couple of students. This prompted three students to suggest that "extension work" (HS5, HS7, HS10) should be provided for students who complete their work quickly. While in part this idea borrows from a finite value of learning some of the participants were able to see the value of learning beyond what was teacher controlled. One stated "I actually do my own interest projects … if I've got nothing to do" (HS7).

The final comment to this question belonged to one of the high school students who has demonstrated an understanding of learning beyond the classroom context, "I work hard in InteL but I finish my work, but I also think that the time they give us is also for preparing what we need to do for further work in my InteL class. That's what gives me confidence when I'm preparing my things" (HS6).

From the perspective of the teachers the responses to the question on work ethic were disappointing. Although some students acknowledged that there was no difference, too many stated they did not work as hard, this was

despite the earlier suggestions that InteL was enjoyable because of the self-directed nature of the work. There is a need to ensure greater accountability on behalf of the students.

4.2.3.3 The BRIDGE DVD interview

The BRIDGE DVD was created as part of a presentation for the LTLL project and the opening scenes were of engaged students working on computer or students in discussion with a teacher. The two separate styles of uniform worn by the students revealed there were two schools involved in the project.

The first set of interviews focused on four students from the high school and the interview questions were asked via a 'talking' laptop computer that was sitting on the table between them. Question one asked what the students looked forward to during BRIDGE classes. The responses mirrored those of the survey and the focus group interviews. HS23 commenced with "working with other people beyond your homeroom" which was followed up with "using computers" (HS24), "helping others" (HS 25) and "choosing the research topic" (HS26).

Six students commented on the topic of study and their comments at this early stage of the semester were in line with the more detailed survey responses. There was general agreement that the research topic was interesting because it enabled the students to "challenge" (HS 20) themselves and the presentations in class allowed for more learning (HS18) because of the variety of topics. Two students desired more variety and choice (HS12, HS17) and one suggested that the ability to work in a group was positive because "we can ask each other if we need help" (HS21).

Statements made by the students on the DVD also pointed to the reasons for increased engagement: socialisation, group work, choice and the self-directed nature of the work. As was also the case with the InteL DVD created the following year.

4.2.3.4 The InteL DVD interview

The InteL DVD was created to showcase InteL to other schools within the system. A number of students were asked to provide their perspective on the program. One question asked if they liked the topic of research. All students replied in the affirmative with two suggesting this was to do with the freedom to choose their own topic (HS23, HS25) and another stating it was the "hands-on" (HS26) nature of the work.

The responses were all affirmative when asked whether InteL was different to the regular classroom experience. Attention concentrated on the ability to choose your own topic and the freedom to decide your own direction (HS23, HS24, HS25), with one student suggesting that the freedom experienced in InteL allowed students "to learn to the best of their ability" (HS24). The other proposed difference was about being "able to work with Year 6" (HS26).

4.2.3.5 BRIDGE survey

The complete data set relating to the BRIDGE survey can be found in Appendix 5 on page 247.

Question 4: What do you look forward to the most in your weekly BRIDGE lesson?

In Semester 1 the data indicated that the students enjoyed using the available technology 35% and the socialisation 34% that came from contact with other students outside their regular class grouping. Technology was available every lesson. Significantly 14% of students identified 'learning' as something they looked forward to in Semester 2 signifying a shift beyond the content focus of the lesson. There was also an increase in the number of students who reported that they did not look forward to BRIDGE.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Using the computers	35	17
Socialisation	34	25
Variety of learning	15	1

Nothing	9	25
Choosing my work	8	2
Research	8	3
Not doing much work	6	9
No response	5	9
Having fun	5	2
Other	3	2
Group work	0	4
Changing campuses	0	2
Learning	0	14

Table 4.9   BRIDGE survey question 4

Question 5:   Are there any aspects of the program you do not enjoy?

In Semester 1 69% of respondents indicated that there were aspects of the program that could be improved.   The majority of students did not identify what it was that could be improved or what aspects of the program they did not enjoy.   A number of students listed speeches/presentations as an area they did not enjoy.

Interestingly the percentage of students who indicated that there were aspects of the program they did not enjoy increased by 9% in Semester 2.   This is despite the fact that the students were allowed much greater choice than they were in Semester 1 and were also able to work in a group if they so desired. The use of fertile questions in the second semester shifted more of the emphasis for learning onto the students.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Yes	69	78
No	28	21
No response	3	1
Response	%	%
Speeches/presentations	18	9
Limited choice	16	0
Too many activities	9	0
Not being in groups	8	0
Doing the same thing every week	7	4

Research	7	4
Not being able to use a computer	7	1
Year 6 and 7 not working together	5	6
Lack of time	4	4
Homework	4	3
Writing	4	0
All of it	3	22
Going to Feeder school	1	4
Other responses	9	16

Table 4.10   BRIDGE survey question 5

Question 8:   Did you enjoy the fact that you could choose who you wanted to base your research on and what activities you had to complete?

The responses demonstrated that within parameters, students enjoyed the freedom to choose the subject of their research with 81% of students replying in the affirmative in Semester 1 and 85% in Semester 2. There was increased choice provided in Semester 2 and an increase in the number of students 13% who did not like the ability to choose their own areas for research.

	Semester 1 n=110	Semester 2 n=114
Response	**%**	**%**
Yes	81	85
No	8	13
Unsure/No response	11	2
Response	**%**	**%**
The freedom to choose	42	31
Interesting, fun/ someone I liked/ interested in	42	37
Choice was too restrictive	11	3
Allowed me to focus more on learning	7	0
Too much choice	3	3
Other	3	6

Table 4.11   BRIDGE survey question 8

Question 10: Do you prefer this way of learning? Explain your answer.

66% of respondents in Semester 1 said that they preferred to learn in the 'BRIDGE' way. Although there was a wide variety of responses in Semester 1 they coalesced around the concepts of choice, group work and socialisation,

with 25% of respondents suggesting that the BRIDGE way was more enjoyable. The response was not so positive in Semester 2 and declined to 33% and there was a marked increase in the number of students who chose not to answer.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Yes	66	33
No	21	42
No reply	6	22
Unsure	6	4
Response	%	%
Better, more interesting, easier, less listening	25	11
Choice	14	4
Group work is better	12	3
Using computers	12	5
Socialisation/meeting others	11	3
Didn't like using computers so frequently	9	0
Ability to work at own pace	5	2
Prefer to work on my own	3	2
Regular class is easier	3	4
Enjoyed the opportunity to research	2	1
Boring	0	9
Other	6	7

Table 4.12   BRIDGE survey question 10

4.2.4   Summary

While the teachers were able to speak positively of their InteL experience and identify higher levels of student engagement, neither Principal respondent was really able to articulate whether any significant change had occurred with regard to student learning. Their answers were general and were mediated through other staff. The teachers acknowledged a shift in their traditional role and commented on the different nature of the relationships that developed in the InteL classroom. In part, this shift in role was partially responsible for the increased engagement of the students.

The student responses were perhaps not as positive as their teachers' comments, although there was strong agreement around the importance of choice, group work and socialisation. At the conclusion of the questionnaire some students commented that if you are having fun you could not possibly be learning. "InteL is a fun subject although you don't learn as much as other subjects". Having fun could be a sign of engagement, but this statement is perhaps more reflective of a culture where covering content and generating pages in a book are considered learning. Building reflective practice into lessons may make the learning occurring in InteL more obvious.

In acknowledging that InteL is different, one student noted, "InteL has made the stereotypical high school different.   Instead of just assignments, homework and class work, there is communication, co-operative learning and good teachers". This final statement suggests that the change that InteL brings leads to better student engagement.   The implications of this are explored through the literature in the next chapter, while the next section looks to leadership and its impact on learning.

4.3 Research Question 2: How have the experiences of the student and teacher participants in the InteL and LTLL project influenced their perspectives of the linkages between leadership and learning.

Research Question 2 focussed on the impact that leadership had on learning.

4.3.1 Teacher Response

The responses of the teacher participants were collected through questionnaire and focus group interview and are outlined below.

4.3.1.1 Questionnaire

Of the ten statements on the questionnaire the following three in Table 4.13 were linked to leadership.

	Statement	Strongly agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
7	InteL provides more opportunities for students to demonstrate leadership within the classroom.	20	30	40	10	0
8	I have become more aware of how teacher leadership impacts on student learning.	10	50	20	20	0
9	My view of the linkage between formal leadership within the school and learning at a classroom level has changed as a result of my experiences in InteL.	10	30	30	30	0

Table 4.13   Teacher questionnaire items – leadership (n=10)

Statement 7: InteL provides more opportunities for students to demonstrate leadership within the classroom.

Only 50% of respondents indicated that there were more opportunities for students to demonstrate leadership in the InteL classroom and a further 40% were undecided – the highest 'undecided' score.   However, individual comments were encouraging, with one person reporting that "this is one of the strong positives associated with InteL" and another two referring to students assisting each other with their work.

Statement 8: I have become more aware of how teacher leadership impacts on student learning.

Although one comment referred to an inability to elaborate on how teacher leadership had impacted on student learning another stated that they viewed "the teacher more as the facilitator". 60% of respondents pointed out that they were now more aware of teacher leadership.

Statement 9: My view of the linkage between formal leadership within the school and learning at a classroom level has changed as a result of my experiences in InteL.

This statement drew a variety of responses. While 40% of teachers agreed with this statement, 30% disagreed. The focus appeared to be about the

visible support from the Principal or leadership team. As one respondent elaborated, it was viewed as being "critical. Not just in words but being involved visiting classrooms, coming to meetings, financial support". Others noted the need to have parental support and to have the "whole staff on board" for a project of this kind to succeed.

4.3.1.2 Focus group interview

The exploration of the link between leadership and learning continued in the focus group with the following question:

> *3. The questions on leadership drew a variety of responses, although a couple of people pointed out the importance of visible support from the Leadership Team. Do you believe that InteL has affected your view of both formal and informal leadership by student, teacher and those appointed to positions of responsibility? How has leadership within the schools impacted on InteL?*

In contrast to the questionnaire, all teachers agreed that InteL had impacted upon their perspective of student leadership. While there was consensus concerning the importance of informal teacher leadership within a school and the impact that it had on the InteL project, a uniform understanding of the impact of formal leadership structures was not clear-cut.

With regard to student leadership one respondent stated, "you can see evidence of kids that are guiding the directions of the group" (T1). Another said that student "leadership is shown every lesson. These kids who take the lead with their level of academic [ability] and technology … they're good role models for each other and ... they do peer tutor" (T2). This statement was supported by another teacher who stated, "peer tutoring is a really positive thing" (T3). There were opportunities for all students "to become peer tutors and take on learning leadership roles" (T8) although it was necessary to "actively promote and encourage" (T8) students to move beyond the safety zone of their current cohort and work with the other group.

There was a suggestion that it might be a good idea to get the students "involved in the actual process of planning" (T6) for InteL the following year and it was agreed that little had been done to formally promote student leadership in this regard aside from the promotional DVDs. While InteL had "given some students the opportunity to lead" (T5) it was put forward that if they were involved in the planning itself they might "think they've got a bit more power" (T6) and begin to question rather than accept the culture of learning around them. This was seen as a positive outcome.

The level of informal leadership within InteL was deemed responsible for the survival and relative success of the program and if what was desired was "many leaders, educational leaders and classroom teachers then it's a success" (T2). It was also acknowledged that one person within the group of InteL teachers had assumed leadership responsibility for the group. This person was able "to pull it all together because you're dealing with a disparate group of teachers in so many different KLAs who otherwise might not even come together" (T1). Indeed, it was noted that the complexities of coordinating staff across two schools – one primary, the other secondary – not to mention different timetables and bell times and structures should not be underestimated. This person did not possess a formal title or a formal leadership role within either school and had been teaching for a relatively short period of time – four years, prompting one observation that "the most important thing I think has been the teacher leadership shown" (T1).

Taking a slightly different tack one participant believed that all of the teachers had "become leaders in this educational issue in the school" (T2) and then went on to outline some of the negative discussion that had surrounded InteL. It was inferred that this negativity was situated in the high school and stemmed from some Key Learning Area coordinators, although other teachers had also been "openly dismissive" (T8). Questions concerning the worth of InteL were voiced at a full staff meeting and on at least one occasion at a meeting of the KLA coordinators. In both instances there was no defence of InteL offered by the formal leadership of the high school. There was a belief that inaction on the part of the formal leadership allowed negativity to foster

towards InteL and by association the teachers involved in it. It was believed by some of the InteL teachers that if the leadership of the school did not demonstrate overt support for the program and challenge the negative statements, then they did not value InteL. Neither Principal supported this belief during their interview.

However, a shift in attitude on the part of other staff was also detected, "just recently I've had KLA coordinators come to me and ask for my opinion regarding the direction of InteL" (T2). This was seen as an important development and "being able to lead KLA coordinators" (T2) was viewed as significant because it was eroding the cultural barriers and power structures that existed. As was identified by someone else, "we are a fairly conservative institution and … until we get the nod from people like KLA coordinators, then it's not going to get the traction … there won't be cultural change" (T6). This statement is interesting because of the implication that the real power base was situated not with the school executive but with the middle curriculum leaders.

T6 stated that it was his/her involvement in LTLL and then InteL that allowed "me to feel like a real leader for the first time". This comment was surprising because this person had been a middle leader of one of the schools for a number for years. This related to how formal leadership roles were structured in that school.

Generally, formal leadership refers to that demonstrated by the school executive, specifically the Principal and the Assistant Principal, although some respondents have broadened it to include other Coordinators as well. Involvement of the formal leadership was described, "there hasn't been a lot of input … from the formal end of the management team [they have] been in on a couple of occasions and said 'how are you going? Is everything alright?'" (T1). Another said,

> "we have people from the executive turning up to meetings but it appears that it's just window dressing, that they need to fly the flag … I don't think that there has been enough positive input from the

executive and probably one of the reasons why is because they're not involved" (T3).

In the first year of InteL (BRIDGE) the Principal and the Assistant Principal (this researcher) had been allocated a class each. The Principal was unable to take a class the following year and with personnel changes and timetable restrictions the new Assistant Principal had a partial allocation for InteL but did not appear to seek an active level of involvement.

Continuing the theme that formal leadership support was "window dressing" (T3) another teacher put it more forcefully,

> *"they are not actually doing anything to support those people in the team [by] providing the team with the resources they need to make the program better so that it can be viewed by other people in the school as a worthwhile program … some of the leadership has a negative impact"* (T7).

While there was tacit acknowledgement that people in formal leadership roles needed to be actively involved in the project, there was also the belief that support went well beyond the classroom into resourcing and timetabling. This was echoed by a number of people who acknowledged the significant role of coordination played by one particular teacher. It was one person

> *"that's underpinned everything and pulled it together and made it real and put it on paper and organised people. You really need someone to be doing that which has been the reason that it's worked well"* (T1).

Despite this and the fact that this person needed to work with "teachers coming from different staff rooms, different KLAs, different schools" (T2) there was never any support provided in terms of "a time allocation for InteL [and] … that again shows a level of commitment … we've been battling the whole year really to get enough [planning] time to make this a success" (T3).

The undercurrent of expectation was that more could be done and more should be done by the formal leadership of the school to support and nurture the program and the teachers involved in InteL, "my fear [is] that InteL could burn out with those enthusiastic people burning out" (T6) in the process. This was clear in discussion around the negative sentiment expressed by some

staff members, although it was obvious that there was a belief that more staff now viewed InteL as a positive for the school, but this was a reflection of the "strong leadership" (T4) from within InteL. It was also clear that InteL threatened the status quo where "people are fairly entrenched in certain ways of doing things with systems and structures, and experimentation is not part of that culture" (T6). Again, it was viewed that formal leadership had more of a role to play in supporting InteL, rather than allowing the negative to dominate discussion. Although it was suggested that the formal leadership could be involved in the teaching of InteL, when balanced against other comments it was clear that what was wanted was genuine involvement.

At the conclusion of the focus group interview one teacher quipped, "it would be really, really nice if people were prepared to try things" (T5). This prompted the question, "I wonder how much that has to do with formal leadership?" (T7). The reply was "the leadership team is the most conservative of the lot of teachers here" (T5). The conversation then shifted to the need to make the students the central focus of a school. It was suggested that "the bottom line here is not kids" (T7) and until the leadership places the students first there will never be a culture "where you can move forward to make things better" (T7) for the students. This discussion highlighted the importance of leadership and the impact it can have on changing learning cultures.

In summary, there was a strong recognition of the role of student leadership through peer mentoring. Informal leadership by the teachers was also recognised as being fundamental to the continued existence of InteL. The impact of formal leadership of the schools was not always viewed as positive, although the Principals presented a different perspective.

4.3.2   Principal Response

In response to:

> *3.   The questions on leadership drew a variety of responses, although a couple of people pointed out the importance of visible support from the Leadership Team. Do you believe that InteL has affected your view*

of both formal and informal leadership by student, teacher and those
appointed to positions of responsibility? How has leadership within the
schools impacted on InteL?

One Principal focussed his/her answer solely on the teaching staff and the
school executive and did not explore whether InteL impacted on student
leadership. Indeed, leadership in the broad sense seemed not be part of the
response. Attention was on logistical difficulties associated with the program,
to do with employing "the right person" (P2) to make InteL a success, rather
than looking to behavioural concerns of students – which was implied. It was
suggested that things started to go wrong with the InteL project when a staff
member left the school because prior to that "it was working well" (P2). It was
declared that "informally and formally as a leadership team, we just jelled
anyway to support" (P2) the project implying an *ad hoc* approach. How the
program was supported was not articulated and given that one of the key
teachers who had been involved since its inception was not being allocated
an InteL class in the following year the next statement seemed incongruous.

> *"If we want sustainability with the project and with InteL … we've got to*
> *make sure that the people we put into [it] … understand what it's about*
> *and have that belief of the way children learn and are prepared to have*
> *that openness and flexibility to be able to make it happen"* (P2).

It will never be known if the sustainability of the project would have been more
viable if the original InteL teacher had been allocated a class in the following
year. The Principal who spoke of the value of InteL made the decision not to
utilise existing staff.

The other Principal recognised that he/she was "not directly involved in the
teaching" (P1) of InteL and as such this meant that the impact of formal
leadership had not been as significant as it could have been.

> *"We've [Principal and Assistant Principal] supported and helped in*
> *terms of providing [planning] days. We provide infrastructure … The*
> *subtle and the indirect forms of support are all there but I cannot say …*
> *that I'm impacting on InteL in terms of what they are doing in the*
> *classroom"* (P1).

There was an acknowledgement here that more involvement in the project from the formal leadership team would have a direct and, by inference, a positive impact, but the focus was limited to structural and organisational concerns. The question asked about formal, informal and student leadership and despite this, no mention was made of the latter two categories. Clearly the lack of direct involvement in the project limited each Principal's understanding of its operation and its benefits.

In contrast to the teacher responses, the Principals' focus on leadership was narrow and did not extend beyond the provision of support structures in one case, and, in the other, teacher leadership. Neither Principal commented on student leadership, again, this is probably due to their lack of direct classroom involvement.

4.3.3 Student Response

There were several data collection sources used with the students: questionnaire, focus group interview, survey and DVD presentation.

4.3.3.1 Questionnaire

Of the fourteen statements on the questionnaire the following three, listed in Table 4.14 were linked to leadership.

	Statement	Strongly Agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
10	I am more responsible for my own learning during InteL.	20	51	22	5	2
11	I now learn differently in other classes because of my experience in InteL.	4	24	30	28	14
12	I help other students with their work more often during InteL classes.	9	32	27	26	7

Table 4.14   Student questionnaire items – leadership (n=148)

Statement 10: I am more responsible for my own learning during InteL.

The subject of responsibility for learning drew some interesting statistics and 71% of students agreed that they were more responsible for their learning

during InteL classes. This was an interesting statistic when compared with the 52% of students who suggested that they did not work as hard in InteL. One respondent observed, "you don't really have as much teacher input in this class". This comment could refer to 'teacher talk' as well as "teacher input" or assistance.

Statement 11: I now learn differently in other classes because of my experience in InteL.

While there was acknowledgement from the teaching staff that the skills taught in InteL were transferable to other classes this was not evident in the student response with only 28% noting that they learn differently in other classes because of the InteL experience. 42% of students disagreed with the statement, "I learn how I normally learn in other subjects" and "I still work the same". These statements could be more reflective of the learning opportunities available in other classrooms, rather than being a comment on the skills being learned in InteL.

Statement 12: I help other students with their work more often during InteL classes.

Statement twelve was designed to focus on the leadership shown by the students through their provision of assistance to others. The result was polarised once again with 41% of students saying that they did help other students more often in InteL and 33% suggesting they did not.

4.3.3.2 Focus group interview

To commence the discussion around student leadership, the students were asked the following question that brought together statements 10 and 12 in an exploration of student leadership in learning.

> *6. Over 40% of people said they helped others more in InteL classes. Students can show leadership by helping others learn or by taking responsibility for their own learning. Do you think InteL helped you develop in either of these areas and if so how did you develop?*

In a significant contrast to the online responses thirteen of the eighteen students involved in the focus groups indicated that InteL helped them demonstrate leadership skills or at least provided them with a facility to develop their skills (HS1, HS2, HS3, HS4, HS6, HS8, HS10, PS1, PS2, PS3, PS5, PS6, PS7). While they agreed that the InteL experience provided them with an opportunity to show leadership, few of them strayed beyond the framework of the question and, therefore, responses were largely confined to assisting other students and being responsible for their own learning. Of the other responses three students did not believe that InteL had assisted their development of leadership skills (HS7, HS9, PS4) and two provided a qualified answer that acknowledged that there was some development (HS5, PS8).

Some students identified the group work structure of some InteL activities as providing the opportunity for leadership, "you could improve on leadership skills if you worked in a group because there are more people you are working with and there are more people to help" (HS10) and "we help people we work with because it is a more social and group work class anyway" (HS1).

There was also the recognition of a hierarchy of power among the students. The high school students viewed themselves as being dominant by virtue of their age and perceived knowledge. "I do think that InteL has given us leadership … because we are the eldest out of [the two schools]. We should help the [primary students] because we've got more knowledge about computers" (HS1). From the primary perspective attitudes to existing power relationships varied from the traditional, "I feel that up in high school I don't really help the Year 7s because they are above me and they already know what to do more than me" (PS8) to the more accepting "when you're at InteL, even though you're like the junior sort of people there, you can still help some of the high school people … it does help you to become a leader" (PS6) to the self-assured, "I've developed more leadership skills helping, sometimes, the Year 7s … that's kind of satisfying" (PS7).

One student suggested that InteL did not have the monopoly on leadership development opportunities,

> *"I think InteL does give us leadership skills but I think any subject does as well. Any subject where we get assignments we have to take responsibility like if our friends or classmates are struggling and we help them. I think in other classes we get more leadership skills"* (HS5).

Two of the students who did not believe that InteL assisted with the development of leadership skills identified being an independent learner as the reason: "because I'm [a] more independent worker and I don't really like to work in a group I don't develop that many leadership skills" (HS9). While another stipulated in somewhat of a contradiction "I don't think InteL has helped me be a leader. I think you have to be a leader while you are there because most people need help … and it allows you to be a leader" (PS4).

In summary, there was an increased acknowledgement that the structures of InteL afforded students more opportunity to demonstrate leadership, largely through the social nature of the work. One student summed it this way, "I think it's made me become more of a leader because of understanding more of the things that you need to achieve in life, more than just friendships" (PS2). Moving beyond this, the InteL DVD looked towards resourcefulness as a demonstration of leadership.

4.3.3.3 InteL DVD interview

A question was asked of the participating students examining their resourcefulness and the level of independence they demonstrated in their learning. They were asked where they go when they need help and what strategies helped them learn best. Answers revealed that the students were resourceful and self-directed with their learning and as such assumed leadership of their learning. Various Internet sources and books were the first port of call prior to asking the teacher for assistance (HS23, HS24). Other

answers were to "think first" (HS25) and to look for more "practical things, like pictures" (HS26) to help solve the problem.

The BRIDGE survey attempted to make student leadership more concrete by offering students an opportunity to shape the program for future groups.

4.3.3.4 BRIDGE survey

Question 13: How could the program be improved for next semester?

This question was designed to allow the students to take a leadership role in the re-shaping of the program and the responses are recorded in Table 4.15 below. The Semester 2 results were markedly different from those of Semester 1. Interestingly the two highest responses in Semester 1 were more choice 25% and more group work 19%. This was despite the fact that students had more choice available to them and were involved in more group work in BRIDGE than they were in regular classes. Neither of these responses attracted much interest in the Semester 2 survey with 'no reply' recording the highest percentage at 26%. The next most popular response was 'make it more fun' 19%, although there was little further elaboration on how this might be achieved.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
More choice of topics	25	4
More group work	19	6
No reply	11	26
It's good – no change needed	7	4
Choose your partners/people your own age	6	1
Don't know	5	11
Make it more fun	5	19
Rotate the groups	5	0
Learn how to make a film	3	0
Do less work	3	1
Irrelevant personal responses	3	0
No presentations	2	0
More outdoor activities	2	0
Choose whether you go to the other school	2	0
Scrap it	2	11

Do a PIP	2	0
Better, more involved teachers	2	1
More time	2	4
Single response answers	8	4
More computer use	0	2
More structure	0	2

Table 4.15   BRIDGE survey question 13

4.3.4   Summary

The data revealed students and teachers believed InteL provided opportunities for leadership. The teachers acknowledged informal leadership was crucial in the ongoing development of InteL and there were opportunities for the students to develop their skills in leadership as well, particularly through peer mentoring. Both Principals recognised the importance of formal leadership but neither commented on student leadership. The teachers also believed that the formal leadership of the schools could have done more to support InteL. The implications of this will be explored through the literature in the next chapter as leadership and its impact on learning are examined. The next section explores whether involvement in InteL has altered perspectives on learning.

4.4   Research Question 3: Has the involvement of the teacher participants in InteL changed how they view teaching and learning?

This question focussed on the impact of the InteL project on teaching and learning and how involvement in the project may have altered the practice of the participants.

4.4.1   Teacher Response

The responses of the teacher participants were collected through questionnaire and focus group interview and are outlined on the next page.

4.4.1.1 Questionnaire

The five statements from the questionnaire related to learning are listed in Table 4.16.

Statement 3: My involvement in InteL has changed my understanding of learning.

Involvement in InteL and, through it, the LTLL project had an impact on teachers' understanding of learning, with 70% agreeing with this statement. One teacher noted that InteL had "confirmed my beliefs" while another stated that "it has reminded me to try many different ways for all my students".

	Statement	Strongly agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
3	My involvement in InteL has changed my understanding of learning.	20	50	20	10	0
4	Things I have discovered about how students learn during InteL I have utilised in other classes.	0	60	20	20	0
5	As a result of my experience in InteL my view of the nature of teaching has altered.	10	60	0	30	0
6	My involvement in InteL has resulted in me making adjustments to my teaching practice.	0	50	20	30	0
10	The InteL experience should be expanded within the school.	20	50	20	10	0

Table 4.16   Teacher questionnaire items – learning (n=10)

Statement 4: Things I have discovered about how students learn during InteL I have utilised in other classes.

Building on the previous statement about the teachers' understanding of learning was the reality that involvement in InteL had a wider impact on teaching practice. 60% of teachers said that things they discovered about how students learn during InteL they have utilised in other classes.

Statement 5: As a result of my experience in InteL my view of the nature of teaching has altered.

This statement was supported with 70% of respondents agreeing. Although some "always believed in the process" and were "willing to experiment" prior to their involvement, others commented that it was "good to see others move" and grow throughout the course of the year. One teacher remarked that "I have critically assessed the effectiveness of my teaching", demonstrating the level of impact of the project.

Statement 6: My involvement in InteL has resulted in me making adjustments to my teaching practice.

While it was acknowledged that participation in InteL had an impact on teachers' understanding of learning, only 50% of respondents agreed that they had made adjustments to their teaching practice. One person noted that they were "constantly changing to keep [the students] on task", another reported that changes to practice applied only to "InteL lessons". The latter statement could reflect the very strong culture of focussing on content, particularly in a high school context. It could also reflect a traditional school environment where it is deemed acceptable to experiment with courses that lie outside the formal curriculum. Risk taking, in terms of teaching methods perhaps did not extend beyond InteL for some teachers.

Statement 10: The InteL experience should be expanded within the school.

This statement referred to the possible expansion of InteL within both the primary and the high school and 70% responded positively stating that it should, with only 10% disagreeing. How this might be achieved was not discussed. It was suggested that InteL could be expanded across a number of subject areas by focussing on thematic work and that InteL "should be occurring at Year 9 and Year 10 level" as well.

Although the initial development of InteL had its focus on Years 6 and 7 only, there was belief that it possessed untapped potential as a vehicle to change pedagogy across both schools in a much broader way. As one teacher stated, "InteL provides a mechanism to really bring change to teaching

practices at this school. It is a point of leverage which can significantly allow for professional learning within the school for staff as well as students." It was also suggested that this could be accomplished by utilising "student based/enquiry activities". Collegiality was also recognised as an important characteristic of the InteL model in the statement "the best part about InteL is the planning/collaborative process. The InteL classes have demonstrated the need for more innovative approaches to making our students better researchers".

4.4.1.2 Focus group interview

The extent to which perspectives on teaching and learning had been altered due to involvement in InteL was explored at focus group through two questions and the responses are recorded after each question.

2. The majority of respondents recognised that involvement in InteL has had an impact on their teaching practice or their view of teaching. Was this true for you? Could you share some examples of how the experience impacted on your teaching?

All teachers except one indicated that involvement in the InteL project had affected some level of change on their teaching. The teacher who stated that there had been no impact on was not a full time classroom teacher and said, "I haven't got other full classroom involvement as such and my background in classroom teaching was much more structured like this [the InteL project] in the first place" (T5). All other teachers spoke of the change in their teaching practice from InteL to the regular classroom, even to the extent of changing practice to ensure that the high school students "did not have a negative attitude to me as a primary teacher" (T8). From this point the discussion moved in different directions regarding the nature of the learning occurring and how their own classroom teaching had or should be altered in style.

Some of the teachers spoke of a general shift in mindset "from being the person with the expertise in the subject because there isn't a subject … so you have to step outside your normal way of thinking about teaching" (T1) and focus on the learning. "I'm facilitating the kids to figure out stuff for

themselves and that's been a big shift in the way you are in the room" (T1). Another teacher with a background in Science talked about how it changed his/her approach in the mainstream classroom. Rather than providing the students with the steps to complete the practical task he/she provides them with a "problem … [and] they work in pairs and they come up with their own method" (T7). T2 remarked that the way they operated within the InteL classroom gave them more time to observe what the students were doing. The teacher was "able to observe, being a facilitator rather than an instructor" (T4) with the students "all off on different journeys" (T4). Put another way, it was "easier to free up time in the curriculum to concentrate on skill development" (T6) largely because there were no government or system mandates on content or structure.

From the primary perspective the shift in teaching was related to more pragmatic concerns. In part this could be due to the generalist approach in primary schools where the teacher is responsible for all subject areas. Anecdotally it was suggested the focus was more clearly on learning as opposed to the content driven world of the high school. As a result there was some concern around ensuring that "we were all saying/doing the same thing in regard to expectations" (T8). This became a greater concern when "new people came on board" (T8) and InteL was part of their teaching load.

Time was a significant factor to be examined. Basically it concerned two areas, the first was to do with regular classes and the time required covering mandated content areas and the second was to do with the perception that there was more time available to observe students in InteL. With regard to the former it was stated that "the content driven syllabuses … and the amount of material that we need to get through really impacts on your ability to introduce a lot of things that you would" (T3) like to in a mainstream classroom. In stating this T3 was acknowledging all the positive aspects of the InteL classroom. Another teacher focussed on the observational aspect, "InteL allows me to notice a little bit more clearly, what my students are doing individually … and secondly the reliance on technology, maybe over reliance on sources of information" (T2). This emphasises the importance of the

teacher as guide, coach and facilitator, ensuring that the students receive adequate guidance and encouragement on their learning journey. Without the constraints of other subjects InteL allowed "time for the kids to be able to experiment, to fail, to come back, to try something different" (T3); learning drives it, not marks or grades. This is also reflected in the teachers' role to prompt thinking as T2 implied, to move the students beyond their reliance on Google as providing the answer to all their learning problems.

From this point the discussion broadened to cover presumptions of knowledge, the ability to think laterally and a general questioning of why students do not take risks with learning. "We're all presumptuous about what kids can do. We presume, if we're giving a task, that they know how to go and research it but no one has really sat back and said, well do they really know how to research?" (T1). Building on this it was agreed that while the students may be able to think laterally, the level of innovation really extended only to "going straight to a source like the Internet which has all the answers for them" (T2). Perhaps this and the following statements are more a reflection of how the students see school and the nature of learning. It demonstrated inauthentic learning, a minimalist, 'find the answer' approach to something that could be so much broader in scope. One participant mused,

> *"We gave the kids the opportunity to select which research presentation they were going to use whether it was PowerPoint, podcasting or report. It was amazing in my classroom that just about all of them wanted to go to PowerPoint … not many of them wanted to do [podcasting] because a lot of them were reluctant to take that risk of doing something new … students don't become as creative or take the initiative to think outside the square because they are reluctant" (T4)*

to take risks with their learning.

One teacher rationalised this sentiment by saying "I also think a lot of kids still perceive InteL as something external to the rest of the real school" (T1). Others turned their attention to the questions "why aren't we challenging them more? Why aren't they challenging themselves" (T4)? Part of the answer appears to revolve around the content driven curriculum of regular classrooms

although this does not negate the concern. "It does concern me, within KLA areas … how many times when we set tasks students will opt for something that they are comfortable with … that will get them a certain result rather than really extending themselves" (T4). It was explained that "kids are generally going to look for the easier road to give themselves a more beneficial time at school and if the teacher doesn't urge or encourage them to [take risks] then they won't" (T2). This discussion resulted in one teacher suggesting that he/she will "reassess what it is that I can do to set tasks so I can reward students that do go creative or above and beyond in what they do" (T4). These statements imply that it is necessary to review what is happening in contemporary classrooms in order to change learning to make it authentic and relevant to the students, to shift from knowledge to knowing.

In summary, the teachers were able to articulate how their view of learning had changed as a result of their involvement in InteL, where the process and skills of learning became more important than the content knowledge. The most obvious change was to their role from the imparter of knowledge to facilitator or guide to learning or even as co-learner. This had an impact on how they operated within the classroom and created more time for observation of student progress. In turn, this led to the desire for the students to take more risks with their learning.

> *4. There was strong support for expanding the InteL experience. Comments focussed on a 'whole school approach' or using InteL as a change agent to alter current pedagogies. Do you think there would be benefits in expanding InteL? How could this be achieved?*

The discussion echoed the findings of the online questionnaire and there was general agreement that expanding InteL would be beneficial, although "difficult in practice" (T8). It was recognised that the original concept was that once established "the intent was to take InteL beyond Year 6 and Year 7 and move it into other stages" (T8). Broadly the conversation was varied and went to the core of what InteL was about – changing pedagogy.

The first speaker was in total agreement that InteL "should be expanded right across the school" but went on to point out that "someone's going to miss out in terms of hours in another KLA area or maybe across several KLA areas … Perhaps this is where the executive leadership needs to be if this is the direction we're going to take" (T4). Underpinning this statement was the belief that particular faculty groups own class time and this leads back to a content driven curriculum and the pre-existing power structures.   Although it is significant to note that the New South Wales Board of Studies has mandated particular hours of study in subject areas in Years 7- 10, it could be argued that there is sufficient time available within the structure of a timetable to meet these requirements and still be creative with programs such as InteL.

Further discussion concerned the placement of InteL within the high school structure. It was put forward that InteL would be better placed "in the middle school, like Years 9 and 10, the wasted years" (T6) because these students "sometimes don't see the point in sitting and just taking in more information, more content" (T6) and the current enquiry based structure of InteL would suit these students and encourage more thinking and experimentation. "We really need to have students become thinkers" (T7) because "so often in faculty teaching they're not encouraged to question. They're encouraged to learn that, read that from the textbook, make a note from the text book and accept it" (T5). It was accepted that students needed to be taught thinking skills and that the extra maturity of middle school learners would be beneficial, but the discussion, foreshadowed by the first speaker, shifted to the pragmatics of subjects and hours and ownership. It would be necessary to "break down the barriers between the subject areas and have InteL as the base" (T5) to ensure the success of such a project.

The next speaker contested the basis for the expansion of InteL; "I don't know whether it's InteL … that needs to expand" (T1) perhaps it is a matter of "changing the way we're educating the kids … You're really looking at integrating learning" (T1).   This theme was taken up enthusiastically by another speaker who postulated the concept of "a particular group of KLAs" (T2) working together in Term 1 and then a different grouping cooperating in

Term 2 and so on. The end point of which would be "an exciting task, dynamic maybe, something different … that would assess … [across all] KLA areas and it's an amazing task that's worked on for a whole term with amazing output at the end, rewarding to everyone involved" (T2). The conversation shifted to the nature of the tasks and how different subject areas could be incorporated into such a project until the pragmatic issue of planning time was raised.

The breadth of the original vision was measured against the time constraints experienced in InteL, a project that incorporated only Year 6 and Year 7 and not the whole school as was being discussed.

> *"We're struggling for planning time [now] and every time we get together we've got to totally shift the way we're thinking and the way we're writing outcomes and the way we're structuring assessments and stuff. You would have to do that on a whole school basis"* (T1).

There was general consensus around this point and the benefits of allowing students to "pursue areas of expertise" (T2). The final product would be "far more marvellous than getting a piece of paper back with a grade or a mark on it" (T2) but it would require a total rethink on how a traditional school is structured. It would require a shift beyond the classroom to organisational structures, not just of timetables, but also of leadership at all levels.

There were three comments that went to the heart of education and current traditional methods of schooling that challenged school structures and the nature of what is happening in the classroom. Two of the comments were made in the light of what could be possible following the experience of InteL. The first looked to sustainable change "It's so easy to just do what you do all the time without changing it. You feel comfortable. You know what the outcome's going to be. Really we need to be dynamic and we need to be evolving continuously" (T7). The second comment focussed on the untapped potential of the system, "I think that schools are underperforming. We have a thousand human beings here. What an energy resource, what a mind think tank, what a labour force" (T2). Placing the 'possible' back in the reality of two traditional schools was the realisation that "if there is no perception that

practice needs to change, there will be no change" (T8). Again the perspective that such a significant shift in practice could only occur with the support of a strong leadership team and a shared vision for change was confirmed.

While there was agreement that InteL should be expanded, there was no common way for this to occur. It was recognised that InteL meant a change to teaching practice and that fundamentally this was the real benefit of the project but it would require strong support from formal leadership to be successful.

4.4.2 Principal Response

Although not directly involved in the teaching of InteL, the Principals were also asked:

> *2. The majority of respondents recognised that involvement in InteL has had an impact on their teaching practice or their view of teaching. Was this true for you? Could you share some examples of how the experience impacted on your teaching?*

One Principal was certain that being a part of InteL had a positive impact on the teaching practices of the staff involved in the project "only in so far that they are telling me that's the case" (P1) and went on to name several teachers who had spoken about the benefits of InteL. Taking the comment further it was acknowledged that there had been some difficulty in gaining a wider staff acceptance of InteL. It was suggested that this was not "resentment, but perhaps apathy" (P1) on behalf of some staff, although this was not accepted by the teachers involved in the project who felt there was, at times, open hostility. It was acknowledged that InteL was "slowly bringing about some change" (P1) in a "very traditional and conservative" (P1) environment.

For the other Principal this question was interpreted through a lens focussed on the difficulties this cohort had presented and the response conceded that they had been "in survival mode" (P2) with this particular year group. It was

stated that InteL had helped one particular teacher become more "reflective" (P2) in his/her teaching practice but this was largely as a result of the students not being at a level that was expected of them in terms of self-directed learning. It was posited that, to create the right environment for enquiry learning to occur in the later years, it was necessary to begin working with students in the earlier years, even to "start it in kindergarten" (P2) otherwise the attitude from the students would not be about learning but interpreted through "you write it up on the blackboard and we'll write it down" (P2).

Despite working so closely together with a combined cohort of students sharing a program and facilities it was revealed by their responses the two Principals possessed very differing views of the impact of the project. One Principal responded to the question from the teacher perspective and the effect it had on teacher classroom practice, the other interpreted the question through the behaviour of students.

The Principals' comments were in line with those of the InteL teachers. One Principal believed the expansion of the idea was warranted, but this did not necessarily mean the expansion of InteL itself. It was more to do with enquiry based learning and practices that would facilitate "deep understanding, deep knowledge" (P2). It was suggested by one Principal that the best place to begin would be in Stage 1, but it was also said that if classroom practice was dominated by "trying to manage behaviour … forget about the learning" (P2) because it was not possible to achieve both. The other Principal noted "the most important thing we can do is find ways to actually expand the program" (P1). Again, this did not refer specifically to InteL but to the concept behind it.

It must also be remembered that the high school had at least six main primary schools that contribute to its Year 7 intake and Feeder Primary is but one of these schools. Therefore there was some discussion around how to expand InteL to include the other primary schools. The high school Principal did not believe that the expansion of InteL meant moving beyond Year 6 into Year 5 and Year 4. She/he was more concerned with maintaining the current structure while finding more creative ways to bring in the students from the

other feeder schools. This led to a conversation around existing timetable structures and what could be done to free up time to allow for the expansion of the project. There was a suggestion that new structures could be in place for 2009 although this did not eventuate.

In summary, the Principals were in agreement with the teachers that the concept of expanding InteL was positive but did not mean the expansion of InteL itself, but of the changed pedagogy it brought.

4.4.3   Student Response

There were several data collection sources used with the students: questionnaire, focus group interview, survey and DVD presentation.

4.4.3.1 Questionnaire

The following five statements listed in table 4.17 are from the student questionnaire and were linked to learning.

	Statement	Strongly Agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
1	InteL has helped me improve my skills in information technology.	6	57	15	18	4
2	InteL has helped me improve my skills in research.	16	52	19	9	3
4	When researching topics in InteL, I prefer to work in a group.	47	22	13	13	5
5	I enjoy the opportunity to choose my own area of research in InteL.	36	44	16	4	0
13	InteL has helped me improve my social skills.	15	28	18	25	14

Table 4.17   Student questionnaire items – learning (n=148)

Statement 1: InteL has helped me improve my skills in information technology.

The first statement drew a positive response from 63% of participants. Given the project based, enquiry model of InteL this result was not unexpected. The early part of the first unit focussed on the effective use of technology.

Statement 2: InteL has helped me improve my skills in research.

Responses to this statement were very positive with 68% suggesting that InteL had improved their research skills. Despite the strong agreement levels for the first two statements, a small number of students, eight in total, added commentary that reflected a negative perspective with remarks like "I have not learnt anything I did not know", although the negative comments were tempered by the more positive "I did not have any idea about how much info there was to learn about technology".

Statement 4: When researching topics in InteL, I prefer to work in a group.

This statement drew a very strong response with 69% of the students indicating that they preferred to work in a group. This fact was also borne out in the survey conducted by the InteL teachers with the 2006 cohort. Some of the reasons put forward for this were the ability to share ideas with other people and "it helps me to focus and I can work better knowing other people are doing the same things as me".

Statement 5: I enjoy the opportunity to choose my own area of research in InteL.

The opportunity to choose the topic on which they worked was even more popular than working in a group with 80% of the students agreeing with statement five. Although most additional comments did not provide further articulation as to why choice was a good thing beyond "it means I can do what I think", one respondent acknowledged that choice is "good sometimes, but other times it is hard". Clearly, where choice is involved the students should be supported in the process of choosing appropriate tasks that not only match their skill levels but that also challenge them to develop further. Otherwise inappropriate choices could be made with students opting for tasks that do not

extend them.   Students should be encouraged to make choices that allow them to experience success as well as challenge.

Statement 13: InteL has helped me improve my social skills.

43% of students believed that they had improved in this area and 39% disagreed. Once again the students' understanding of the terminology could be a possible reason for such polarisation. In later discussion the teachers indicated that the focus on group work and collaboration allowed for a focus on social skills.

4.4.3.2 Focus group interview

There were two questions asked at interview that focussed on learning.

1. Please tell me what you think 'learning' is and whether you learned differently in InteL classes from your regular classes.

Before it could be ascertained if students learned differently in InteL, it was necessary to understand how the students themselves saw learning. Generally, the view of the high school students focussed on the concept of "being taught" (HS5, HS10) or "knowing something that you never knew before" (HS7) or the slightly broader interpretation of "learning new things" (HS6).   Learning was interpreted through the lens of collecting facts or accumulating knowledge. There was very little recognition of developing skills that could be transferred from one context to another. Although one student did question whether what was learned in InteL would be of benefit in "Maths and English" (HS9); the implication was that these subjects are associated with 'real' schoolwork. It was very clear that they had compartmentalised their learning into content, the subject areas and specialisations that their teachers worked within.   It was also obvious that their view of learning was quite narrow.   One student commented "I haven't felt like I learned very much [because] I already knew like how to research" (HS5) and another "we already sort of knew about them things" (HS2) reinforcing their finite view of knowledge and learning.

By contrast the primary students responded by linking learning to their lives, present and future (PS2, PS3, PS4, PS7). All eight students used terms such

as "accomplishing" (PS1), "achieve" (PS3, PS5, PS7, PS8) or "develop" (PS5). Each of them viewed learning as an active process that fostered development or achievement that allowed them to journey to a higher level or, in the future, to a better place.

There was an acknowledgement that InteL did allow for learning to occur differently. At the primary level the comments looked towards the variety of work and the fact that the projects differed from the norm, completing "projects in primary school that you wouldn't normally do" (PS1). How the projects were different was not articulated. One student extended this response to state that InteL is a good "learning process because you get to do different subjects" (PS5) and another, "it explores a range of subjects and teaches us how to do bigger projects in smaller times" (PS7). Several of the participants referred to the need to take more responsibility for the learning (PS2, PS4, PS8) as they experienced a new found independence.

The high school students tended to interpret 'learning differently' through the structures associated with InteL. There was mention of the ability to choose your own work (HS1, HS5) and therefore maintain a higher level of interest (HS5, HS7, HS9). Other students talked of interaction, or lack of, with the students from the other school (HS1, HS4, HS5, HS6, HS10, PS6) and the relatively self-directed nature of the work (HS5, HS7, PS2, PS4, PS8), although this was not unanimous. There was evidence of teacher variance through the level of interaction with the Year 6 students that was insisted on by individual teachers and also the extent to which students were encouraged to work in groups or individually.

When asked to elaborate on how they learned differently in InteL, the responses from the high school students tended to be framed by their narrow definition of what constituted learning. A number of students identified the use of technology as having a significant impact on what they did (HS1, HS2, HS3, HS4, HS6, HS7). One stipulated that "they teach us more ways of studying" (HS6) and others commented on the freedom to choose areas of study (HS1, HS5, HS10). Two students made reference to InteL being more

"casual" (HS1, HS7) in contrast to other subjects where you "moved onto the next" (HS10) topic really quickly. One possible interpretation being that there is the opportunity for deep learning that goes beyond content. The primary students conversely focussed on the different nature of the work in InteL in comparison with regular class work (PS1, PS3, PS5, PS6, PS7).

In summary, there were two distinct understandings of learning operating with the students. One focussed on learning as something finite and grounded in fact; the other looked at learning as a process that could be utilised in settings outside of school.

Maintaining the focus on learning, the students were asked:

> *2. Most students said that InteL had helped them improve their skills in particular areas. What were some skills you developed through your involvement in InteL? Were you able to use these skills in other subjects?*

Each primary student opted to nominate 'referencing' as a skill developed through InteL with the first respondent setting the tone, "the skills I improved were referencing and taking my time and focussing on my projects more" (PS1). While this student also identified the more abstract concepts of personal organisation and time management as being skills – or at least skills that had been developed throughout this project, the tone was set and every other response centred on referencing. The majority of the students were able to explain how they had used the skill they developed in InteL in another subject (PS1, PS2, PS4, PS5, PS7, PS8).

The high school students' responses were typified by their variance from their junior counterparts. There was general agreement that they had learned "new skills" (HS3) and "improved on old ones" (HS7). Their understanding of 'skill' was significantly broader than the interpretation of the primary students. Although there was commentary on referencing (HS1, HS8) and computer work (HS2, HS3, HS4, HS7, HS10), there was also an appreciation that organisation (HS1, HS6), work planning (HS6, HS10) and confidence (HS3, HS6) had been developed by the activities and assignments of InteL. "I

developed skills for organising my work and making a timeline" (HS6) and "InteL has also made me improve in my speech and talking in front of an audience" (HS6). Although one student did not recognise the incremental development of skills stating that they had learned it all "the year before in primary school" (HS9). One student stated that InteL had been of little benefit, "it hasn't really helped me in other classes" (HS9).

There was recognition that InteL had helped develop skills in referencing, time management and in the use of technology but not a strong understanding that these skills could be transferred to other areas.

> 3. *Nearly 70% of people said that they preferred to work in a group when doing research in InteL. Why do you think this would be?*

Four primary students said that they preferred to work as a part of a group during InteL but not within the regular classroom (PS1, PS4, PS6, PS7). One suggested this was because he/she felt "more confident" (PS7, HS6) in InteL, another because they could "accomplish more and feel more proud" (PS1) of their achievements when working individually in the regular classroom. Two students identified the level of difficulty of the work as an issue, citing the fact that InteL work was "harder" (PS6, PS8). It was also suggested that the InteL classroom was "a different environment" (PS4) and as a result "people work together" (PS4).

Students recognised the benefits of group work and were able to articulate the positive impact of working within this type of structure. Many students acknowledged the positive strength of socialisation when being allowed to work with friends (HS1, HS2, HS6, HS8, PS2, PS3), but this was developed further in terms of cooperation and sharing. It was also expressed as being able to "lean on each other" (PS1) to "depend on other people" (PS2) and to "help each other" (PS7). The most common theme was that group work allowed the load to be shared (PS1, PS5, PS6, PS7, PS8, HS1, HS2, HS4, HS6, HS9). As one student explained, it spreads "out the work and also gives a fair share to others" (HS6). This respondent went on to outline how tasks could be broken down and students could work to their strengths and use

their time more efficiently. Developing this idea further, others referred to the fact that it "improves your abilities" (HS1) because you are able to draw on the knowledge and skills of the other group members (PS1, PS2, PS4, PS8, HS4, HS6).

Others discussed the complexities of group work, "we're all different and it is easy to work independently" (HS5) accepting the difficulties associated in working with others while negotiating a workload. This concept was further developed in the recognition of working within a group as a life skill, "working in a group does contribute like when people grow up and they have to work in groups" (HS6) and "it's part of learning to work in a group" (HS5). Commentary from the high school students alluded to student choice and picked up on the earlier statement that group work was a positive experience because "you don't get to do it much in other subjects and in InteL you can choose" (HS3). Choice was a factor of significance that was identified in the original surveys conducted on the first cohort of students who participated in the project, then known as BRIDGE (see Appendix 5, p.247) and is discussed later in this chapter. Another speaker conceded that not all students liked to work in a group, and, as such, students "should get a choice of working in a group or not" (HS5).

Two high school students said that they preferred not to work in a group and both identified a similar reason, "I myself am an independent learner and I do not like to work in a group. Working with other people puts me off and you don't get as much done as you would like" (HS7). This student did not acknowledge the benefits of working collaboratively, indeed, he/she elaborated later, "you can sometimes get distracted by friends in a group, by talking or you might have arguments over stuff. You're not as productive" (HS7).

Aside from a preference to work alone on the part of a small number of students, the only significant negative identified with group work was summed up "they like to work in groups … because they don't really have to do anything" (PS8). Therefore, the majority of comments were in support of

group work as a more productive way of operating in a classroom environment and this was in keeping with the questionnaire and other data sources.

4.4.3.3 BRIDGE DVD interview

One of the questions posed to two students from the high school and two from the primary school asked if they preferred the BRIDGE way of learning. Three classes often shared an open learning space in the high school. This made the experience of BRIDGE very different to that of a regular classroom. All four students (PS9, PS10, HS12, HS20) agreed that they preferred to learn this way. PS9 claimed it was better because "instead of sitting in front of a board, you get to work on a computer and invent ideas". The other primary student favoured it because there was no need to sit and wait "for instruction, you can work independently" (PS10). This theme was taken up by the high school students, "you can do it by yourself and it's your responsibility" (HS12) and "no teachers tell you what to do" (HS20), which is a clear reference to the self-directed environment out of which BRIDGE operated.

4.4.3.4 InteL DVD interview

When asked whether InteL had helped them improve skills, two students nominated "referencing" (HS 23, HS 26) and a third "computing skills" (HS25). The other student replied "no, not really, but it has challenged me to use what I know in an intense research project" (HS24).

4.4.3.5 BRIDGE survey

There were four items on the BRIDGE survey that related to learning.

Question 3:   Circle any skills that BRIDGE has helped you improve. You can also write some in.

The teachers decided to list the three key skill areas of research, information technology and social skills and then provide further space for the students to identify other areas they felt were noteworthy. The results for Semester 1, with the exception of 5% of students who did not respond, revealed that all students recognised the BRIDGE program helped them improve in at least one skill area. The majority of respondents selected from the listed skills of -

IT 55%, research 80% and social skills 44% and did not venture beyond it. Although the percentage differed, the pattern of response was similar for Semester 2 - IT 39%, research 52% and social skills 28%. The decline in the number of students who selected areas such as research, is noteworthy as is the appearance of independent skills 4% and literacy 2% in the Semester 2 survey result.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Research	80	52
IT	55	39
Social	44	28
Public speaking/confidence/presenting	13	1
Team work, cooperation	8	2
Referencing	2	1
Other/none/no response	10	18
Independent Skills	0	4
Literacy	0	2

Table 4.18   BRIDGE survey – question 3

Question 6:   Do you prefer to work in a group or individually?

This question elicited a polarised response and results are shown in Table 4.19 on the following page.   In Semester 1 69% of students said they preferred to work in a group.   This figure climbed to 80% in Semester 2. Anecdotally, some teachers viewed group work as a waste of teaching time and teachers not involved in the project had presented this as a criticism of it. However, the clear majority of students preferred to work in groups. Significantly responses centred on the sharing of ideas and workload as key factors – issues associated with learning.   While there were opportunities to work in a group in Semester 1 there was a much greater chance of this in Semester 2 and this is reflected in the responses.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Group work	69	80
Individually	25	17
Both, depends on the situation	5	2
No response	1	2
	Semester 1	**Semester 2**
Response to individual work	%	%
No disagreements working on your own	26	5
More control working on my own	26	11
Get more work done on my own	22	26
Don't have to depend on others	15	16
To see if I can do it on my own	4	0
Groups muck around	4	5
It's easier	0	5
	Semester 1	**Semester 2**
Response to group work	%	%
Hear other ideas	29	16
More enjoyable	25	25
Get more work done	14	19
Share the work load	22	21
Socialisation	11	15
Easier	11	11
Team work	5	9
More organised	1	0
More confident	1	0

Table 4.19   BRIDGE survey – question 6

Question 11: Have BRIDGE lessons changed the way you go about learning in other subjects?

This question asked students whether their participation in BRIDGE lessons had altered the way they approached learning in other subject areas. This was one of the few questions where responses were similar across both Semesters.   In Semester 1 77% of students said they used BRIDGE approaches in other classes, in Semester 2 this dropped to 60%. While 31% and 22% of students respectively maintained that their learning was the same as in other classes.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
No	65	69
Yes	24	13
No reply	9	18
Yes and no	2	0
Elaborated Response	%	%
Learning was the same as other classes	31*	22*
Learning transfer – use BRIDGE approaches	77^	60^
Didn't learn anything new	15*	6*
BRIDGE is BRIDGE it is not like other subjects	15*	5*
Learning is fun	15^	7^
Set our own degree of difficulty	8^	0
I don't like BRIDGE	1*	1*
I like my own way of learning	0	4*
Deeper understanding	0	7^

(* % calculated on the negative responses, ^ % calculated on the positive responses)

Table 4.20   BRIDGE survey – question 11

Question 12: Has BRIDGE changed your attitude towards learning?

Around one quarter of the students believed that they had shifted in attitude towards learning, 25% in Semester 1 and 23% in Semester 2. Although there were a variety of reasons for this a significant proportion of students identified learning as fun 46% in Semester 1 and 'thinking more' 15% in Semester 2 as reasons for the change of attitude. All responses are listed in Table 4.21.

	Semester 1 n=110	Semester 2 n=114
Response	%	%
No	61	61
Yes	25	23
No reply/Unsure	14	16
Elaborated Response	%	%
It's still school, no impact	34*	19*
Learning can be fun	46^	19^
Improved time management	25^	4^
It's boring	7*	6*
It's still learning	6*	7*
It's better to use computers for research	14^	4^
Makes me think more	7^	15^

Confidence has increased	7^	0^
Already happy with my learning	1*	1*
Other classes are more structured	1*	0*
More serious about learning	4^	4^
Help others	4^	4^
Learnt new things	0^	4^

(* responses based on negative answers,^ responses based on positive answers)

Table 4.21   BRIDGE survey – question 12

4.4.4   Summary

It was acknowledged at all levels of participation that the InteL project was able to facilitate a change in teaching practice and in the way learning was structured in a classroom. The shift from content to learning brought about a change in the relationship between the teacher and student. Despite this, it was still recognised that students need to take more risks with their learning as they will generally seek out the known rather than pursue the unknown.

To sum up the teachers' attitude towards learning in InteL: it was expressed most simply as "I don't think our role as teachers is the same in InteL" (T1) and another, we are "a facilitator or advisor as opposed to a person who imparts knowledge" (T2). Finally, "when I come out of an InteL class and I go back into my subject area I'm jumping from one world into another and it's such a contrast" (T3). While these comments are an endorsement of the InteL program, they question how teachers view their daily work in the mainstream classroom. The data suggested teachers are not taking the risks with their own classroom experiences that they expected of their students. The implications of this will be explored through the literature in the next chapter, while the next section examines the vision and values underpinning InteL.

4.5   Research Question 4: What vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?

Research Question 4 explored the vision and values that underpinned LTLL and InteL and moved into the area of beliefs and values expressed as spirituality and moral purpose.

4.5.1   Teacher Response

Research Question 4 did not have any corresponding questions on the questionnaire. The first set of data stems from the Focus Group Interview.

4.5.1.1 Focus group interview

There were two questions asked during the focus group interviews that elicited responses around the teachers' views on vision and values. It became apparent from the responses that values and spirituality are interconnected in the day-to-day work of the teachers.

> *5.   How do you think your own personal beliefs about the nature of education influenced your involvement in InteL?*

The first respondent began by reflecting on the nature of schooling, "there's no connection between the world and the school … we're content driven. We're teaching to the Higher School Certificate which is really geared up to set universities up and save them from having their own entrance exam" (T1). This teacher saw InteL as being a way of educating students for life, of making a difference and then went on to theorise about what education should be:

> *"You could actually be making a difference to kids lives in the future so that kids knew how to exist in a society that they're going to be launched into. I think the first step is getting kids to own knowledge and to figure out how to put information together and how to figure out the world around them. And that's something [that] we're starting to do in InteL, and what we could be doing is helping kids to derive and filter and digest stuff around them and make sense of what they're in" (T1).*

The next speaker reflected on the freedom provided by InteL:

> *"Teaching for 20 years, I feel like I've been teaching in a classroom and its four walls and those four walls are constraints, and they limit us and I like the idea of the possibility of InteL … it's like teaching under a tree*

> *… I've always believed that education is more than just the four walls of a classroom because they are not only physically limiting, but I think also mentally and emotionally, physically and spiritually limiting"* (T2).

T2 enjoyed the empowerment that came with the lack of syllabus restraint and warned that we need to be careful "not to limit ourselves as teachers and not to limit our students at all with their learning capabilities".

Other respondents continued with these themes. Another teacher spoke of the positive impact that InteL has on teachers and students, because the work that is being done is real and relevant. Again, there was a link made to the limiting nature of the current syllabuses. "I think the people who have put together the syllabuses are so far behind that there is such a disservice being done to children now. I'm bored with syllabuses which are outdated, which are content driven" (T3). By comparison InteL was "like a breath of fresh air. I walk out of an InteL lesson and I feel just great. It's draining … I come out of most [regular] lessons thinking yeah, that's another lesson" (T3). A similar point was expressed slightly differently by T7 "to me education is all about connecting with kids and I feel that InteL has provided me with a different avenue to connect with them to connect with learning". Continuing with the idea of connection and relationships it was also put forward that teaching is "about teaching kids and learning from kids. Not teaching subjects. It's about forming relationships and going on a journey with them" (T6). As stated by another participant, it is about "finding answers to questions" (T5).

Involvement in the project for another teacher was about being "open to new ways of teaching, constantly reorganising practice and management to cater for the needs of students" (T8) being willing "to take a risk" (T8).

The final commentary to this question belonged to a person who has made a career change into teaching, who came into InteL looking for ways of assisting students to aspire to lifelong learning. "What drew me to InteL [was] that students could feel the same passionate way as I feel about the fact that you never stop learning" (T4). This teacher also highlighted the importance of the process of learning, not just the product, because the process also allowed for

opportunities of social engagement. In a clear link to the LTLL framework the lack of connection between what is learned in school and the outside world was brought up, it was said that "we don't connect it [learning] enough to significance outside in the real world" (T4) and as such it lacks relevance and InteL has a structure that allows the learning to be more rich, real and relevant for the students and the teachers.

In summary, beliefs that encouraged teachers to be a part of InteL centred on the ability to make a difference to the lives of the students by making their learning relevant through the development of positive relationships. The concept of spirituality was associated with these beliefs.

> *6. For the purpose of this research spirituality has been defined as the "process of finding meaning and purpose in our lives as well as living out one's set of deeply held personal beliefs" (Lips-Wiersma, 2002, p.498). Do you think that there is a link between your own teaching and learning and a search for meaning and purpose?*

Although one person chose not to respond to this question, there was general agreement around the motivation for teaching and how that motivation became a part of each person and, in one instance, a part of practice. In response to this question one person quipped, "in short, yes" (T8). The adage, 'we teach who we are' was not far from the surface of conversation nor was the belief outlined in the previous question that we teach to make a difference, particularly for those students who may be seen to be less academic or who are disadvantaged by the system.

It was proposed that the search for meaning and purpose in life was in some way "a by-product of teaching and learning" (T1). By wanting to do the best for the students in your care in terms of your research and preparation and presentation of material, those behaviours influence your purpose in life. Therefore, to improve the quality of your teaching enhances "your meaning and purpose" (T1). Built into this was the concept of "doing your job well" (T1) and the acceptance that teaching is both "challenging and purposeful" (T8).

T2 commenced, "education is everything" and proceeded to link it to all facets of life. It is education as a catholic concept that makes the vocation of educator so important. "The reason why I'm in it is because I think that education and teaching and learning is, or are the most important things that exist" (T2). Despite the fact the our education system is geared towards the academic, we

> *"are able to engage students who are not seen as successful educationally … it's about allowing those students who, in our formal institutions, don't have success or don't have a pathway that's allowing them to be life-long learners and successful life-long learners"* (T2).

Spirituality was also associated with the collaborative practices of education. It was suggested that the essence of education was to learn to accept "different opinions, different viewpoints, different approaches" (T4) and to embrace the difference in those around us. Learning helps with "getting along with other people … whether it be collaborative or whether it be in gaining a greater insight into other people's differences, other cultures, other backgrounds" (T4). The spirituality of teaching is about acceptance and ultimately making the world a better place. T6 suggested it is "about trying to bring meaning to things and doing it together" in community with students, parents and staff.

Building on the previous response the next speaker also highlighted the importance of working with students who might not stand out in a classroom or might never be provided with avenues for success within the framework of a regular school. "I personally get a huge answer for my meaning and purpose search … with the kids in the [school] musical because you see them on a totally different level to the classroom" (T5). This was extended to include the teachers as well because the out-of-class experiences can "be the meaning and purpose of their lives and it just gives them something additional" (T5). It was also noted, "you get a great buzz and a great response from seeing kids achieve" (T5).

The next participant also focussed on achievement and success, but again it was not academic success that was the focal point of the discussion. "I love being in an environment where I can … help students become respectful people that respect life, that respect everything around them … to make the world a better place" (T7). Success was not measured in academic terms but in humanity, "on my own I can't do much but the effect that I can have on the hundreds of kids that I'll meet during my career could potentially help improve thousands of lives" (T7). To conclude the conversation T7 made the following dramatic point "I'm teaching because it gives my life meaning because I feel like I'm making a difference".

The conversations clearly indicated that teaching has been able to provide meaning and purpose in the lives of the respondents and seen through the definition used in this study, it is a spiritual pursuit and moves beyond the usual moral purpose that drives humanity forward. The data presented in this section has demonstrated that our beliefs and values are expressed as spirituality and these beliefs find manifestation in what we do each day.

4.5.2 Principal Response

Both Principals linked the concept of spirituality to what was happening within the InteL project in its classrooms. The first responded with,

> *"we always talked about authenticity in terms of affecting kids lives. Let's be honest. If you're trying to make kids more into independent learners you're actually affecting the whole fabric of their being. … It's a spiritual response to all their needs" (P1).*

The other Principal agreed, "I come back to that word 'authenticity' and for kids to learn it has to have meaning and purpose. … Comes from deep within. You make it rich enough and authentic enough" (P2) and they will be passionate about their learning. These responses seem to indicate that both Principals as well as the teachers view teaching as a spiritual activity.

4.5.3 Student Response

There were no survey items that corresponded to vision and values.

4.5.4   Summary

Spirituality as the expression of a set of beliefs and values and moral purpose as the action of that process was inherent in the comments made by the Principals and the teachers that related to "our students" and providing the best for them. In the next chapter this is connected to the literature through the elements of spirituality posited by Korac-Kakabadse et al., (2002) in terms of enabling students to do their best and fostering a transformation in them.

4.6   OVERVIEW OF DATA

As the data has been presented it has shown interplay between leadership, engagement in learning and the motivation of the teacher participants. In turn this has had an impact on how the students and teachers view themselves as learners.

The data demonstrated that the introduction of a change project such as InteL can bring about increased student engagement as lessons are focussed on creating authentic learning experiences. In the process, the teachers saw their role shift from being the expert to being a collaborator on a learning journey with their students. In turn, this facilitated a change in the relationship dynamic of the classroom allowing the students and teachers to be leaders as well as learners. Leadership emerged as being crucial to the success of the project and was underpinned by vision and moral purpose. This was linked back to values and spirituality and the need to do something positive for the students, to make a difference to their lives.

The four research questions can be reduced in focus to leadership, learning through increased student engagement, vision, and beliefs and values expressed as spirituality and moral purpose that formed the conceptual framework of this study and will be used in the next chapter to ground the data in the literature.

CHAPTER 5:   ANALYSIS AND DISCUSSION OF DATA

5.0   INTRODUCTION

The initial question that framed this study was: "what can be learnt about the linkages between leadership, learning and student engagement through the experiences of school communities in an educational change project?"   In attempting to answer this question the core of the preliminary research coalesced around leadership and change processes and it generated more specific questions. These questions were used in the previous chapter as a framework for presenting the data collected through the course of this study.

As the concepts beneath these questions were explored through the scholarly literature a conceptual framework for this study emerged.   There were recurring themes in the literature and that were echoed in the collection of data.   As such, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability were added to the core area of leadership. Table 5.0 links the research questions with the key themes that emerged from the literature.

Research Question	Key theme
1. What issues regarding student engagement in learning have emerged for participants from the implementation of InteL within the LTLL framework?	Leadership Authentic Learning
2. How have the experiences of the participants in the InteL and LTLL project influenced their perspectives of the linkages between leadership and learning?	Leadership
3. Has the involvement of the participants in InteL changed how they view teaching and learning?	Leadership Sustainable change
4. What vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?	Leadership Values/Spirituality Vision Sustainable change

Table 5.0   Linking the research questions to key themes in the literature

The analysis and discussion of the data have been structured around the main constructs of the conceptual framework, that is, leadership, beliefs and

values expressed as spirituality and moral purpose, shared vision and sustainability and how they combined to create authentic learning.

5.1 LEADERSHIP

Leadership and its potential influence on student engagement through the creation of a specific program of learning (InteL) was the starting point of this research. The definition of leadership in an educational context was defined as the ability to create moral and ethical learning experiences (Burford, 2005; Duignan, 2006; Starratt, 2004). Leadership was viewed from a perspective broader than just the formal leadership contained in executive positions. Within the InteL program itself teacher leadership as espoused by Crowther et al., (2002), Durrant (2004) and Harris (2008) was embraced as was the leadership demonstrated by the students, although the dominant focus was on formal leadership and its impact on student engagement. The data revealed that the InteL teachers believed it was their leadership that had the most significant impact on the project. However, leadership in all guises, although variable in influence, was found to be fundamental to the success of the InteL project and can be distilled into three main categories: formal leadership, informal teacher leadership and student leadership.

5.1.1 Formal Leadership

In reviewing the formal leadership of InteL it was decided to utilise the model developed by Robinson (2007, p.14) and to analyse the data against the five leadership dimensions. These are listed in Table 5.1 (p.141) compared with the reality of InteL. The leadership practice identified by Robinson (2007) is expanded through descriptors that elaborate on that particular practice and these have been mapped against the reality of InteL as described by the participants.

The analysis of the formal leadership of the schools involved in the study did not compare favourably in relation to the leadership dimensions. The formal leadership of both schools generally refers to the Principal and Assistant

Leadership Practice	Meaning of Dimension	The reality of InteL
Establishing goals and expectations Effect size 0.42	Includes setting, communicating and monitoring learning goals, standards and expectations. Staff involvement to ensure clarity and consensus about goals.	Goals initially set in 2006. Minimal input from formal leadership. Negativity from some staff went unchallenged.
Strategic resourcing Effect size 0.31	Involves aligning resources and allocation to priority teaching goals. Includes provision of appropriate expertise through staff recruitment.	Support was rhetorical rather than concrete. Lack of financial support. Increased workload.
Planning, coordinating and evaluating teaching and the curriculum Effect size 0.42	Direct involvement in the support and evaluation of teaching through regular classroom visits and provision of feedback. Direct oversight of curriculum and alignment to school goals.	Formal leadership not directly involved. InteL teachers responsible for program review.
Promoting and participating in teacher learning and development Effect size 0.84	Leadership that promotes and participates with teachers in formal or informal professional learning.	Informal discussion with staff. InteL teachers shape program. Professional learning opportunities declined after 2006.
Ensuring an orderly and supportive environment Effect size 0.27	Protecting time for teaching and learning by reducing external pressures and interruptions and establishing an orderly and supportive environment.	Managing timetables to ensure InteL occurs. Provision of technology.

Table 5.1   Robinson's (2007) leadership dimensions and the reality of InteL

Principal, although the Executive of each school drew more widely from across the school population. In the High School this included others in formal leadership roles such as the Religious Education Coordinator, the Pastoral Coordinator, the Curriculum Coordinator and the Administration Coordinator as well as at least two elected staff representatives.

Dimension 1: Establishing Goals and Expectations

The first leadership dimension focused on goals and expectations and was achieved in the early stages of the LTLL project when the management teams from each school were involved in planning prior to the implementation of the program.   There were several meetings that included the two school Principals and the key teachers involved in InteL. Initial discussion focussed on areas of development for each school and how these might be addressed through a joint program of action. It was decided that the project would be to develop self-directed learners through a transition program from Year 6 into

Year 7. Subsequent meetings planned the actual program and, in keeping with the LTLL protocols, it was linked it to the LTLL framework (see Figure 1.0, p.5). The learning goals were set around The Essential Learnings of the Tasmanian Department of Education (2005) and were mapped back to the LTLL framework. Appendix 3 (p.241) provides a more substantial elaboration of the focus of the project.

With the conclusion of the LTLL project at the end of 2006 formal leadership involvement in InteL declined with one Principal admitting that she/he was not "directly involved" (P1) and only made occasional classroom visits. The teachers involved in the project highlighted the reduced input from the formal leadership as a concern and one reason for this was equated to the lack of involvement in the day-to-day activities of InteL. Despite presentations at staff meetings, the InteL teachers did not believe that there was clarity amongst the whole staff as to the intent or purpose of the project. There were teachers at the high school who were openly dismissive about the worth of the project.

Dimension 2: Strategic Resourcing

Formal leadership was also deemed responsible for the provision of resourcing to ensure the success of the LTLL project and within that, of InteL. Strategic resourcing, involves "aligning resource selection and allocation to priority teaching goals, [and] this includes provision of appropriate expertise through staff recruitment" (Robinson, 2007, p.14). While there was agreement that resourcing was the responsibility of formal leadership, there was a significant disconnect between the perspective of the formal leadership and that of the teaching staff as to the effectiveness of those carrying out this role.

One Principal reported that there had been support by way of "providing days [and through] infrastructure" (P1), but this was refuted by a number of teachers who said, "there hasn't been a lot of input" (T1), or "it's just window dressing" (T3). These comments and other similar ones were focussed on the difficulty of coordinating a program across two school campuses that involved a diverse group of people, particularly when the program did not

come with a prescribed set of outcomes or a set syllabus. "Having teachers from different KLAs but also teachers from different schools" (T2) meant that it was important to have someone coordinate the project and "you really need someone to be doing that" (T1). However, unless members of the Leadership Teams of both schools were significantly involved in InteL there could not be sufficient understanding of the challenges that were faced with preparation and programming. At the very least, this involvement should manifest itself in participation in meetings and programming, classroom visits and team teaching. Clearly the lack of direct participation by the formal leadership of the schools culminated in the differing opinions over the level of resourcing.

At one level there was agreement that the Principal of one school had supported the project by providing the right staff and access to new technologies, "we're locked into computer labs. We have the set time every week" (T2). At another level there was unanimous agreement amongst the teachers that InteL had been under resourced. The comments focussed on the lack of provision of time to plan, what could only be described as a new curriculum. Even more telling was the comment that interest in InteL at Principal level had dissipated once the project had been structured into the school day and its successful implementation "fell to two original participants with not a lot of support in practical terms other than lip service" (T8). The belief that involvement in the project brought kudos to the schools (if not the Principals) was interpreted as a sound reason for better resource funding. The workload of the teachers involved at 'ground level' was significant and in addition to their normal work. There was a growing disenchantment that the resources that were required to make the project a success were not forthcoming. Requests for time to meet and to plan were only marginally successful and the time given did not reflect the hours that had been devoted to the writing and re-writing of programs.

One of the basic tenets of the LTLL project was that leadership should be shared (Bezzina and Burford, 2010) and it was considered strategic resourcing to structure InteL in that way. Duignan (2006), Durrant (2004) and Fullan (2001) reported that teacher leadership was essential to ensure a

successful program of change. While there was a genuine attempt to share the leadership of the project in the initial year of development, it could be suggested that in later years there were tiers of distributed leadership (Spillane and Orlina, 2005). While the teachers were largely able to make their own decisions regarding what was being taught and how, administrative decisions regarding teacher loading and meeting and planning time were centralised to the formal leadership positions. Given that the Principal can exert influence on and "galvanises the leadership effort of others" (Hargreaves et al., 2003, p.2) the reverse is also true. "Overt support of a program such as InteL is critical" (T8). When teachers feel that are not being supported they become frustrated and this impacts on their work and the leadership they exhibit. Crowther (2004) and Starratt (2004) would suggest that the passion and drive of the teacher leaders helped them to overcome the difficulties faced. Specifically, in this program the leadership that was shown by two teachers, who were original participants in LTLL, was "one of the major reasons for the success" (T1) of the program. They worked well together as a team, came from separate campuses and acted as a voice for their respective schools and had invested so much time, passion and spirit into InteL that they were unwilling 'to let it wither on the vine'.

Barth (2001), Harris (2008) and Lambert (2003) posit that teacher leadership must be developed and supported for it to flourish. The InteL teachers' belief in shared leadership at the schools began to fade when the formal leadership was not as forthcoming with the more obvious forms of support, such as more regular planning days. At one of the schools InteL "was not in the budget at all" (T8). What made this statement more difficult to reconcile was the fact that the teachers who had been a part of the original LTLL planning team were aware of how much more funding had been provided to schools from the other Dioceses to support and grow their LTLL projects. This lack of funding was further compounded at one of the schools in this study when attacks on the InteL program and its worth went unchallenged by members of the formal leadership team. "The time allocated to InteL was questioned at a staff meeting, as was the worth of the program. No one in leadership said a word to defend it" (T7). T3 believed that there was "a major issue in terms of the

perception of InteL in the school". Although leadership was not reserved for formal roles and the leadership of InteL had been devolved to the teachers, there was a strong belief that what had been created would be short-lived and unsustainable if key members of the team chose not to continue with the project. This is a belief that still exists "if I had a choice of saying would it survive or die, I'd say die" (T2).

Crowther (2004), Fullan (2008), Hallinger (2005), Lambert (2003) and Spillane and Orlina (2005) have all reported the importance of relationships within their theories of leadership. As a result of the perceived difficulties and lack of support from formal leadership some relationships became quite strained at times as was indicated by the data and the teachers in the classroom felt and continued to feel overworked and undervalued. This view is supported by Hargreaves (2003) and Harris (2004) who believe that teacher leadership is founded on relationship and consequently must suffer if the relationships are not positive. If not for the perseverance of the two original participants the project probably would have collapsed, or at least have become "quite a problem, messy" (T2). Data suggests that the teachers in the classroom did not feel loved as Fullan (p.11, 2008) suggested needs to be the case when creating successful change. Despite this, the capacity of informal leadership facilitated the continued survival of InteL as they found ways to work around the blockages placed before them.

The provision of strategic resourcing was adequate in the first year of operation but declined thereafter. The first year of the project brought with it involvement from the Catholic Education Office because LTLL was an initiative involving the Australian Catholic University and four Catholic Dioceses. Although the other three Dioceses had decided to provide substantial funding to ensure the success of the individual projects at school level, this was not the case with the two schools in this study. This point was discussed on occasion as was noted at an LTLL management meeting (May 20, 2005). It was also a point of interest for the program participants when the schools came together to report on the progress of their projects (March 18, 2006). The administering Diocese provided very little funding to support the

project despite several requests to do so. Subsequently, once the formal part of the LTLL project concluded, all funding to support the InteL initiative had to be sourced from within existing budgets prompting one teacher to comment that importance of leadership "beyond the school to the CEO" (T8) is critical because there was "no financial support that would enable planning and meetings" (T8) to occur. In the fullness of a school day any new initiative needs to be supported by funding. If adequate funding is not provided to support an initiative then it could be assumed that the initiative is not valued.

Dimension 3: Planning, Coordinating and Evaluating Teaching and the Curriculum

The findings associated with the third dimension were similar to that of the first dimension of establishing goals and expectations. In the first year both Principals attended planning meetings and visited classrooms. At the end of the year there was a joint presentation of the students' projects across both campuses and parents and visitors were invited to attend the presentation day. The students were also surveyed as to the benefits and effectiveness of the program (see BRIDGE Survey, Appendix 4, p.245 and Appendix 5, p.247). Again following the initial year there was a gradual decline in the Principals' involvement. Despite acknowledgement of the importance of InteL in terms of student learning and strategic school goals, the primary school opted out of the joint initiative at the end of the 2008 school year. This decision was clearly at odds with the rhetoric that was espoused by the Principal during the data collection interview and suggested that the program was not as highly valued as was stated. If the rhetoric was to be believed, one possible explanation for the demise of the program from the primary school could be a lack of formal leadership, and a possible unwillingness to persevere with the project. One participant implied that the statements of support were hollow. The high school maintained its commitment and as the 2011 academic year commences the program is still a part of the Year 7 curriculum.

The evaluation of teaching and of the project itself has remained the responsibility of the InteL teachers and there are still substantial issues to be

addressed around the acceptance of the project on a whole staff basis and the provision of time to allow for the effective evaluation of the program. Officially, no teacher had been appointed to coordinate InteL, something that demonstrated a lack of commitment on the part of the formal leadership (T3). Under the current workplace agreement the individual school was able to allocate coordinator points and the provision of a time allocation was also an internal school decision.

Dimension 4: Promoting and Participating in Teacher Learning and Development

Participation levels in professional learning also declined after the initial year of implementation as the formal part of the LTLL project concluded. Throughout 2006 there were professional learning opportunities provided by the Australian Catholic University as all schools involved in LTLL came together to listen to guest speakers. Among them were Professor Paul Begley, Director of the University Council for Educational Administration Centre for Values located at Pennsylvania State University who spoke on school leadership, change and values in education; Professor Steven Gross of Temple University, Pennsylvania who discussed curriculum development in turbulent times; and Professor Patrick Duignan from the Australian Catholic University's National Flagship for Creative and Authentic Learning who talked about ethics and authenticity in teaching. These opportunities also allowed the participants from the various schools to share their experiences. T7 said that the professional learning associated LTLL "exposed us to new ideas that we could discuss and implement"; and supported risk taking. However, once the formalities of LTLL concluded so did the opportunity for professional learning. One teacher attributed this shift in commitment to the researcher changing schools, "there was minimal support from the two Principals after you left" (T8). The new Assistant Principal was not involved in InteL and only attended meetings infrequently. Being new to the school there was not the same understanding of the journey that had been travelled by the staff teaching InteL. As the Principals became less involved following the conclusion of the formal LTLL program, InteL was left to survive through the informal teacher leadership, passion and energy of the classroom teachers

who believed in it. Hargreaves and Fink (2006) attribute sustainability of this type to depth of moral purpose.

Dimension 5: Ensuring an Orderly and Supportive Environment

The final dimension, maintaining an orderly environment that supports learning, was not directly raised during focus group interviews. From the observations of the researcher both schools maintained an orderly environment. The lack of commentary from the participants on matters of school structure suggested that they were effective. Both schools had processes in place to support the learning agenda and the work of the teachers to ensure that the students were well behaved. The Executive of each school monitored disruptions to the relevant school calendars.

5.1.2   Informal Leadership

Although the data identified the formal leadership of the InteL project as falling short of the mark, the same cannot be said of the informal leadership. Indeed, it was this level of leadership, the teacher leadership identified by Crowther (2002), Durrant (2004), Harris (2005) and others which was widely touted by the InteL teachers as being responsible for the survival of the program. After five years InteL is a part of the high school curriculum although it relies heavily on teacher leadership for its continued place in the timetable. It has become a part of the culture and the InteL teachers see themselves as leaders. This is a departure from the traditional school context outlined in Chapter 1. It was informal leadership that was slowly changing the culture "we are leading by presenting to the other teachers at this school what we are doing" (T4) in terms of a different pedagogy. This understanding is supported by Caldwell (2006), Fullan (2001, 2002, 2003a) and West et al. (2005) when they described changing culture through changing beliefs. As the teachers involved became more passionate about how they did things their conviction that the core concepts could be transferred to other class contexts began to have an impact in other areas. There was general discussion amongst the teachers about what had worked in InteL and some teachers not involved in the project decided that "they'd try negotiated

learning" (T7) in their classes. Others approached the InteL teachers and "worked with us developing units of work" (T7).

Leadership in education is about leading change as Harris (2004) and Youitt (2004) suggested and the teachers involved in InteL were leaders. By meeting regularly to discuss and plan their teaching activities, they created a "shared sense of direction, clear goals" (Leithwood and Jantzi, 2005b, p.185) and supported and encouraged each other in the process. They were able to change and reshape the learning experiences of the students in Years 6 and 7, making the learning relevant and real. In turn, their experiences impacted upon their practice in other classes and ultimately informed the practice of others. This was particularly evident in Science where T7 reported that the faculty teachers worked with the Intel teachers to improve a Science assessment task and the identified skills were then targeted in the InteL classes. In another example, members of the Language department worked closely with an InteL team member to create a unit of work that examined the connection between language and culture.

The support for InteL went from being overt with direct Principal involvement to tacit as informal leadership developed. Fullan (2003b), Harris (2009a), Marzano et al. (2005) and Sergiovanni (1987, 1996) acknowledged the importance of developing leaders at all levels of an organisation and the LTLL project certainly facilitated this process with the teachers becoming a self-managing group by the end of 2007. That is not to say that they were entirely happy. There was a strongly supported belief that InteL could be more successful with more defined support from formal leadership (T7). Further energy could have been focussed on the continued development instead of being forced to "defend the project" (T8). Perhaps if that had been the case Feeder Primary would not have withdrawn.

5.1.3   Student Leadership

Lambert (2003) suggested that learning and leading are closely related and that leading is actually a form of learning. The structure of the InteL project ensured that some students developed as leaders because part of its

foundation included enquiry-based learning. The focus on students managing the nature of their learning meant that they became leaders of learning as they assisted other students and, on occasions, the teacher.

The teachers recognised that InteL provided "some students [with] the opportunity to lead" (T5) and that there were examples "of kids guiding the directions of the group" (T1) and that there was evidence of "informal student leadership" (T2) as well. In a mixed ability classroom consisting of Year 6 and Year 7 students using thirty computers "then one teacher isn't going to be able to adequately service thirty pieces of hardware with thirty children, so you sort of rely on those student's abilities, whether they're people abilities or technological abilities" (T2). This comment reflects the belief expressed in the work of Barth (2001); MacBeath (2006) and Starratt (2004) that the classroom needs to cater for the diverse experiences of our young people. There was also the suggestion by one teacher (T6) that the students should be given an opportunity to be involved in the planning process for the following year's program, a move supported by the research of Gross and Burford (2006). Underlying this was a shift in the understanding of the role of the teacher and the subsequent understanding of pedagogy. There was a willingness to step down from the stage and allow the students a greater measure of control over the learning process as Beare (2001) and Starratt (2004) suggested.

The students from the primary school also recognised that InteL provided them with the opportunity to develop their leadership skills although one student stated that "you have to be a leader" (PS4) implying that the qualities of leadership can not be learned. One of the barriers to leadership had been the hierarchical structure of schools and this was recognised by one of the students in his/her explanation that even though they were the junior people "you can still help some of the high school people" (PS6). The fact that older students "helped me quite a lot … encouraged me to be a leader" (PS2) was also acknowledged. The responses from the primary students tended to focus on leadership through providing assistance to others while the high school student's responses echoed this aspect they also reflected more on leadership through becoming "more responsible for our work" (HS3). One

student captured the overall feeling; "we have to take responsibility, like if our friends or class mates are struggling … we help them" (HS5).

5.1.4   Summary

The initial structures put in place when InteL was a part of the LTLL project ensured the development of teacher leaders because as Hargreaves and Fink (2003) would describe it, the project became embedded in the hearts of those involved.   These teacher leaders developed and designed a program that facilitated the growth of student leaders.   Despite the declining involvement of the formal leadership of the project, the empowerment of key people at the outset ensured its continued survival, at least at the high school.   However, genuine presence is the signature of authentic leadership as shown in the literature of Duignan (2006) and Starratt (2004).   The crucial concern that developed over time was the lack of "presence" (Starratt, 2004) of those in formal leadership positions at both schools.   There was a strong belief that the needs of the classroom teachers were not clearly understood and as a result were not being met.   In the long term this could have a negative impact on the program through "burn out" (T6).   For lasting sustainable programs to become a part of school culture there must be constant overt support from formal leadership.

The conceptual framework of this study (see Figure 2.2, p.45) placed leadership in an equal relationship with other factors influencing a change project.   This has proven not to be the case.   Robinson (2007) indicated that dimensions of leadership have a variable effect and the power of relationships (Lapadat et al., 2005) impacted on the development of leadership at varying levels within the structure of the schools.

Student leadership was confined by the students' ability to take responsibility for their own learning and in the broader sense to what extent student voice was sought for the ongoing development of InteL.   Formal leadership had the power to allow the project to flourish, or otherwise, through support provided or withdrawn.   Ultimately, it was with the formal leadership that decisions regarding the survival of InteL would be played out.   Informal teacher

leadership proved to be a significant driving factor for InteL as it was the energy, enthusiasm and passion of one or two key people who continued to motivate the other teachers involved.

While leadership was a driving force behind InteL, it did not occur equally at all levels of the school or system. It is also unlikely that leadership interacted equally with the other constructs given the dynamic nature of schools. Therefore, the success of InteL was very heavily dependent on the level of leadership that supported it. It was the InteL teachers' belief in the value of the project and the fact they believed it made a difference in the lives of their students that provided them with the moral purpose to keep the program alive.

5.2   BELIEFS, VALUES AND SPIRITUALITY

Although the topic of spirituality was not addressed in the questionnaire it became a question at focus group interviews as the focus of Research Question 4 moved beyond the actions of moral purpose into the spirituality of leadership, as this was how beliefs and values were expressed. In fact, the spirituality of leadership or "spiritual capital refers to the strength of moral purpose and the degree of coherence among the values, beliefs and attitudes about life and learning" (Caldwell, 2009, p.10). As the participants talked of their work it became apparent that their beliefs and values, expressed as spirituality was a significant motivating factor and provided them with purpose. This was not surprising as a review of the literature revealed that spirituality would be a significant factor – whether this was interpreted through the lens of the research of Fullan (2001) and tagged as moral purpose or whether it was viewed through the perspective provided by Caldwell (2009), Korac-Kakabadse et al. (2002) or Lips-Wiersma (2002).

The definition of spirituality used in this study states that it is "finding meaning and purpose in our lives as well as living out one's set of deeply held personal beliefs" (Lips-Wiersma, 2002, p.498) and statements made in the focus group interviews support this. (T7) spoke about teaching providing a meaning for

life. Teaching provided an avenue to live out those personal beliefs, as working with children presented a way to discover meaning and purpose through the creation of authentic learning experiences. Moral purpose provided the motivation for action and the beliefs and values of spirituality could be viewed as the foundation of that motivation.

There was almost unanimous agreement at the focus group interviews about the place of spirituality in teaching. However, one teacher declined to comment on the issue. This perhaps reflected the situation where the term 'spirituality' had previously become the domain of the narrowly religious and its re-emergence into worldly values in mainstream educational discussion did not sit comfortably with everyone (Beare, 2006a; Dorr, 2004). None of the other teachers had any difficulty relating their work to the concept of spirituality, nor did either of the Principals. In order to demonstrate the significant place of spirituality in the day-to-day work of teacher leaders, it was appropriate to utilise the elements of spiritual leadership as reported by Korac-Kakabadse et al., (2002, p.172-173) to map the responses of the participants provided at the focus group interviews. The element of spirituality, its description and an example from some of the participants are outlined in Table 5.2 on the following page.

Korac-Kakabadse et al. (2002) acknowledge that the elements have been drawn from the work of several other theorists and they are listed in the table next to the corresponding element with the year of research. It is apparent that each element reflects the relational aspects of teaching and that this is deeply grounded in strongly held beliefs and values.

Element 1:   Building shared values
The first element has as its focus building shared values and was implicit in many of the responses. Teaching is, after all, a relational business and one that is based upon common good. Earl had this to say: "social trust among members of staff was the strongest facilitator of professional community" (in Earl and Timperley, 2008, p.49) which indicated the importance of positive relationships in establishing community.

Element	Description	Example
1. Building shared values Fairholm (1996)	Shared community values	"Getting along with other people … gaining greater insight into other people's differences" (T4) "collaborative practices" (T4) "it's all about how we are learning and what we are learning" (T2)
2. Vision setting (Fairholm 1996)	Common vision, consensus	"gaining a greater understanding" (T4) "we should be giving every young person the opportunity to learn" (T2)
3. Sharing meaning (Kouzes and Posner 1987)	Create meaning, engage the heart	"it's about trying to bring meaning to things and doing it together" (T6) "try to make the world a better place"(T7) "the first step to solving any problem … is understanding and education and learning" (T2)
4. Enabling (De Pree 1993)	Train, educate and coach	"for kids to learn it has to have meaning and purpose" (P2) "to make kids more independent learners" (P1) "help students become respectful people" (T7)
5. Influence and power (De Pree 1989)	Help others feel powerful	"allowing [students to be] … successful lifelong learners" (T2) "you're affecting the whole fabric of their being" (P1) "I feel like I'm making a difference" (T7)
6. Intuition (Kouzes and Posner 1987)	Produce change that matters to people's enduring needs	"help these kids try and be better people so that they can make a difference" (T7) "It's a spiritual response to all their needs" (P1) "it just gives them something additional" (T5)
7. Service (Greenleaf 1977) (De Pree 1993) (Gross 1997)	Servant leadership	"to improve … the lives of our students and the future generations of our country" (T2)
8. Transformation (Covey 1990) (De Pree 1993) (Fairholm 1996)	Transform themselves and others	"you're filling yourself up with ideas and information … to improve your quality of teaching" (T1) "to improve our lives" (T2) ""to actually become something" (T5)

Table 5.2   Elements of spiritual leadership (Korac-Kakabadse et al, 2002) compared with a sample of participant statements

The participants understood the concept that each person was working toward a set of commonly held community values within a Catholic school. The most direct response to this element came from T4 in a statement he/she made about tolerance and following the words of Jesus, concluding with "getting along with other people and learning … whether it be collaborative or whether it be in gaining greater insight into other people's differences, other cultures, other backgrounds … the more you learn, the more understanding and tolerance you gain" (T4). Another teacher talked of wanting to improve the lives of the students and pointed out that to do that it is necessary to focus on "how we are learning and what we are learning" (T2), perhaps alluding to

the shared values that come from being a part of a system that was constructed around sharing the same faith and values (Caldwell, 2009).

Element 2:   Vision setting

During the formative discussions when the InteL project was being designed one of the fundamental concepts that underpinned the decision making process was the creation of authentic learning experiences. Both Principals used the term 'authenticity' in their response to the question on spirituality linking learning with authenticity and the search for meaning (Duignan, 2003a). Clearly this commonality of vision set the tone for the classroom (Leithwood and Jantzi, 2005a). While the teachers did not use the term authenticity, they had a shared understanding of the purpose of InteL and spoke of using it as a vehicle to "improve your quality of teaching" (T1), assisting students in becoming "successful lifelong learners" (T2) and helping them "be better people" (T7) through the learning experiences of InteL. Each of these statements is linked to authenticity because the teachers were committed to the development of the students through the improved learning experiences. "Authentic educators recognise the limits imposed by schooling but always test those limits in order to increase the quality, depth and richness of the learning experience" (Starratt, 2004, p.78). In reality it would appear that is what InteL had become, a vehicle through which the limits of traditional schooling could be challenged.

Element 3:   Sharing meaning

It was clear from all respondents that each wanted to do the best for the students with whom they were working and that this was achieved when they affected change in the life of those students (Andersson and Andersson, 2005). "You get a great buzz and a great response from seeing kids achieve" (T5). This achievement did not necessarily refer to academic success but to other school experiences such as the school musical and even more broadly by influencing the students to build their capacity "to make the world a better place" (T7). To successfully create meaning the students must be engaged (Starratt, 2004) and the teacher needs to accompany them on the learning journey "trying to bring meaning to things and doing it together" (T6). Enquiry

learning played a central role in the InteL classroom and it was acknowledged that understanding and education (T2) were the first steps in solving problems.

Element 4: Enabling learners

Enabling learners is at the heart of what teachers do everyday. By articulating what they wanted for their students the teachers' comments steered away from the traditionally academic and revolved around creating life-long learners able to take their place as citizens in a changing world. This is a theme that has been espoused by a number of researchers including Barth (2001); Beare (2001); Hargreaves and Shirley (2009) and Starratt (2004). To "help students become respectful people that respect life, that respect everything around them … to make the world a better place" (T7) was the goal of one teacher. Another put it this way, "it's about allowing those students who … don't have success or don't have a pathway that's allowing them to be … successful lifelong learners" (T2). By "trying to make kids independent learners you're actually affecting the whole fabric of their being … it's a spiritual response to all their needs" (P1). To effectively motivate the students to want to learn "it has to mean something to them" (P2) and in making the learning relevant it generates passion and "the drive to learn" (P2).

Element 5: Influence and Power

As evidenced by their comments there was a strong desire from the teachers to empower the students (MacBeath, 2006; Wehlage et al., 1996) and by doing so bring about lasting change in their lives. There is some overlap between this element and the previous one as enabling learners is empowering. Remarks such as "giving every young person the opportunity to learn" (T2) and "researching all the time to enhance whatever I'm able to expose the kids to" (T1) point unambiguously to the fact that InteL is about empowerment and providing opportunities for the students to learn how to take control of their lives. Discussions around "collaborative practice" (T4) and the fact that we are "doing it together" highlight the partnership in learning that is shared between the teachers and students. InteL was about making students more "independent learners" (P1) or "successful lifelong learners"

(T2). The power of learning was shifting from teacher to student (Gross and Burford, 2006; Shernoff et al. 2003; Starratt, 2004).

Element 6:   Intuition

Although Element 6 has been titled 'intuition' it aligns closely with the previous element as once empowerment begins it creates change.   Once students have been "given an opportunity to explore, to find out, to discover, to learn" (P2) they will become passionate about their own learning.   This level of empowerment produces real change that stretches beyond the classroom (Begg, 2002; Bezzina and Burford, 2010; Bezzina et al., 2007).   The ability of the teachers to produce this level of change in the lives of their students and in doing so empowering them to take their place in society is an attribute of spirituality that motivates the teachers of the InteL project.   This level of relationship of connection with the students (Burke, 2006) is evident in "I love being in an environment where I can … help students become more respectful people … to make the world a better place" (T7).

Element 7:   Service

The seventh element focussed on service, a quality that is a part of the fabric of teaching (Starratt, 2004).   Although this component was best captured by T2 explaining that in teaching it is possible to improve "the lives of our students and the future generations of our country" there were other statements that also demonstrated that teaching was about service.   T7 talked of trying to "make the world a better place" and in doing this referenced the word "help", a clear link to the notion of service.   Taking a different angle T1 alluded to service through working to "improve your quality of teaching".   It was also expressed through a sense of "trying to bring meaning to things" (T6).   While T4 did not provide a specific example of service he/she related an example of a positive learning experience from one of his/her classes.   The topic of study was the religion of Islam and T4 was pleased that the "students in my class have a better understanding of Islam. Not the practices … but why there are such conflicting differences between the western view and Islamic view".   This suggests that the students' deep learning and understanding is at the centre of his/her daily purpose.   Each of the examples included reveal the

importance of service in the daily work of a teacher. Their responses were wrapped in language that espoused assistance for and service to the children with whom they work.

Element 8: Transformation

The final element is that of transformation and this is an action that is integral to the operation of LTLL (Bezzina and Burford, 2010; Bezzina et al., 2007; Starratt, 2004). The basic premise on which the project is based is that of transformation. All teacher participants and both principals talked of transformation, whether it referred to leadership or learning. Transformation was a clear goal of both LTLL and InteL. A fundamental principle of teaching is to bring about change or transformation in the student learners. With regard to the students this occurred in their daily learning in the classroom and extended beyond to the co-curricula as T5 stated. Teaching is about imparting a skills base that allowed the learner to transform their knowledge and understanding, in some cases to become "life-long learners" (T2) or to help them "be better people" (T7).

5.2.1 Summary

With the exception of T3 who chose not to respond, all teacher participants and the Principals identified the significance of their beliefs and values as a motivating force in their daily work. These actions can be collected under the umbrella of spirituality. It provided meaning and purpose and manifested itself in the way they prepared for class; in the way they worked with the students and their encouragement of those students to grow and change and challenge and develop. As T1 suggested, spirituality is "a by-product of teaching and learning".

The elements of spirituality identified by Korac-Kakabadse et al., (2002) have areas of overlap with leadership. This compromises the conceptual framework (see Figure 2.2, p.45) of this study, as the basic premise was that all constructs combined equally to bring about change. A different model will be required to explain the interplay between the forces that create sustainable change.

The initial research question that elicited the discussion around spirituality used the term 'values' and this was inextricably linked with 'vision', both concepts are also linked to leadership. The shared vision of the teachers in InteL became the "call to joint action" (Fink, 2005, p.27). To be effective, spirituality needs a focus and that focus is most often realised through a shared vision.

5.3   SHARED VISION

Vision generally has its beginnings in the formal leadership arena and the concept of shared vision within the LTLL project has already been partially addressed under the guise of leadership earlier in this chapter. This section will specifically investigate the concept of shared vision as a catalyst for change and judge its effectiveness against the data.

In the context of this study, vision was the ability to understand, educationally, what needed to be changed in order to bring continuous and sustainable improvement to the learning experiences of the students – in effect, ensuring that their learning experiences are rich, real, relevant (March, 2008.) and authentic. In a school that is focussed on learning, "every structure, activity, policy or practice must contribute to students' learning" (Fink, 2005, p.31). One of the criticisms of the current curriculum was that there is insufficient connection with the real world (Barth, 2001; Duignan, 2006). To create a shared vision requires more than just articulation, the vision must also be well resourced and supported by other stakeholders. Vision "involves dialogue and must be shared before it can be a call to joint action" (Fink, 2005, p.31), as such, a vision becomes truly shared. It is in this way that change occurs as practices or processes are identified that are in need of review. Fundamentally, the vision needs to articulate the goal that will be achieved by change. Harris warned that any change must be "linked to high quality support" and "needs to be shared and regularly reconfirmed" (2000, pp.5-6).

It is this understanding of vision that will be used to explore the effectiveness of the shared vision that framed the InteL project.

In its genesis the LTLL project brought together nine teams from within individual school environments with the aim of developing a strategy to transform learning experiences for students. In whatever form that strategy manifested itself, it was essential that it be developed within the conceptual framework (see Figure 1.0, p.5) that was designed for the LTLL project. The model had four major pillars: values, ethics, leadership and learning; each of these contained a subset of attributes.

In a paper by the school LTLL management committee that was distributed to the staff of the high school in 2005, the scope of the project between the two schools was outlined (see Appendix 2, p.238). The concept was stated thus: "to develop and put into practice a continuum of quality learning and teaching from K – 12 in a Catholic primary and secondary school … Initially the emphasis will be on stages 3 and 4 with a focus on transition through enhancing quality learning outcomes" (Appendix 3, p.241). The focus became transition and quality learning because they were the areas identified by the teaching staff.

The vision behind the infant project had been shared with staff from the outset. This was largely achieved through staff meetings as the participants reported their learnings at LTLL reflection days to the whole staff or as they presented the students' perspective of InteL through DVD presentations or by outlining the structure of InteL for a particular term. As Fink (2005), Harris (2000), Lambert (2003) and West et al. (2005) had identified, it is crucial to keep the vision in sight of everyone at all times. While this did occur during the formal phase of the LTLL project in 2006 as a result of the professional learning opportunities provided, 2007 saw InteL slip from prominence. The whole community, therefore, was no longer sharing the vision, and this made the work of the InteL teachers more difficult. Neither principal accepted this view.

The original intent once InteL was established was to move it beyond Years 6 and 7 but this did not happen partially because the vision was allowed to fade from centre stage. Once it was perceived that there was not strong support from those in formal leadership the position of InteL within the curriculum was weakened. As discussion focussed upon the expansion of InteL it was recognised that the "whole school has to embrace it … [and] that's where it has to come to strong leadership … it has to come from the executive" (T4) in terms of explaining to the whole staff the importance of the project and the benefits it brings both students and teachers.

Aside from the transition focus the core concept of InteL was the development of a joint learning program across Stages 3 and 4. The concept was to change current pedagogy through the utilisation of enquiry based learning to create sustainable learning environments in order to develop reflective, self-directed learners who engage in a range of learning opportunities that address specifically identified outcomes. One teacher recognised that InteL placed them at "the beginning of cultural change" (T6) in terms of students being able to question the curriculum. The students began to view the teacher "more as an advisor … a collaborator rather than a person who is going to impart information" (T3), a co-learner on the learning journey (Begg, 2002). It was anticipated that this process would create authentic experiences that would encourage all participants in the project, teachers and students, to grow as learners and leaders. It also acknowledged the assertion that "learners and learning have changed" (Caldwell, 2005, p.3) and that schools should be organised around students "and that the self in self-management is the student" (Caldwell, 2005, p.3). The ultimate goal was to "enhance students' progress, achievement and development, to prepare them for a changing world" (Stoll, 1999, p.504). The shared vision of InteL was the creation of positive learning experiences that would be meaningful for students and would broaden across the schools and assist in shifting the current culture.

All teacher participants agreed that InteL had promoted "successful learning" (T2) and many accepted that their involvement in InteL had also impacted

upon their own pedagogy. It was also recognised that "the kids have been far more engaged" (P1). As a significant proportion of the students' work was project based, the way the teachers operated in a classroom shifted to a more advisory role and this provided them with more opportunity to observe the students. The cross-curricular nature of InteL allowed for duplication to be removed from the curriculum thereby freeing up time and providing a more "individually tailored curriculum" (T6). These changes demonstrated how the teachers' view of learning had changed. For this to happen there needed to be a shared, clearly articulated vision of what type of learning was required to make the program a visible success. One teacher was sceptical as to the extent of the change in pedagogy but accepted that change had occurred within the InteL classroom.

5.3.1 Summary

It was recognised that for InteL to be an ongoing success then "we need to be dynamic and we need to be evolving continuously" (T7). The project was "slowly bringing about some change" (P1) which it was designed to do. So, while the participation of the schools in the LTLL project and the implementation of the InteL project itself had reaped positive benefits, the formal leadership of both schools failed to keep reaffirming the vision behind the educational change and as a result the project faltered. While acknowledging the importance of vision, it must be recognised that leadership was also a significant force. Once again, this calls into question the value of the initial conceptual framework (see Figure 2.2, p.45) that depicted all constructs as equal forces in the change process.

Notwithstanding the fact that both Principals had declared their support of InteL, the project was struggling on the level of formalised support. The teacher participants believed that formal leadership was not committed to the program. This was evidenced by a lack of funding and structural support that could have been demonstrated through the provision of adequate planning time. Further, neither Principal had maintained any significant involvement with InteL and had failed to formally reaffirm the value of the project to other staff. Ultimately, the primary school withdrew from the joint project despite the

Principal confirming the benefits it had brought to the students and agreeing that to expand it further across the school would be positive. While the high school continued alone, the teacher participants felt that any measure of continuing success was due to the passion of the teachers involved and not as a result of any support from the formal leadership of the school. The sustainability of the project was in doubt and is examined in the next section.

5.4   SUSTAINABILITY

The finding of Hargreaves and Fink (2006) that "change in education is easy to propose, hard to implement, and extraordinarily difficult to sustain" (p.1) has been verified in this study. Effective educational leadership needs to be sustainable; otherwise gains made under a particular leader may be lost or forgotten when there is a change in leadership. Sustainability, however, as discussed by Fullan (2005) and Hargreaves (2005a) does not mean maintainability; it is more than just ensuring that change lasts. Sustainability refers to the learning agenda, leadership and the resultant impact they have on the broader education community. All facets of the process need to be sustainable. Hargreaves (2005a) sees sustainable leadership "is about the impact and importance of leadership as a process and a system" (p.173). Within InteL informal leadership fostered sustainability. One of the teachers informally assumed the role of leader and was "vital to any success" (T1) that was experienced. T4 suggested, "we're lucky to have an active leader". If sustainability was achieved, it meant that both the leadership and the change endured over time without having a negative impact on those most involved in the change. Fullan (2005), Lambert, (2003) and Senge, Kleiner, Roberts, Roth, Smith and Guman, (1999) all agree that sustainability cannot occur without sustainable leadership practices.

Principle	Description	Example
1. Sustainable leadership matters	Creates deep and broad learning that is itself sustaining	Student choice in research Self-directed nature of work
2. Sustainable leadership lasts	Leading across and beyond individual leaders over time	Although the InteL still exists, its position has weakened
3. Sustainable leadership spreads	Is distributed leadership	Students have ownership of their learning. Teachers have input into the nature of the project
4. Sustainable leadership improves the surrounding environment	Finds ways to share knowledge and resources	Discussion around expanding InteL Combines Year 6 and Year 7 classes
5. Sustainable leadership promotes cohesive diversity	Learns from diversity in teaching and learning and creates cohesion	Allows students to work at their own pace Student choice promotes diversity
6. Sustainable leadership develops and does not deplete material and human resources	Recognises and rewards leadership talent, looks after people and renews energy	Lack of planning time for teachers No Intel Coordinator
7. Sustainable leadership honours and learns from the best of the past to create an even better future	Revisits organisational memories, honours and learns from the past	Change in pedagogy Regular review of InteL

Table 5.3   Elements of sustainable leadership (Hargreaves and Fink, 2006) compared with the reality of InteL

As the 2011 academic year commenced the InteL program was in its sixth year of operation. A simplistic view might suggest that this demonstrates sustainability and certainly, if the enthusiasm and passion of the teacher participants was used as a gauge, then this would be the case. However, sustainability is more complex than a program being in existence for a number of consecutive years. In reviewing the sustainability of InteL it was seen as valuable to look to the leadership, both formal and informal, to ascertain how it had impacted upon the ultimate sustainability of the project. Several theorists, Hargreaves and Fink (2006), Fullan (2005) and Lambert (2003), point out the impact of leadership on sustainability. Therefore, the seven principles of sustainable leadership as proposed by Hargreaves and Fink (2006, pp.18-20), were used to measure the sustainability of InteL and are outlined in Table 5.3, with a description of the principle and a supporting example.

Principle 1: Sustainable leadership matters

The first principle states that sustainable leadership "puts learning first" (Hargreaves and Fink, 2006, p.54) and as a process is in itself sustaining. Certainly the teachers who were directly involved in InteL would agree that learning came first and the project energised them.   By virtue of the collaborative nature of the work InteL was "reaching more students … making more students enthusiastic and self-directed" (T4) in their learning.

Building on the self-directed nature of InteL was the fact that the students had significant choice in how they wanted to work and present their final product; "they can choose their own area of interest to do their research and learning" (T1). As a result teachers saw students that "were engaged and self-directed and enthusiastic" (T2). As one student stated, "I enjoy InteL because you get to choose what you want to do" (PS2) a view that was echoed by HS1, HS5 and HS10.

The students' ability to choose their own work was clearly sustaining for themselves and their teachers as this enhanced engagement (Shernoff et al., 2003). The students' ability to negotiate their work was a deliberate attempt to focus on the learning and was seen as a different style of pedagogy (T1). The result for the teachers was that they did not need to focus on content driven, highly prescriptive syllabuses and were more able to tailor the curriculum to individual students (T6). One teacher who was disenchanted with content driven syllabuses saw the authentic learning approach of InteL as new and invigorating (T3). Another talked of the excitement InteL generated (T7). Undoubtedly the teachers viewed their work in InteL as sustaining.

In summary, it was clear that InteL was focussed on learning and because there was no need to follow the dictates of a syllabus, the student and teacher were free to create learning that was deep and broad rather than shallow and exam centred (Barth, 2001; Starratt, 2004; Stoll et al., 2003). In doing this, the students' enthusiasm increased, as did the teachers' level of enjoyment in the classroom. InteL was sustaining for both teacher and student.

Principle 2: Sustainable leadership lasts

As this study drew to a close it was perhaps too early to establish whether the second principle of lasting leadership applied to the InteL project, although there were many comments made regarding formal and informal leadership. At the time of the questionnaire and the focus group interviews and into the following academic year of 2008, it would appear that the informal leadership of InteL was more responsible for its success than the formal or executive leadership of either school. None of the teachers interviewed credited either Principal or the schools' executives with the success of InteL and this is unchanged in 2011. The Principals of both schools had been accused of "distancing" (T8) themselves from the project after the formal LTLL program had concluded. Similar comments were made regarding the wider school executive, "I don't think there has been enough input, positive input from the executive" (T3). Certainly there was no evidence to suggest that there was a "culture of leadership development" (Hargreaves and Fink, 2006, p.72) throughout either school. The leadership of InteL had been devolved to one or two significant people since the conclusion of the LTLL program. However, it appeared not to be a matter of deliberately distributing leadership but more a case of 'out of sight out of mind' in that InteL was operating successfully.

In summary, there was certainly a belief amongst the InteL teachers that what they were doing within the classroom was innovative and authentic by "making a huge change to past teaching practices" (T4), but to date there has been no attempt to formally measure the learning of the students. Therefore, there are no data to demonstrate the depth of learning achieved by the students. On that basis, and given the lack of impact of formal leadership as reported by the teacher participants, it would be prudent to say that no conclusion can be reached or at worst, that the InteL project had not achieved the second principle of lasting sustainable leadership.

Principle 3: Sustainable leadership spreads

If sustainable leadership is distributed leadership as principle three states then InteL is a success, although a qualified one. As has been discussed, it was the informal leadership that encouraged InteL to flourish. The relative

success of this informal leadership was accomplished through the devolved leadership of InteL. To refer to this sharing of responsibility as distributed leadership would be inaccurate. However, in the first year of operation there was a deliberate attempt to distribute leadership as the younger members of the team were encouraged to take the lead and became the 'face' of the project at an LTLL level. This dissipated with the "loss of the driving force and baby holder of the project" (T8) as staff changed.

Distributed leadership "has sometimes been used as a shorthand way to describe any form of devolved, shared or dispersed leadership practice in schools" (Harris, 2009a, p.1). From a different perspective, distributed leadership covered programming and the general management of InteL. It did not extend to some decision making processes regarding funding and availability of planning time and the informal leaders of the program felt as if they had to go 'cap-in-hand' to the executive to request time to program.

Hargreaves and Fink (2006) viewed sustainable and distributed leadership as methods to inspire "staff members, [and] students … to seek, create, and exploit leadership opportunities" (p.95) that will facilitate authentic learning. While this statement does not refer to relationships between the formal and informal leadership of the schools it does apply to the relationship between the teachers and the students in InteL. The deliberate focus to allow the students choice within some structural parameters demonstrates a clear commitment on the part of the teachers to distribute leadership. The students responded by taking "the lead" (T2) with their level of academic and technological knowledge and demonstrating "informal student leadership" (T2). One of the by-products is a cohort that are "so much more engaged because they've got ownership" (T7) of their learning. In fact, "they've [the students] actually shown me a lot of qualities that I certainly wouldn't have seen in them before" (T5). The student view of this is not quite so positive.

In summary, in terms of distributed leadership InteL was a qualified success. Leadership was certainly being distributed to the students in a deliberate attempt to encourage them to be self-directed in their learning and to take

more responsibility for their own learning. However, at best, it could only be said that the formal leadership of the schools had shared certain aspects of leadership with the InteL teachers.

Principle 4: Sustainable leadership improves the surrounding environment

The LTLL project was based on sharing ideas and knowledge that were learned as the schools developed their own separate programs. This concept fits neatly with principle four, that sustainable leadership discovers avenues to share knowledge. Certainly this was achieved in the early planning stages as the initial InteL program was partially based on an existing program being delivered in the high school in 2005. Further the InteL team presented their work at LTLL meetings to other schools, to local Diocesan Principals and to visiting teachers. They have since made visits to other schools to discuss how InteL has evolved. All of this was evidence that the nature of InteL was to share knowledge.

As the InteL program itself developed the need to formally share resources between a neighbouring primary and high school was recognised. There was some concern about this arrangement because Regional had at least six significant primary schools providing enrolment to Year 7 and the tyranny of distance meant that the InteL program could only be offered to one school because of its proximity. There was genuine concern and desire to work with the other schools, "how can we do that with the other primary" (T3) schools asked one participant. "It's such a good program … that we should be doing this for every kid that comes in" (T3). Despite having enrichment days for the other schools across a number of subject areas "Food Technology, Chemistry, Science, Drama and Video Editing" (P1) this was not InteL and the experience was not integrated and sustained over the year. It was acknowledged that it was necessary to "find ways to bring the other schools" (P1) into the program in a more formal way. While these were indirect benefits of InteL, the program itself did not spread beyond its original environs.

Finally, in its first two years of operation there was a celebration of learning that occurred in InteL at the conclusion of the school year. Across both campuses there were displays of students' work. All members of the school communities were invited to view the work, as were parents and members of the Diocesan office. On the final day of presentation the students stood with their projects and answered questions as the visitors moved around the various locations to view the work. This allowed the students to share their knowledge with anyone else who was interested and certainly illustrated that principle four – the sharing of knowledge and resources- had been achieved.

Principle 5: Sustainable leadership promotes cohesive diversity

Sustainability focuses on cohesive diversity and attempts to circumvent the current standardised agenda. There are a number of ways that the leadership of InteL has demonstrated this principle. The teachers involved in InteL at the high school level are drawn from a variety of faculties. This ensured diversity of thinking and of subject expertise. It provided a diverse knowledge base upon which the students could draw. At the time of the focus group interviews the teachers involved were drawn from the areas of Languages, Mathematics, Science, Visual Art and the library. When this was considered along side of the fact that the project brought together students from Year 6 and Year 7 it was clear that it successfully created cohesion and valued diversity.

The classes were structured to ensure that there was a mix of academic abilities and year groups. The flexibility of InteL provided teachers with more opportunity to focus on "the diversity of learners" (T4) in the classroom. In allowing the students to choose their own topics for investigation and mode of presentation it provided an opportunity "for kids who are not particularly academic" (T6) to utilise skills in other areas. This, coupled with the opportunity of the students being able to work in groups, meant that they were able to "share the work" (HS1, HS4, PS5, PS7), work to individual strengths (HS4, HS6) and help each other achieve (PS1, PS2, PS8). This diversity in operation helped develop cohesion among the students and allowed teachers to personalise learning (T6) to suit individual needs.

Principle 6: Sustainable leadership develops and does not deplete materials and human resources

The sixth principle has at its core the ideal of taking care of people. It is about creating leadership that renews the energy of people and rewards their efforts. Hargreaves and Fink (2006) described it as "resourceful leadership" (p.191). In the initial stages of InteL, when it was still operating under the auspices of LTLL, there were some tacit rewards for the people involved. This was largely delivered through professional learning opportunities and situations where younger members of the team were encouraged to present to a variety of audiences. This latter situation demonstrated the faith the school executive had in the teachers and encouraged their further development. The benefits of InteL itself renewed the energy of those involved in its day-to-day delivery. This was further enhanced by the collegial discussions with staff from other schools that were also involved in LTLL. However, the credit for the renewed energy that flowed from these experiences could not be totally assigned to the formal leadership of either school as some of it derived from participation in LTLL. Regardless, when formal involvement in LTLL concluded at the close of 2006 many of the rewards did as well.

The difficulty of leading a program across two schools that involved teachers from different faculty areas, competing timetables and students from two different year groups should not be underestimated. Despite the obvious complexities, there had never been a person designated to coordinate such a broad project (T3), let alone the formal recognition that InteL needed one person to coordinate it. Teachers completed much of the planning and organisation in their own time and this was perceived as an "expectation" (T3) from formal leadership. It was agreed by all InteL teachers that they had found it difficult to find planning time (T4) and that one person in particular was putting in many hours and this could lead to teachers burning out (T6).

It was clear that the leadership of both schools did not acknowledge the complexities involved in ensuring that a program such as InteL was successful, particularly in the face of "negative talk" (T4) from other staff. It

was this negativity that did not allow some of the "teachers involved in the project feel comfortable and willing to stick with it for longer than a year" (T8). It was pointed out that expedient timetabling decisions also played a role in the lack of continuity of staffing. Perhaps if the Principals or senior leaders had attempted more significant involvement in InteL they would have been more able to reward those teachers involved and demonstrate "their support of InteL rather than saying 'yeah, we think it's a great idea'" (T7). In doing so they would have been promoting sustainable leadership through the renewal of teachers' energy rather than the reverse.

Principle 7: Sustainable leadership honours and learns from the best of the past to create an even better future

The final principle of sustainable leadership acknowledges the past and builds on it. Given the relatively brief period of time that InteL has been operating it was not a simple matter to judge it against principle seven. It was acknowledged that InteL was changing teaching practice (T4) and therefore it could be assumed was building on the foundations of the past. In fact one teacher referred to the Aristotelian perspective (T2) delving back to a time beyond standardised testing and inauthentic learning. Certainly the development of the program built on the experiences of each member of the management team as well as those involved in the formulation of the LTLL project. Although there have been changes made to the program at the conclusion of each year, there is still a need to include student voice in this process and look for a formalised way to measure student outcomes.

5.4.1 Summary

Sustainability, as measured against the seven principles proposed by Hargreaves and Fink (2006), is very difficult to accomplish. While the InteL project has proven to be viable thus far, at least at a high school level, the data have made it clear that formal leadership has a significant role to play in achieving some of the principles not yet attained. There is still significant enthusiasm and passion for InteL among its teachers. It is this passion and the informal leadership of the participants that has ensured the sustainability of the project to date. When people "have a passion and a purpose that is

theirs … and when their passion is pursued together and is sharpened by a sense of urgency … there are no limits" (Hargreaves and Fink, 2006, p.254) to what can be achieved. Although burnout exists as an ever-present danger most of the InteL teachers believe that what can be accomplished is limited only by imagination.

The idea of sustainability put forward by Hargreaves and Fink (2006) is bound to leadership at each level. Once again, this calls into question the initial framework (see Figure 2.2, p.45) of this study as leadership is equated with sustainability. The weightings associated with each concept are not equal and shift depending on a range of factors operating within a school context. The InteL project commenced with the goal of creating authentic learning experiences and with every iteration that goal became more sustainable in the long term, although the influences that helped create it were not applied with equal weight.

5.5   AUTHENTIC LEARNING

The management teams of both schools were committed to ensuring that InteL fostered authentic learning practices. Within the context of this study authentic learning was defined as learning that "implies real world experiences, which make the content relevant and engage the learners in their own meaning-making" (Andersson and Andersson, 2005, p.424). Therefore the structures of the learning processes in InteL were built with authentic learning in mind. This was supported in the early phases of the program by professional learning opportunities afforded through LTLL. Decision making in regard to InteL always came back to what had been learned and discussed at LTLL meetings. As T7 stated, the LTLL framework "was always in the back of my mind, particularly when we were planning to ensure that what we were doing would lead to authentic learning".

InteL utilised enquiry based learning in mixed ability groupings across two year levels where students were able to choose their area of research and

also choose the mode of presentation. Allowing the students to select their own area of study was actively distributing leadership and encouraging reflection and self-direction. While Hattie (2009) reported higher levels of motivation when students had more control over their learning, improved learning outcomes did not necessarily eventuate. In this instance, however, choice sponsored student leadership in both formal and informal capacities. The students' enquiries commenced with their own knowledge and understanding of a topic and used that understanding as the springboard for further research providing them with "meaning and purpose" (P2). The process involved "enquiry, reflection, risk taking, empathy and moral courage" (MacBeath, 2006, p.17); all things that make possible authentic learning.

To create a sustaining environment in which authentic learning can occur is a significant challenge for all leaders, formal and informal. As Starratt (2004) said, to create such an environment

> *"includes the effort to relate the curriculum to the lives of the students, to bring out its significance to their current experiences and to the future demands that will be placed upon them, and to appreciate, within the student's cultural and developmental growth, the complexity and ultimate privacy of the known"* (p.77).

To achieve all of that is to be truly transformational (Gross and Shapiro, 2005), almost in the sense of enactivism (Begg, 2002) and to do so is to demonstrate true authentic leadership.

In general terms authentic learning means providing the students with a voice (Gross and Burford, 2006), allowing them to participate in the decision making processes and delivering student-centred activities that were rich, real and relevant (March, 2008). Structuring a program in this way did not lead to automatic engagement of the students, it required "teacher input to get students to a point where they were self-directed, motivated and excited and well behaved" (T2). All but one of the teachers who were interviewed believed the students were more engaged and this was largely attributed to the students' ability to choose, within parameters, their area of study and method of presentation. One teacher commented, "I like the empowerment

aspect" (T2) as did the students who enjoyed the opportunity of "learning what you want to learn" (HS7). The students that were identified as being more engaged were "more able to proceed with the tasks that were given, were self-directed and motivated and engaged and enthusiastic" (T1) providing the students with a voice. The data indicated that it increased their level of ownership of the learning, that in turn had an impact on moral purpose. As levels of student ownership increased so did their motivation and engagement with their work.

Responses to the online questionnaire used words such as enthusiastic, engaged, self-directed and better behaved when describing students in the InteL classes and this was supported at focus group interviews, "those words would describe the classes that I had" (T2). Another teacher suggested that InteL was "making more students enthusiastic and self-directed relative to other subject learning areas" (T4). The common understanding as to why this might be the case is choice effects engagement (Shernoff et al., 2003) and resulted in authentic learning. It allowed "them to be in charge of their own learning" (T7) and as a result they were more motivated to complete the work - "you can see that they're more enthusiastic because they can see that they are achieving" (T7). One student summed it up by saying that InteL was "more fun and [the] assignments involve creativity" (HS6). Realistically, the positive behaviour and attitudes exhibited by the students were a direct "reflection of their attitude to their own learning" (T8) and as Hattie (2009) revealed that the teacher can have a significant and positive (or negative) impact.

To create authentic learning challenged the teachers because it required a different mind set and a different way of operating in the classroom. The students viewed the teacher "as an advisor … a collaborator rather than a person who is going to impart information" (T3) and it was recognised that "our role as teachers" (T1) was not the same (Begg, 2002) in InteL. All eight of the primary students interviewed acknowledged that they learned differently in InteL or at least that InteL was different to their regular classes. This was also supported by eight of the ten high school students interviewed. Authentic

learning means building on an already existing knowledge base and then challenging the students to go further (Begg, 2002) "helping the kids kind of do what they know they can already do in order to find out new stuff" (T1). It also signalled the end of the 'one lesson fits all' style of teaching as the students were "all off in different directions and journeys" (T4). This was reinforced through InteL being a cross-curricular program that allowed the students to draw outcomes from a number of subject specialisations. The benefit for the teachers was that it was easier "to concentrate on skill development" (T6).

An interesting difficulty that was associated with authentic learning was the fact the students were "not used to thinking" (T7). After 7 or 8 years in the education system many of the students were just looking for the "easy option" (T4) and wanted to complete the work and move on to the next topic or assignment. Therefore, some students were reluctant to move from their comfort zone and take risks with their learning (Haberman, 1991). Much as the teachers had to review their role and how they operated in the classroom, the same can also be said of the students. They need to be encultured to focus on the process of learning and not just the end point.

In summary, InteL engaged the students because they had the ability to choose their area of study, which in turn made their learning authentic because to them it had meaning outside of the classroom. Coupled with this choice was the teachers' different way of operating, shifting the focus from teaching to learning and ensuring that the classroom maintained a student-centred focus, all of which allowed the students to further develop their level of leadership, further enhancing the self-directed nature of their learning.

5.6   SUMMARY

The analysis and discussion of the data have been structured around the four main constructs of the conceptual framework of this study: leadership, beliefs and values expressed as spirituality and moral purpose, shared vision, and

sustainability. It is evident from the data that the informal leadership of the InteL project was more responsible for the success of InteL than the formal leadership. The beliefs and values of teachers involved in InteL demonstrated their spirituality, and gave rise to moral purpose. It was this that kept the participant teachers focussed on making InteL a continuing success. The shared vision that grew out of the LTLL project in 2006 is now the domain of informal leadership of InteL and once again it was the teacher participants that were responsible for keeping the vision in front of the wider school communities. Similarly, the project has proven to be sustainable, at least at the high school level, but the lesson from the primary school was that formal leadership makes the decisions and can decide when InteL is over.

Recurring themes (Duignan, 2003a, 2006; Fullan, 2008; Hargreaves and Fink, 2006; Starratt, 2004, 2006) in the scholarly literature facilitated the development of a propeller as the conceptual framework (see Figure 2.2, p.45) that supported this study. Leadership, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability were the blades of that propeller. Following analysis of the data it was apparent that, while the elements of the framework remained the same, the influence and impact of each area was variable and was not equal as implied by the framework. Further, the goal of the change, authentic learning, also required a place in the framework. To that end a new framework emerged as the data was analysed and this will be discussed in the final chapter of this study.

CHAPTER 6:   FINDINGS, IMPLICATIONS and RECOMMENDATIONS

6.0   INTRODUCTION

This chapter is built around the three key constructs of leadership, learning and student engagement and they will be used to present the findings that emerged from the data. By presenting the findings in this way it links the fundamental purpose of this study with the research questions and the key concepts of the conceptual framework. It will also address the utility of the conceptual framework and, based on the shortcomings that emerged, argue for the creation of a new framework based on the findings. A new conceptual framework for demonstrating the linkages between leadership, learning and student engagement will be proposed.

Chapter 4 used the four research questions of this study as a structure to present and discuss the data. In Chapter 5 the conceptual framework (Figure 2.2, p.45) was used to present an analysis and interpretation of the data. In presenting the findings it is deemed appropriate to return to the fundamental question that framed this study:

> *"What can be learnt about the linkages between leadership, learning and student engagement through the experiences of school communities in an educational change project?"*

6.1   LEADERSHIP

The research model was used to investigate what influence leadership had on the process of change described as the InteL project. The purpose of the InteL project was to develop reflective, self-directed learners who engaged in a range of learning activities to create authentic learning. The leadership of the project was explored through Research Question 2:   How have the

experiences of the participants in the InteL and LTLL projects influenced their perspectives of the linkages between leadership and learning?

The findings related to leadership were:

1. There is a discernable link between leadership and learning,
2. Leadership matters at all levels of the organisation,
3. The impacts of levels of leadership are variable,
4. The impact of leadership is mediated through variables, and
5. A new model of leadership called *"connecting leadership"*, situated in enactivist theory is required for today's learners.

The data indicated the teachers believed the goal of authentic learning was achievable and one of the major contributing factors to this was informal teacher leadership. It was this leadership that facilitated and maintained the development of InteL and could be linked to the participant teachers' vision and values. This was explored through Research Question 4: What vision and values were important in the participants' leadership of the learning created in the InteL or LTLL projects?

Throughout the course of this study three types of leadership were identified at work and were discussed in an earlier chapter, these were: formal, informal and student leadership. The data indicated that there was a clear link between leadership and student engagement in formal learning. However, the impact of the three types of leadership on learning was found to be variable and it is necessary to look at each separately.

6.1.1   Formal Leadership

Of the influences discerned by teacher participants an area that stood out in the data was their understanding of the importance of both formal and informal leadership. There was an understanding that formal leadership can (and did) have a negative as well as a positive impact on a project. This phenomenon was also evident in the work of Hattie (2009) and Robinson (2007) who wrote of the importance of instructional leadership from those in formal positions of responsibility if positive student outcomes were to be achieved.   Contrary to their findings, this study found positive student

outcomes were achieved in InteL despite the lack of significant instructional leadership from the formal leaders. The data indicated that this could be attributed to the impact of informal teacher leadership.

Responses from the teacher participants were viewed against Robinson's five dimensions of leadership practice (2007) and this proved to be a useful process for analysing and contrasting the data on leadership. As reported in Chapter 5, the InteL teachers believed the formal leadership of the schools performed poorly against these dimensions with data indicating that, had formal leadership been more supportive and involved, it could have been anticipated that InteL would have been more successful in terms of its acceptance across the school. This finding confirms the direct association between formal leadership and learning described by Marzano et al., (2005) and Robinson (2007) when they identified the positive impact of specific leadership behaviours on student learning outcomes.

6.1.2   Informal Leadership

In the absence of strong formal leadership, informal leadership was revealed as having the most significant influence on the project and on the teacher participants themselves. Planning for InteL was seen as collaborative in nature and the teacher participants indicated that they had an equal voice in shaping the direction of the program, which was a valuable experience as it contributed towards developing the capacity of those involved so that they felt as if they, too, were leaders. By fostering the development of informal leadership the data showed that InteL created many leaders as well as leadership depth in individuals. It was through this process of distributive and collaborative leadership that InteL developed its sustainability, at least at Regional High School. In this regard, the findings of this study are in agreement with Fullan (2008) and Sergiovanni (1987) who saw the creation of leadership depth within an organisation as essential for the sustainable success of any program. A commonality also exists between the findings of this study and Harris (2009a) who emphasised the importance of informal leadership in its ability to contribute beneficially to an organisation. Harris (2008, 2009a) described such leadership activity as distributed.

While supporting the importance of informal leadership the data also revealed that the teacher participants believed having one person to coordinate or lead the project was essential. The research of Harris (2008) into distributed leadership claimed that vertical structures or positions of formal leadership can work with informal leadership to improve the effective functioning of an organisation, a finding supported by this study. Despite the fact that all of the teacher participants viewed themselves as being equal, in that none of them were members of either school executive, there was one person to whom they all looked for guidance. This person assumed the responsibility of leadership because he/she believed in the worth of the project. Had no one assumed the unofficial role of coordinator a lack of cohesion could have easily developed rendering the project ineffective. This person went on to become a KLA leader within the school. In most school contexts roles are usually well defined and it may have been useful to nominate a coordinating teacher for the purpose of leading this project. The implication for leadership is that to ensure the success of a new project it should be identified, supported and rewarded within the formal structures of the school. This study supported the work of Fullan (2001, 2003a) when it found that creating change in the learning environment, through a specific project such as InteL, is complex and requires cultural change in leadership processes to foster success.

Ultimately, one person emerged as leader of the InteL project demonstrating the importance of leadership beyond the formal positional structures. What became obvious to the teacher participants was that leadership had less to do with formal hierarchical position and more to do with relational interaction. This is supported by the research of Harris (2008) and Sergiovanni (1996). The initial conceptual framework and the analysis of data indicated that informal leadership came to the fore because of the values, beliefs and moral purpose of the teacher participants, expressed as spirituality by Korac-Kakabadse et al. (2002). The value placed on the InteL project by the teacher participants provided them with a sense of higher purpose that enabled them to resist the negativity towards the project and attacks made on it. Following from this was the significance of identifying the informal leaders in a school

context to ensure the continued building of leadership capacity and sustainability. This finding demonstrates the importance of formal leadership identifying, supporting and resourcing informal leaders to sustain initiatives.

There are also implications for the type of leadership employed by formal school leaders as this study found that the support of the formal leaders was essential for the success and sustainability of the project. This is confirmed by the research of Lambert (2003) where she noted the importance of capacity building and the negativity associated with command and control style leadership.

6.1.3 Student Leadership

The importance of student leadership in creating a new learning environment was also recognised by teacher participants and by students themselves. The students demonstrated their leadership ability through peer mentoring and by taking responsibility for their learning and that of other class members. In doing so it was perceived that the students positively influenced the learning of others, including, on occasions the teachers. This linked with the concept that leading is learning a factor identified by Lambert (2003) in her work on leadership capacity who also found that fostering student leadership became a form of learning. In InteL the fostering of authentic learning practices led to leadership developing amongst the students supporting Lambert's (2003) position that not allowing students to lead in such initiatives could hinder their learning and their development. Hattie (2009) and Robinson (2007) both noted the importance of leadership and its impact on student learning outcomes. It is proposed, as a result of this study, that a new construct of leadership is required to facilitate the creation of authentic learning and this will now be explored.

6.1.4 Connecting Leadership

The previously discussed and examined leadership constructs and styles do not quite encapsulate the leadership that was demonstrated within this educational change project. As stated at the outset of this chapter and in Chapter 5, the original conceptual framework proved to be an inadequate

model to help explain the dynamic nature of this study. Similarly, the notions of leadership that were examined in the Review of Literature in Chapter 2 do not adequately explain the processes that formed the InteL project. As Harris (2009b) suggested the crucial point of leadership, was that it was different for each school; there cannot be one response to any given situation. Schools require many types of leadership within a complex structure of interrelationships.

Given the areas of confluence of the leadership theories examined, the data pointed to the need for a different model of leadership, one that draws from all of the constructs previously discussed in the Review of Literature, a type of leadership for schools of this millennium; a construct that demonstrates flexibility. Schools require a type of leadership that recognises their complexity and, in keeping with the enactivist view of learning, is able to adapt itself to changing circumstances (Begg, 2002) and respond to particular needs and situations; leadership that is able to connect the person to the situation and draw from a number of leadership types, or models. This new type of leadership required for schools today to challenge learning has been suggested by this research and it is proposed to call it *"connecting leadership"*.

This new concept of *"connecting leadership"* draws together many of the characteristics present in each of the models or constructs discussed earlier and connects people with the experiences and resources they need to meet the challenges of authentic learning in an authentic classroom. As the model of leadership that emerged from the InteL project it acknowledged the belief that leadership must change what is happening in classrooms; otherwise authentic learning cannot be created (Duignan, 2006; Starratt, 2004). The nature of the work involving the teachers and students in the InteL classroom ensured that leadership at that level was distributed and was not locked into hierarchical structures, but was focussed on actions and interactions as described by Harris (2008) and Sergiovanni (1996) in their examination of leadership in schools. Through the LTLL project the direct involvement of the Principal and the University team utilised instructional leadership as outlined

by Hattie (2009) and Robinson (2007) as the initial InteL project was being framed. The collaborative processes used to develop the InteL program of teaching made certain that leaders were developed and transformed at different levels within the schools through processes described by Fullan (2008) and Leithwood and Jantzi (2005a). The social engagement of teacher leadership described by Crowther et al. (2002) and the concept of Greenleaf's stewardship (1977) implicit in education were also present in the leadership of the InteL project, as the importance of relationship and its impact on learning were identified by this study.

As suggested by Starratt (2004), ultimately leadership is about responsibility and relationships at the deepest level and in an educational context is centred on making connections between leaders, (formal and informal, student and teacher), and learners and their learning. This finding has implications that extend to all leaders in schools to ensure that all members of the educational community are being connected with the experiences that allow them to lead within their own context. *"Connecting leadership"* as identified in this study links leaders and learners to focus on the authentic learning of both groups to ensure improved learning outcomes for all. It connects people with the resources and experiences required to develop capacity and sustain growth. "*Connecting leadership*" aligns with the final conceptual framework of this study proposed in Section 6.4, p. 195.

To be successful, a change project that uses authentic learning to enhance student engagement requires the following elements of connecting leadership:
1. A clearly articulated vision, shared with the community,
2. Demonstrated overt support for, and genuine involvement in the project,
3. Acceptance and encouragement of the voice of informal leadership,
4. Provision of sufficient resourcing and infrastructure to facilitate success,
5. Assistance and encouragement of, and response to student voice.

The variability of the impact of the levels of leadership in operation within a school context needs to be understood in the context of a change project.

While acknowledging the levels of leadership operating in InteL, it was the interplay between informal leadership and the values, beliefs and moral purpose that had the most impact on student learning outcomes.

6.1.5   Recommendations Linked to Leadership

There are five specific recommendations that flow from this research that have direct implications for leadership.

6.1.6.1 Recommendations for schools

Recommendation 1: School and system leaders involved in change projects analyse the leadership within their schools against the five elements of connecting leadership.

6.1.6.2 Recommendations for systems and universities

Recommendation 2:   Universities and systems create programs for school leaders to enhance the development of relational skills that help identify and develop informal leaders and assist them to move into formal leadership.

Recommendation 3:   Systems focus on identifying informal leaders through specific development programs aligned with system and school goals.

Recommendation 4:   Universities and systems investigate the construct of *"connecting leadership"* and test it against other leadership models presently operating in their organisations to ascertain which has more applicability to leadership for learning.

Recommendation 5: Through the implementation of a specific change project universities and systems test the construct of *"connecting leadership"* in school environments against its elements:

1. A clearly articulated vision, shared with the community,
2. Demonstrated overt support for, and genuine involvement in the project,
3. Acceptance and encouragement of the voice of formal leadership,

4. Provision of sufficient resourcing and infrastructure to facilitate success,

5. Assistance and encouragement of, and response to student voice.

6.2 LEARNING

The next area of concern for the research focussed on teacher participants' perceptions of learning as they identified a number of concepts where involvement in InteL had influenced their understanding of learning or where it had an impact elsewhere in their teaching. This was explored through Research Question 3: Has the involvement of the participants in InteL changed how they view teaching and learning?

The findings related learning were:

1. As the role of the teacher shifted to co-learner the student became the central focus of the classroom,

2. The explicit teaching of concepts and skills was important to ensure learning transfer,

3. There was a link between risk taking and depth of engagement in learning,

4. Authentic learning can be achieved through a change project,

5. Integrated learning experiences provide for more authentic learning, and

6. Professional learning aligned with the work of the teacher had a positive impact on teaching and learning.

The data indicated that a shift in the role of the teacher in the classroom was identified as being significant, as was the importance of explicit teaching. In terms of learning, the need to understand what the students already know or can do was prominent as was the necessity of risk taking in learning, and the benefit of aligned, purposeful professional learning experiences. Two further understandings emerged following the analysis of the data that explained both teaching and learning - this was that content driven syllabuses can hinder

authentic learning and skills development, and that the freedom provided by an integrated cross-curricula focus can foster an individual curriculum tailored to the needs of each student. This has implications for how learning is structured and reinforces the critical role of the teacher in the learning process as Hattie (2009) identified in his research.

6.2.1   Role of the Teacher

The shift in the role of the teacher from the pedagogical expert and away from the industrial mode of operation, as argued by Beare (2001, 2006b) Caldwell (2009) and Warner (2006), had an impact on how the teachers viewed themselves within the classroom. Some teachers found that they were uncomfortable not being the expert and being in possession of all the knowledge and answers. In that sense, this research aligns with the work of Beare (2006b) and Caldwell (2006) when they suggested that changes in approaches to learning would also change how educators function; the student, not the teacher is the centre of the classroom as the learning became more meaningful and relevant to the needs of students in today's society. This is in keeping with the theory of enactivism where the learner assumes the centre stage and the teacher is a co-learner (Begg, 2002). Given this shifting role in the classroom there are implications here for teacher training programs and for the professional learning experiences offered to existing teachers.

This perceived change in role encouraged some of the teachers to alter some practices in their other classrooms and allow their students more choice in learning activities. The findings indicated the shift in role allowed the teachers to see more easily the individual needs of their students. This paradigm shift was also identified in the work of Caldwell (2006) when he suggested that, as schools re-imagine themselves, the focus shifts from teacher to student. Flowing from this finding there are implications for how learning is currently viewed and organised in schools. It could signal a move from a strictly controlled curriculum to one that uses an integrated approach where the work of learning is to enhance skills for life. However, if this is to occur educators need to become more vocal about the complexity of teaching and to speak

out, write about and publish findings relating to authentic learning and its benefits.

6.2.2 Student Observation and Prior Knowledge

The data revealed that the structure of InteL was perceived to have provided more time for teachers to observe the students. In reality the length of classes and the time allocated to InteL was unchanged. However, rather than the teacher being constantly in an instructional mode and being the central focus of the classroom the students became the centre of attention. This was perceived by the teachers to actually focus on what knowledge and skills the students brought with them to the classroom, rather than making assumptions about prior knowledge and skills. This is a step in the direction of authentic learning as outlined in the work of Beare (2006a), Caldwell (2006) and also Fullan, Hill and Crevola, (2006) and moves beyond a constructivist perspective towards the theory of enactivism (Begg, 2002). Enactivism shifts the focus in the classroom from teacher instruction to learner growth. The InteL experience has prompted some teacher participants to observe the students in their other classes more closely so as to ascertain their actual learning needs and tailor the curriculum accordingly. There are implications for the nature of the curriculum as well as for teaching practice.

6.2.3 Explicit Teaching

The understanding of the importance of explicit teaching of concepts was identified through student responses suggesting if a particular skill was deemed to be essential to learning, then it needed to be taught explicitly, particularly if it was intended that skill be transferable to other learning contexts. While many students were able to articulate what skills they had developed through InteL, less were able to describe how those skills could be utilised elsewhere.

Students commenced their learning at different levels as Bullock and Wikeley (1999) demonstrated when they found students involved in personal learning plans not able to transfer new knowledge and skills to other areas. Similarly, in InteL the students were in a position to develop leadership skills through

peer mentoring, but, because this was not made explicit, many students did not make the link between the leadership behaviour and the classroom activity; their learning had been compartmentalised. The data demonstrated that explicit teaching of skills and concepts is important in ensuring the embedding of the skill or concept and the same applies if learning transfer is intended. Otherwise the skills learned in the InteL classroom remain in the InteL classroom and are not transferred to other learning contexts. Clearly this has implications for programming as well as pedagogical practice for teachers.

The issues of change and variation in learning cultures raised the subject of students and teachers being confronted with the risk of failure. This risk affects all change and innovative processes and this research was no exception. Therefore, how participants dealt with this risk had an important impact on the outcomes of this study.

6.2.4   Risk Taking

Risk taking in learning was a recurring theme when discussing the learning behaviours of students. The data revealed the importance of risk taking in learning, a view that is shared by Stoll et al. (1999). The InteL teachers acknowledged that most students do not take risks although this was seen in all classrooms across both schools. This is counter to the constructivist view of Vygotsky's Zone of Proximal Development (Atherton, 2010) where learning is stretched beyond the known to the next level. There is a link with risk taking and student engagement, as students who are not engaged in their learning will not take risks with it. Possible explanations can be found in the theory of enactivism and in the work of Csikszentmihalyi (2004) on flow states.

In Hamilton's (ND) paper on enactivism she described classroom learning as something with a dualistic focus. It is 'right or wrong' and the impact of this could be to encourage students to take the safe path of the known. Begg (2002) described the move from constructivism to enactivism in the classroom

as a shift from knowledge to knowing and this change could reduce the impact of dualistic thinking and free students to increase risk taking.

Another perspective on risk taking in learning is associated with challenge. Taking a risk involves being challenged to do something differently or perhaps learn a new skill. When viewed through the theory of flow (Csikszentmihalyi, 2004) by accepting the challenge a student intrinsically values the nature of the work and Shernoff et al. (2003) found challenge is one of the best ways of engaging students. Conversely, if students are not taking risks, as was identified in this study, they are not accepting the challenge and this demonstrates a lower level of engagement and a lack of meaning. While the teacher participants discussed the lack of risk taking in learning in a broad sense, it obviously applied to the InteL classroom as well, despite the teachers seeing higher levels of student engagement in comparison with mainstream classes.

It is interesting to note that the teachers themselves were not prepared to take risks outside the InteL classroom due to the pressures associated with the mandated curriculum. Risk taking suggested that learning was valued, a view supported by Shernoff et al. (2003). In not taking risks students are demonstrating that the mark or grade is more important than the learning and if teachers do not encourage their students to take risks they are validating this belief. Again, this has implications for classroom practice. Teachers need to find ways to demonstrate to the students that learning is valued and equates to more than a mark on a test. There needs to be more of an attempt to create learning by providing appropriate challenges that develop skills. If successful, students would achieve flow as they experience authentic learning.

6.2.5   Authentic Learning

The analysis of data collected throughout the InteL project revealed the participants' reality of the regular classroom, that is, much of what happened was related not to skills but to memorising content. According to Starratt, (2004) and Stoll et al. (2003) this was blamed on content laden syllabuses

that must be covered in order to satisfy regulations from varying levels of government or education systems. Regardless, involvement in InteL has demonstrated that it is possible to achieve authentic learning in a classroom that has had the syllabus content restrictions removed.

Analysis of data revealed the cross-curricula focus of the InteL program encouraged teachers to look beyond the world of their own subject-based classrooms. This exposed significant areas of content overlap, pointing to the fact that an integrated curriculum would be a more authentic way to structure learning and would link with enactivist theory (Begg, 2002; Hamilton, ND). Broadening the base of learning to an integrated focus enabled the curriculum to be tailored more for the individual needs of the students, fostering student engagement and authentic learning. This is in keeping with the work of Caldwell (2006) who suggested that subject boundaries would be broken down and curriculum would become more integrated as schools re-imagined themselves to adapt to the demands of this century. For this to occur there will need to be professional learning opportunities made available so that educators can learn how to change their mode of operation in the classroom. These opportunities should align with system and school goals.

6.2.6   Teacher Professional Learning

Professional learning opportunities that were provided as a part of LTLL were seen to be of benefit for those who attended and, as Lambert (2003) has suggested, were designed to benefit both teacher and student. The learning experiences were designed to support the LTLL framework and subsequently the work of the school teams as they developed their projects and this affected the students' learning experiences. What was learned at the LTLL conferences and seminars constructively shaped the InteL program and participants believed that purposeful professional learning aligned with their work had a positive impact on them and on teaching and learning. Hattie (2009) has validated this finding and Marzano et al., (2005) also noted the importance of professional learning in the overall success of a school. An overt alignment between system goals and those of schools and the teacher

should be supported by professional learning experiences that focus on developing and furthering these goals.

6.2.7 Recommendations Linked to Learning

There are five recommendations that flow from this research that are directly related to learning.

6.2.7.1 Recommendations for schools

Recommendation 6: Schools need to review structures, curriculum and programs and build in a facility to acknowledge students' prior learning as the basis for new learning.

Recommendation 7: Models of integrated learning processes should be incorporated into school structures providing more flexible and adaptive learning environments for students.

6.2.7.2 Recommendations for systems and universities

Recommendation 8: Universities and systems need to collaborate on, resource and support pre-service and in-service teacher training to model best practice in student engagement and authentic learning.

Recommendation 9: There should be alignment of goals from system to school to teacher, supported through targeted professional learning experiences.

Recommendation 10: Projects such as LTLL should continue to be resourced by government, universities and systems to ensure a continued link between research and practice in educational change.

6.3 Student Engagement

Student engagement is inextricably linked to learning and teaching and has been discussed as a significant factor in the section on learning. As

previously stated, student engagement is defined as an active process where the learner is willingly involved in developing skills and knowledge through tasks and experiences that are connected to their world that lead to improved learning. The key points of willing participation and connection to the world help to make this type of learning authentic, which implies the learning utilises real world experiences. Student engagement was explored through Research Question 1: What issues regarding student engagement in learning have emerged for participants from the implementation of InteL within the LTLL framework?

The findings related to student engagement were:
1. Student engagement increased with the level of student autonomy, reflected in the ability to control learning,
2. Positive student-teacher relationships had a beneficial impact on student engagement,
3. Learning experiences need to be structured and should recognise students' prior learning,
4. The utilisation of new technology increased student engagement, and
5. Increased student engagement was achieved by a change of pedagogy and the role of the teacher in the classroom.

6.3.1   Student Voice
The data were unequivocal on the issue of student engagement from the teachers' perspective and revealed that the majority of students were more engaged in the InteL classroom. However, the student data were not as conclusive. Regardless, one area of influence on student engagement concerned student voice that manifested itself through the ability to choose tasks, assessment methods and group structure a finding supported by the research of Shernoff et al. (2003).

Analysis indicated the students' ability to choose the area of their study and being able to work in groups enhanced their level of engagement. Harris (2010) identified the benefits of such a collaborative approach for learning. Teachers saw the ability to choose an area for study allowed students to

focus their learning on areas that had interest and relevance to them. The effective use of group work afforded a measure of open communication combined with the sociability that is so important to today's students as well as encouraging a culture of support, as opposed to one of competition. This process of allowing student choice placed students at the centre of the classroom and recognised that learners and learning have changed. This supports assertions of this nature made by Caldwell (2005) and Shernoff et al. (2003). If the classrooms of today are going to change then student voice will be an important part of this process. The difficulty will be in creating opportunities for the students to be heard in meaningful ways and then honouring their contributions. Creating such opportunities will have implications for teachers and how they operate in a classroom.

6.3.2 Role of the Teacher

Developing from student voice was the different way teachers operated within the InteL classroom. The role of the teacher was recognised as being significant in the impact on learning (see Section 6.2.1, p.186). The industrial model of education was replaced by a focus on student-teacher partnership in learning (Beare, 2006b; Caldwell, 2006; Starratt, 2004) moving toward an enactivist approach (Begg, 2002). A more cooperative model superseded the adversarial model of 'us and them'. This too helped to increase the students' level of engagement as the relational nature of teaching took precedence over content and rote memorisation. Once again, the significance of positive relationships was evident and is supported by the work of Hattie (2003, 2009) when he elaborated on the importance of positive relationships between teacher and student in influencing student achievement. These relationships were also seen as being influenced by the structure of the InteL classroom.

6.3.3 Structure

The more relaxed structure of the InteL classroom and subsequent shift in the way teachers operated did not always happen smoothly. In fact, some students struggled with the more self-directed style of learning, a finding also identified by Haberman (1991) when he noted that students who were forced to think independently would react negatively when compared to those who

were given mindless tasks to copy from the board. The teachers discovered that with more choice came the need for more structure and that too much choice could be overwhelming, something also noted by Hattie (2009). Providing student voice through choice of task is complex and this has implications for planning and programming. It must begin with an end in mind and a clear understanding of where the skills of the students lie. As suggested earlier, there will be a need for clear processes for assessment of prior learning to plan learning experiences and this is especially so with the use of new technology.

6.3.4 Technology

The unlimited access to new technologies facilitated new approaches in student research, moving beyond the stock of reference books and encyclopaedia in the library. It also provided the opportunity to present the finished product in new and inventive ways. The data indicated that most students were engaged by the technology and this was in line with Hattie's (2009) findings that the use of computers can also lead to an increase in student engagement. The challenge is not just to ensure equitable access to new technologies, but also to ascertain how its use is linked to improved learning.

6.3.5 The Nature of Learning

The final issue concerned the nature of learning itself within a school culture. A number of the students still interpreted the learning in InteL through the traditional school lens and struggled to value it. It was seen as non-academic and not contributing to the test scores and therefore was not real learning. This was despite the higher level of student autonomy and engagement in the InteL classroom pointing to the difficulty of shifting attitude in a culture not conducive to this type of learning. This was similar to the findings of Bullock and Wikeley (1999). The students in their study did not associate their personal learning plans with better educational outcomes. Other InteL students viewed the tasks as they would any school task where minimum requirements became the standard for completion. By the time a child reaches Year 6 or Year 7 it would appear that the concept of school learning

as 'pleasing the teacher' and 'memorising facts' is well and truly ingrained. It is also a reminder that whatever skill is taught must be made explicit. For student engagement to be achieved it is necessary to review how learning is defined and how it occurs within the classroom environment.

6.3.6 Recommendations Linked to Student Engagement

This study has demonstrated that increased student engagement is the result of the interaction of leadership on learning and, as such, some of the previous recommendations have an impact on student engagement. There are two recommendations listed in this section.

6.3.6.1 Recommendations for schools

Recommendation 11. Schools need to investigate ways to provide students with more voice and choice in their learning through leadership programs, dialogue and reflection, subject choice and differentiation.

6.3.6.2 Recommendations for systems and universities

Recommendation 12: Systems and universities should investigate traditional and non-traditional methods of curriculum delivery across different schools and systems and utilise available data to measure relative levels of achievement over time.

6.4 A NEW CONCEPTUAL FRAMEWORK

Initial forays into the literature around educational change, student engagement and the relationship of these constructs with leadership revealed several recurring themes, including the concepts of leadership, beliefs and values seen as spirituality and moral purpose, shared vision and sustainability. It was reasonable then to develop a framework that demonstrated their interrelationships in the school context in which they could be applied. The InteL project at the centre of this study was focused on creating authentic learning through educational change and each of these

areas helped to drive this change. The original conceptual framework employed the metaphor of a propeller (see Figure 2.2, p.45).

Although this framework adequately depicted the areas that contributed to change it did not allow for any differential interplay as was suggested throughout the analysis of data in the previous chapter. In such a complex setting as a school there are many factors that contribute to change and intensity and impact varies. The data suggested that while each of the identified areas did contribute to the change project, the most important factor was leadership. The other three areas: beliefs and values seen as spirituality and moral purpose, shared vision and sustainability had areas of overlap with leadership, or it was leadership that brought them to the fore. The uniformity of the propeller model implied that each of the concepts was present in equal proportions or had equal impact, and this has proven not to be the case.

Authentic learning was not included in the original framework and it became clear that it needed to be, as it was the end point of the change project. Therefore, a new framework was required that would include authentic learning, one that would respond to the dynamic and organic structures of a school; a framework that could shift with changing pressures and changing relationships. The structure chosen for the new framework was that of a prokaryotic cell see Figure 6.0 on the next page. A cell was flexible, unlike a propeller, and could shift and adapt to the competing pressures of a school day.

Cells have the ability to alter their shape as they interact with their surroundings. As there are many pressures that are brought to bear on a school community, the capacity to present a model that is able to react to and adapt to these pressures could be helpful and resonates with enactivist theory (Begg, 2002, Hamilton, ND). Using a cell as the main structure of the framework provides for this level of adaptability. It is necessary to explain the functioning of a prokaryotic cell and how the parts relate to key concepts as identified in the literature.
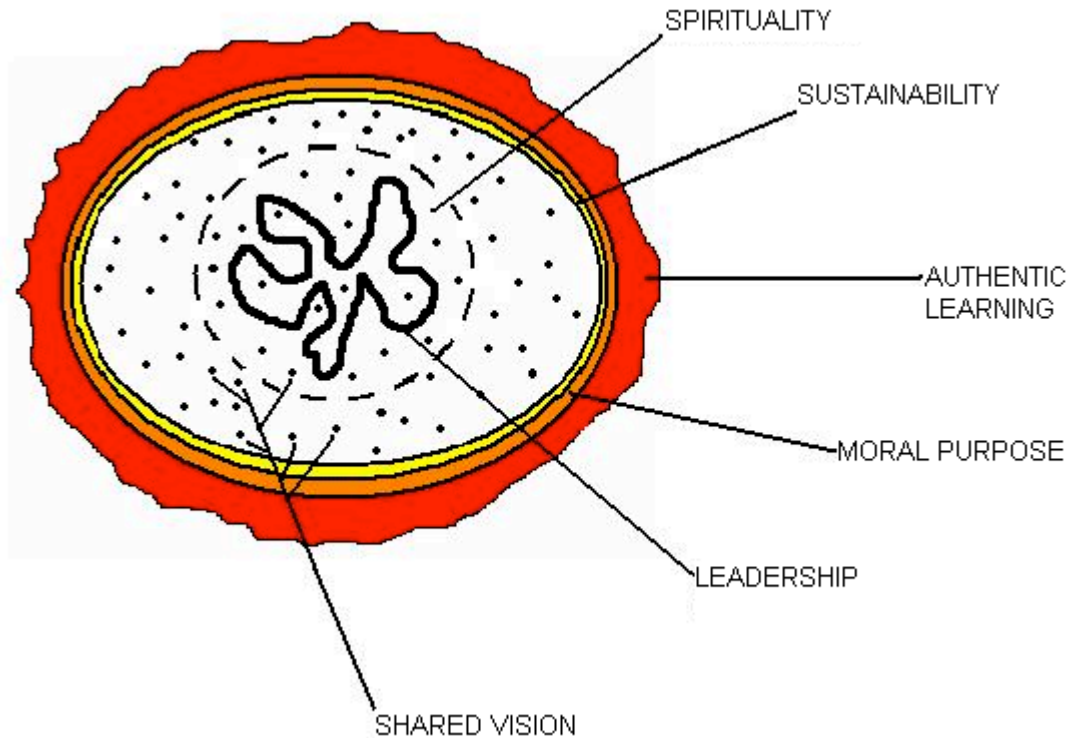
Figure 6.0   **Conceptual framework demonstrating the linkages between leadership, learning and student engagement**

6.4.1 Relationship

Each cell has a permeable membrane, allowing the medium in which they are floating to move in or out of the cell to a greater or lesser extent, depending on the pressures of the time.   The cytoplasm, the fluid within the cell, represents relationship in this model and, being presented thus, permits it to have contact with all components of the cell. It is described as a "rich organic soup" (Francher, 2000) and points to the complexity of the fluid. Relationship underpins all activities that occur within a school.   Many of the responses made by the participants reflected the nature of their relationships: student to teacher, teacher to student, and formal leadership to teacher for example. Acknowledging the importance of positive relationships and the beneficial impact they have on learning, particularly those between student and teacher were revealed through the analysis of data. The beneficial impact on learning outcomes of positive student-teacher relationships has also been identified by Hattie (2009) in his meta–analysis on what impacts on student learning

outcomes. The model also incorporates the important area of change that has been central to this research.

6.4.2 Change Processes

Like the parts of a school, each part of the structure of the cell has a specific function. The organic structure provides a framework that is able to shift, change and adapt to the external pressures that are brought to bear. This is in keeping with enactivism as outlined by Begg (2002) where a learning system is able to adapt itself to changing circumstances. It represents the change process as being vital and alive; something that cannot be dealt with in a step-by-step methodical way, but as an entity that should be viewed holistically to fully understand it. Fullan (2001) supports this view and suggested that change processes can never be controlled and even at a simple level this was certainly the case with this study – the complexity of two schools working together often meant plans needed to be adjusted and refocussed in response to situations.

Schools are subject to numerous pressures from a variety of forces. Each of these pressures can create a level of disruption that is sometimes described as turbulence (Fullan 2003a; Gross, 2004; Shapiro and Gross, 2008). However, each separate force can also be viewed as a cell in its own right. In continuing this analogy, all factors that influence what happens in the complexity of school life are taken into account and the result is an intricate mass of cells that combine to create a living organism. Each cell contributes to the life of the larger organism and yet each cell has its own specific impact and life. In this way, the change process of the LTLL project can be viewed as one cell while the InteL project could be seen as another.

6.4.3 Leadership

The analysis of data indicated that leadership was the key to successful change in an educational context, a perspective also supported by the work of a number of theorists including Caldwell (2006), Fullan (2001, 2008), Gross (1998, 2004) and Hargreaves and Shirley (2009). Within the cell, the naked helical DNA represents leadership. It is here "all of the essential genes for the

cell" (Francher, 2000) are carried. In the same way that DNA is the foundation of the cell, leadership is the core of the conceptual framework. As leadership capacity develops its area of influence expands. As the leadership capacity of the teacher participants of InteL developed, they in turn began to influence others and transform learning beyond the InteL classroom. This finding was consistent with the work of Crowther et al. (2002) on teacher leadership and was also supported by the findings of Duignan (2006) and Bezzina et al. (2007) and Bezzina and Burford (2010) in their commentary on the LTLL project.

6.4.4   Beliefs, Values and Spirituality

Within the cellular framework beliefs and values expressed as spirituality is depicted as the nucleoid. It is the area that surrounds the DNA (leadership) and is in the centre area of the cell. In the review of literature in Chapter 2 it was suggested that leadership behaviours are influenced by spirituality and this provides the meaning and purpose behind drive and motivation. This was also supported by the data analysis. It is spirituality that enables us to answer the difficult questions and to tackle the thorny moral and ethical issues. The work of Thompson (2004) concurs with the finding that the ability to be able to respond to issues at a deeper level is drawn from spirituality. An example of this within the InteL project is that the teachers wanted to make a difference to the lives of their students by creating authentic learning experiences.

6.4.5   Moral Purpose

The wall between the outer capsule and the plasma membrane of the cell represents moral purpose, the actions that stem from spirituality. This wall has a different function to the layers on either side of it and its primary purpose is that of support. In these terms moral purpose helps sustain spirituality and supports the actions of the teachers, or vice versa. The relationship between moral purpose and spirituality was discussed in Chapter 2 where it was suggested that spirituality was the process by which beliefs and values are expressed and this is a deeper expression of the action moral purpose. This is particularly the case when using the spirituality framework of Korac-Kakabadse et al. (2002) as the elements they identified had a more

ethical, altruistic perspective than can often be attributed to moral purpose alone.

6.4.6   Shared Vision

The ribosomes of the cell are spread throughout the cytoplasm and are essential for its survival as they are involved in the production of proteins. To be successful a change project needs a vision to be shared and spread, as are ribosomes throughout the cytoplasm; therefore they symbolise shared vision. Within the literature several theorists (Barth, 2001; Lambert, 2003: Fullan, 2008) identified the importance of sharing the vision for change in creating the climate for success. The belief of Fink (2005) that vision needed to become shared practice before it could be successful was supported by the data. The more the vision is shared, the stronger the possibility the change that it brings will be embedded in culture and sustainability will be achieved.

6.4.7   Sustainability

Sustainability is represented by the plasma membrane of the cell and "serves as a diffusion barrier between the cell and its environment" (Francher, 2000). This membrane prevents the loss of material in the cell to the external environment and regulates the movement of anything trying to enter the cell. Similarly, the sustainability of authentic learning is impacted upon by external influences in an educational context and school leaders can regulate these influences. This is consistent with the work of Hargreaves and Shirley (2009) when they identified innovative leaders as able to focus on what was important while still meeting the system agenda. The data showed that the InteL project was worth sustaining as a continuing attempt to create authentic learning experiences for the students. It is posited that in an ideal world the protection of the school community from non-sustainable initiatives should be viewed as a characteristic of good leadership. The capacity of sustainability within the conceptual framework provided for a multiplicity of interactions with the environment and contributed to sustainability at all levels of the school community – of programs, processes and personnel.

6.4.8   Authentic Learning

The model reflects the analysis of data that shows that authentic learning was the end result of the successful combination of leadership, values and beliefs expressed through spirituality and moral purpose, shared vision and sustainable change processes. The outer cell wall or the capsule that surrounds the cell represents authentic learning. The outer capsule is made from a water retaining material and "water is a vital component of any living cell," (Francher, 2000) and is essential to the productive functioning of the cell. In the same way authentic learning can be life giving to the students as the endless possibilities of learning and connections to a larger world become apparent. In this sense, when discussing the nature of learning in schools Begg (2002), Duignan (2004, 2006) and Starratt (2004) agree that authentic learning can be life sustaining as it affects the entire web of being of the learner.

6.4.9   Recommendations Linked to the New Conceptual Framework

The findings suggested there was a need for a new conceptual framework to be developed for demonstrating the linkages between leadership, learning and student engagement through the creation of authentic learning experiences. Following from this, there is one recommendation associated with the new framework.

6.4.9.1 Recommendations for systems and universities

Recommendation 13: The framework for demonstrating the linkages between leadership, learning and student engagement should be tested in school environments through the creation of a change project to ascertain the extent of the generalisability, predictive ability and worth in facilitating the creation of authentic learning experiences.

6.5   CONCLUDING REMARKS

Following the analysis and discussion of data presented in Chapter 5, this final chapter presented the findings, implications and recommendations that flowed from that analysis.

The purpose of this research was to discover how educational leaders made meaning of efforts to implement change processes that could impact on the learning outcomes of the students in their schools. This was done through involvement with the Leaders Transforming Learning and Learners (LTLL) project and its implementation within two specific schools. The aim of LTLL was to create processes that have an impact on leading for learning within a specific framework.

This research explored the experiences of participants involved in a change project conducted in a Catholic secondary and primary school. The methodology used was case study, utilising the theoretical perspective of symbolic interactionism. The research questions were used to analyse the data and the themes of leadership, beliefs and values expressed as spirituality and moral purpose, shared vision and sustainability provided the framework through which the collected data was presented.

The research found that leadership had a significant impact on the learning experiences of the students within the context of the change project. Following from this a number of implications for universities, education systems and schools were identified. These affect the broad spectrum of school life from the organisation of the classroom to the structure of the curriculum to teacher pre and post-training programs.

A number of recommendations have been put forward that would allow a shift in current practices as the move is made toward creating more authentic learning experiences within schools. One of these is a new construct of leadership called *"connecting leadership"* designed to connect all stakeholders in education with the resources and experiences needed to meet

the challenges before them. Further, a new conceptual framework was created to demonstrate and explain the relationship existing in the research focus areas of the leadership, learning and student engagement.

In retrospect, the research and its findings emphasised that, despite the fact that the 21st century is now eleven years old, the field of education is still talking about what schools for the new millennium should look like and what practices should be put into place. This research has highlighted that our schools are still steeped in the traditions of past eras and education is in need of action now to provide students with skills required for success in a new age. In part this could be achieved through the adoption of an enactivist paradigm in education. The way forward is clear and the challenge for educational leaders is to take the first step.

VALUES: 1- Catholicity

The defining characteristic of our schools is that they are Catholic – a work of love, for the full human development of our students, grounded in the teachings of Christ and at the service of society. They are a key element of the evangelising mission of the Church as they strive to bring culture and faith into harmony in the school community. The Catholic school takes its stand within the organic pastoral work of the Christian community.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	**2**	**3**	**4**
1	Actively give expression to our belief in Christ in our teaching, our practice and our policies.					
2	Promote a vibrant spiritual life through life-giving prayer and liturgy.					
3	Work in close collaboration with all those engaged in the Church's pastoral work, and in particular, local parishes.					
4	Provide a quality religious education program which nurtures the integration of faith in the lives of students.					
5	Contribute to a diocesan community in which relationships are characterised by mutual regard, forgiveness and Christian hope.					
Total of ratings						
MEAN SCORE FOR CATHOLICITY (Total /Number of items)						

VALUES: 2 – Excellence

Catholic schools must be good schools. That is, they must seek the very best outcomes for their students. This comes down to ensuring the highest quality of teaching and learning both for staff and students.

All improvement is set within a framework of:
- values about the nature of Catholic schools
- teacher professionalism
- the capacity of every student to learn and be given support in an inclusive learning environment.

Effective Catholic Schools will:

		Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Create a shared whole-school vision and goals by naming beliefs about good teaching and learning .					
2	Have high expectations for all students, teachers and the school and striving to achieve expectations at all times.					
3	Integrate theoretical understandings of the way young people learn with best professional knowledge.					
4	Develop understandings and capacities to cater simultaneously for the diverse learning needs of all students.					
5	Articulate an educational philosophy to establish the foundations on which beliefs and understandings can be aligned.					

6	Celebrating staff and student achievements in the widest possible range of endeavour.					
7	Provide all staff with access to appropriate, growth-promoting development opportunities.					
8	Encourage staff to strive for growth through creative and critical reflection with colleagues on their practice.					
9	Promote a spirit of welcome and inclusion both within the school and extending to the wider community.					
10	Ensure students develop intellectual rigour in articulating how their values can be reflected in their behaviour					
Total of ratings						
MEAN SCORE FOR EXCELLENCE (Total /Number of items)						

VALUES: 3 - Justice

Justice has been defined by the Catechism of the Catholic Church as the "will to give their due to God and neighbour". The document *The Catholic School on the Threshold of the Third Millennium* makes it clear that Catholic schools should have "a special attention to those who are weakest" (n15), and are "at the service of society" (n16). Catholic schools are challenged to be inviting, inclusive and just.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Embrace the diversity of people and their cultures.					
2	Reach out particularly to those who are poor, marginalised and most in need.					
3	Take a public stance on issues of injustice and inequality.					
4	Are prepared to pay the price of outreach to the poor and advocacy positions which may be unpopular					
5	Ensure that administrative and educational (whole school and class) practices reflect the principles of justice and equity.					
Total of ratings						
MEAN SCORE FOR EQUITY (Total /Number of items)						

VALUES: 4 - Transformation

Teaching has often been described as sowing the seeds of the future. It is a vocation of hope, in which teachers constantly stretch the limits of learning – both their own and that of our students".

Catholic schools must go beyond the informational and even the formational to the transformational. As Jerry Starratt says, through transformative learning, the learner becomes a fuller, richer, deeper human being.

Schools should be vibrant learning communities which make a fundamental contribution to society by working to bring culture and faith into harmony.
They should be places within which students gain the knowledge, skills and attitudes to critically engage with their society as they become effective global citizens.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Ensure that learning connects with the life experience of the learner.					
2	Promote the creation of personal meaning emerging from a dialogue between the learner and the learned. ABIT JARGON – IS IT NECESSARY given 1.					
3	Create frameworks to develop student learning, self knowledge, relationships and personal responsibility for their own and others' learning					
4	Find ways to enable application of learning in academic, personal and public ways.					
5	See themselves as agents for transformation in the lives of students and society, adopting a stance of action and advocacy.					
6	Seek ways in which the values of the school permeate all areas of school life, not just Religious Education.					
Total of ratings						
MEAN SCORE FOR TRANSFORMATION (Total /Number of items)						

VALUES: 5 - Common Good

To be inviting, inclusive and just is to ensure that we work to promote the common good in our schools, the system as a whole, and the wider society. At the heart of Catholic social teaching lies a commitment to the common good.

We see society not just as a collection of individuals but as a community called to share for the common good. Leaders in such a society have a sacred duty to promote that common good. The *Catechism of the Catholic Church* says that the common good has three elements: concern for the individual, concern for the group and the maintenance of stability and good order.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Be profoundly relational, seeking to build community around shared values and norms.					
2	Recognise and celebrate the contributions of the individual to the good of the community.					
3	Promote collaborative practices.					
4	Respect the principle of - subsidiarity in decision making.					
5	Ensure equitable distribution of resources.					
6	Implement procedures for the maintenance of stability and good order.					
Total of ratings						
MEAN SCORE FOR EQUITY (Total /Number of items)						

ETHICS: 1 - Authenticity

Ethics are the norms and virtues by which members of a community bind themselves to a moral way of living. Starratt (2004) suggests that they are maps that we consult only when the familiar terrain we are traversing becomes a tangle of underbrush.   Duignan et al (2003) found that for leaders of service organisations, the choice was often between two "goods" rather than a "good" and a "bad".

The ethic of authenticity challenges us to act in truth and integrity in all our interactions as humans, citizens, teachers and leaders.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Seek to make a difference in the lives of all members of the community.					
2	Recognise that authenticity is the vocation of every individual.					
3	Require engagement with society in ways that support and sustain the exercise of authenticity by all.					
4	Promote authenticity in genuinely reciprocal relationships.					
6	Promote authenticity in teaching and learning, making connections with the real concerns of students' lives.					
Total of ratings						
MEAN SCORE FOR AUTHENTICITY (Total /Number of items)						

ETHICS: 2 - Presence

Ethics are the norms and virtues by which members of a community bind themselves to a moral way of living. Starratt (2004) suggests that they are maps that we consult only when the familiar terrain we are traversing becomes a tangle of underbrush.   Duignan et al (2003) found that for leaders of service organisations, the choice was often between two "goods" rather than a "good" and a "bad".

The ethic of presence challenges us to relate to ourselves and to others in ways are truly open and truly engaging.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Emphasise the importance of full awareness of self and others.					
2	Promote the importance of affirmation.					
3	Value relationships which encourage increased participation in the life of the school.					
	Develop skills in communication and conflict resolution to ensure everyone is included and heard.					
4	Create opportunities for self reflection and critical dialogue within the school community.					
6	Respond to opportunities for growth and transformation.					
Total of ratings						
MEAN SCORE FOR PRESENCE (Total /Number of items)						

ETHICS: 3 - Responsibility

Ethics are the norms and virtues by which members of a community bind themselves to a moral way of living. Starratt (2004) suggests that they are maps that we consult only when the familiar terrain we are traversing becomes a tangle of underbrush. Duignan et al (2003) found that for leaders of service organisations, the choice was often between two "goods" rather than a "good" and a "bad".

The ethic of responsibility challenges us to act in ways that acknowledge our personal accountability for our actions, for shaping learning and for providing growth promoting environments for transforming relationships and learning. We are responsible as human beings, as educators and as citizens to all stakeholders in our schools: students, parents, teachers, support staff, government agencies and the Church.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Take responsibility for creating and sustaining authentic working relationships among all stakeholders.					
2	Take responsibility for creating and sustaining a healthy organisational environment for all students.					
3	Take responsibility for creating and sustaining a healthy organisational environment for all teachers.					
4	Take responsibility for promoting the learning and practice of virtue for all students.					
5	Take responsibility for promoting the learning and practice of virtue for all teachers.					

6	Create a culture of mutual accountability for the core values and practices of the school.					
Total of ratings						
MEAN SCORE FOR RESPONSIBILITY (Total /Number of items)						

LEADERSHIP: 1- Distributed Responsibility

Distributed responsibility is about shared leadership - devolving power from the centre, and being inclusive and empowering of all. It is about enabling structures and providing resources in the organisation which provide legitimate power to those staff best-placed to make decisions about quality teaching and learning, recognizing that all have a contribution to make. Shared leadership and collaborative work cultures are seen to be significant drivers of quality teaching and learning. Distributed leadership means that all share responsibility for effective teaching and learning with a focus on student and teacher learning and sustainable school development processes that are responsive to student needs.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Create and maintain a shared vision and goals for student development and learning.					
2	Commit to shared leadership for school development that responds to and manages the processes that lead to sustained improvement.					
3	Hold high expectations of students, teachers and the school, with an unrelenting focus on social, emotional and academic learning outcomes for all students.					
4	Support and monitor professional learning through distributed leadership.					
5	Develop and maintain high-level knowledge about curriculum and instruction.					
6	Efficiently manage the school's curriculum, teaching, management and organisational practices to support highly effective learning.					
7	Monitor and respond to external forces, such as technological and regulatory changes, and competitors.					
8	Initiate innovation through a focus on action, culture building and organisation-wide learning.					
Total of ratings						
MEAN SCORE FOR DISTRIBUTED RESPONSIBILITY (Total /Number of items)						

LEADERSHIP: 2 - Evidence Based Practice

Evidence-based practice builds staff capacity by requiring the collection and analysis of relevant data which informs their planning and actions. It involves teachers taking a research stance in order to learn from their work. Good teachers and good schools collect data to reflect on their effectiveness. If they are not as effective as they had hoped, then changes are made - a new process in the school, or an alternative pedagogy. This process is stronger if there is a collaborative work culture, and the work is shared with other colleagues.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Require the inclusion of sound evidence as the basis for decision making.					
2	Identify the key forms of evidence to assist in decision making for improvement.					
3	Have in place routine mechanisms for collecting relevant and current data in ethical and critical ways.					
4	Develop and implement processes for interpreting the available data, linking to best practice elsewhere.					
5	Have in place processes for enhancing staff skills in the area of evidence-based practice.					
Total of ratings						
MEAN SCORE FOR EVIDENCE BASED PRACTICE (Total /Number of items)						

LEADERSHIP: 3 – Professional Learning

Professional learning is a clear driver of change and development. In fact unless there is learning there is no change in teacher behaviour. Fullan (2003) holds that an effective professional learning community is the key in building the capacity of a school. "Professional learning communities focus on deep learning and practices that improve teacher efficacy and student outcomes."

All teachers actively engage in professional learning by 'working' with knowledge to construct enhanced understandings of how to improve students' social, emotional and academic learning so that all students achieve their potential.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Embed teacher team–based learning in professional practice and utilise it as a driving force in school innovation and development.					
2	Allocate significant time and opportunities for staff to engage in ongoing, professional learning and reflection, individually and as members of teams.					
3	Articulate understandings of contemporary theories of student learning and teaching practices.					
4	Place a high value on teachers' acquired pedagogical knowledge and actively build on this through the design of professional learning environments that challenge all teachers.					
5	Construct and apply 'new' knowledge and contextual understandings of effective learning environments and student learning.					

6	Place evidence about student learning at the core of professional dialogue and practice.					
7	Utilise teacher appraisal processes to identify and support the specific learning needs of individual teachers.					
Total of ratings						
MEAN SCORE FOR PROFESSIONAL LEARNING (Total /Number of items)						

LEADERSHIP: 4 – Sustainability

Unless leadership is implemented in ways that are sustainable, no efforts at improvement or ongoing change can be expected to persist in a school. Hargreaves and Finks (2004) outline seven principles of sustainable leadership. Some of these have been picked up in other dimensions of this model, but are included here for the sake of completeness

Effective Catholic schools will have:

	Indicator	**Our Evidence** (Record here in point form the visible signs that this indicator is present in your school)	**Rating** 1-Strongly Evident to 4 – Not at all evident			
			1	**2**	**3**	**4**
1	Leadership which lasts					
2	Leadership which spreads					
3	Leadership which is socially just					
4	Leadership which is resourceful					
5	Leadership which promotes diversity					
6	Leadership which is activist					
7	Leadership which is supported and promoted by system processes.					
Total of ratings						
MEAN SCORE FOR SUSTAINABILITY (Total /Number of items)						

LEADERSHIP: 5 – Culture and Community

School culture is the set of norms, values and beliefs, rituals and ceremonies, symbols and stories that make up the 'persona' of the school, Every school has a culture, built on its history and underlying set of unwritten expectations that shapes everything about it. A school culture influences the ways people think, feel, and act. Being able to understand and shape its culture is a key to a school's success in promoting staff and student learning (Peterson, 2002).

Effective Catholic schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Celebrate successes in staff meetings and ceremonies.					
2	Tell stories of accomplishment and collaboration whenever they have the opportunity.					
3	Use clear, shared language to foster a commitment to core purposes.					
4	Have a widely shared sense of purpose and values.					
5	Create norms of continuous learning and improvement.					
6	Demonstrate a commitment to and a sense of responsibility for the care and learning of all students.					
7	Witness collaborative and respectful relationships with colleagues, students and other members of the school community.					

8	Establish a collaborative and supportive teacher culture through the provision of opportunities for staff reflection, collective enquiry, and sharing professional practice.					
9	Have a culture which is shaped by Gospel values.					
10	Give witness to values in ritual and story.					
Total of ratings						
MEAN SCORE FOR CULTURE AND COMMUNITY (Total /Number of items)						

LEADERSHIP: 6 – Change Management

Hargreaves (1994) wrote that even the most well intentioned change devices are often self defeating because they are squeezed into mechanistic models or suffocated through stifling supervision. This threatens to take the very heart out of teaching. The management of change – both internally and externally driven – is one of the major challenges for leadership in Catholic schools.

Michael Fullan is the foremost thinker on leading educational change. His writings allow the development of a framework of change management which is morally grounded, logically constructed and yet recognises the roles of key individuals.

Effective Catholic schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Drive change out of agreed moral purpose					
2	Work with all those impacted by change so that they understand both the change processes and the change itself.					
3	Recognise that change happens best in the context of the relationships within a learning community.					
4	Have structures and processes for the development and sharing of knowledge.					
5	Build coherence through an explicit alignment of values and practices.					
6	Have leaders who are enthusiastic, energetic and hope filled					
Total of ratings						
MEAN SCORE FOR CHANGE MANAGEMENT (Total /Number of items)						

LEADERSHIP: 7 – External Networking

The Catholic school is at the heart of the pastoral work of the Church. It is a significant element of the work of the parish. Parents are always seen as the first educators, and it has been long recognised that their engagement with their children's learning is a strong predictor of success. Different communities may require different approaches to partnership.

The school provides parents with professional advice about effective ways to support their child's learning through an interactive and coordinated relationship between parish, home and school. The school also seeks, to build constructive alliances with other partners in the education enterprise.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Provide parents with information and professional advice they require to enhance and support their child's social, emotional and academic learning.					
2	Facilitate opportunities for parents to undertake training and share their experience of strategies for supporting their child's learning.					
3	Encourage and support parent involvement in their child's learning activities.					
4	Report regularly to parents in a readily understood language and format that provides interpretive comments about their child's progress in academic and non-academic areas and against school and state-wide standards, where available.					
5	Enhance student learning networks through partnerships with community networks, including business and industry.					
6	Are aware that parents select schools on the basis of their					

	understandings of school values, and school practices in facilitating - student well-being, academic outcomes, curriculum offerings, teaching methods, proximity to home and convenience for travel.				
7	Develop a sense of shared responsibility and ownership with parents for student social, emotional and academic learning, underpinned by common understandings of educational goals.				
8	Recognise that individual teachers are generally involved in each child's development for a relatively short period of time and that co-ordination of programs across teachers and over time is, therefore, an important element of the relationship between parents and the schools their children attend.				
9	Promote the role of the school as an integral part of the pastoral work of the parish.				
10	Build capacity beyond the school through interactions with other schools, system resources/personnel and other educational providers.				
Total of ratings					
MEAN SCORE FOR EXTERNAL NETWORKING (Total /Number of items)					

LEADERSHIP: 8 – Capabilities

Authentic leadership is built on personal integrity, credibility and commitment to ethical and moral conduct in practice. Such leadership calls on a range of capabilities of educational leaders, expressed through focusing on spirituality, authenticity, education, organisation and community.

Effective Catholic schools model leadership which:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Witnesses to faith in the Catholic tradition.					
2	Demonstrates a strong sense of professional self efficacy					
3	Demonstrates strong understanding of their relative strengths and limitations and a capacity to utilise this understanding for their personal and professional growth and the growth of the school as a positive organisation					
4	Cultivates trusting working relations based on enhancing others' strengths and capabilities.					
5	Demonstrates professional 'know how' as part of their relevant knowledge base					
6	Manages physical resources to attain agreed goals.					
	Strategically builds individual, group and organisational capacity and responsiveness in a research-based, mission-driven culture,					
Total of ratings						
MEAN SCORE FOR CAPABILITIES (Total /Number of items)						

LEARNING: 1 – Curriculum, Standards and Targets

Curriculum is the sum of all the experiences the student has under the auspices of the school. The intended curriculum is generally captured in programs and other school plans which reflect the school's attempts to attain a set of outcomes, experiences, content and evaluation procedures. These procedures are designed to respond to state mandated syllabus documents, system requirements and align with the developmental needs of students. Good curriculum reflects the school's values and school's standards that are benchmarked in relation to external frameworks for student performance in learning.

The role of schools is to equip students for a life in the knowledge society through a curriculum that addresses social, emotional and academic student learning outcomes and is aligned with the developmental stages and needs of students.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Establish explicit high standards for all student learning.					
2	Ensure every student acquires the skills and knowledge they need for the next phase of their development					
3	Provide a curriculum that addresses student's social, emotional, physical and academic learning needs					
4	Measure, monitor and report each student's learning against student, school and system targets and benchmarks.					
5	Provide a differentiated curriculum appropriate to the developmental stages and needs of students to equip them for life in the knowledge society					
6	Align curriculum and assessment based upon current research and informed practices in education.					

7	Ensure the curriculum articulates across grade levels and stages of schooling.					
8	Design the curriculum to integrate skills and knowledge across subject discipline areas.					
9	Utilize co-curricular programs to support student development and engagement in the broader community.					
10	Develop clear goals for developing students' intellectual and affective capacities for articulating prosocial values (eg respect, fairness, compassion, integrity) and reflecting those values in their actions					
11	Ensure that Catholic values and traditions are in evidence across the curriculum.					
Total of ratings						
MEAN SCORE FOR CURRICULUM, STANDARDS AND TARGETS (Total /Number of items)						

LEARNING: 2 – School and Class Organisation

All the core activities of a school are contingent on the ways in which time, space, people and resources are used. Different allocations of resources, different roles for people, varied uses of space and time will yield different learning outcomes. School and class organisation is sufficiently flexible to enable learning environments to maximise the opportunity for students to engage in learning in a range of contexts.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	**2**	**3**	**4**
1	Ensure school organisation and scheduling maximises the time available for teaching and learning.					
2	Flexibly adjust grouping (within and among classes) to enhance learning at each stage of schooling, by integrating whole-class, small-group and one-on-one learning. Utilize small group learning, and cooperative learning in all levels of schooling to enhance peer support as well as learning.					
3	Use small group and individual tutoring for students, particularly those requiring additional support.					
4	Integrate the use of ICT to support both individualized and small group learning.					
5	Create school and class environments where all students feel physically and psychologically safe					
6	Structure time in ways which best meet the learning needs of students.					

7	Use ICT to access resources and provide access to expertise beyond the classroom via virtual learning environments.					
8	Ensure that the principle of equity is applied in allocation of time, space, staff time and resources for all students.					
9	Deploy and target financial, physical, human and intellectual resources to support teaching and learning in planned, flexible and imaginative ways.					
Total of ratings						
MEAN SCORE FOR SCHOOL AND CLASS ORGANISATION (Total /Number of items)						

LEARNING: 3 – Pedagogy - Teaching

A pedagogic act involves 3 things - learners, knowledge and environments. The role of the teacher is to manipulate environments in ways which help the learner make sense of the knowledge available to them (Edwards, 2000). Pedagogy encourages participation by teachers and students in making meaning and in the production and sharing of knowledge so that others may learn.

Evidence-based teaching strategies are employed to create a safe learning environment that is adapted to the needs of individual students and ensures they are challenged to develop the skills and knowledge required for their future.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Design and create learning environments based on knowledge and understanding of current theories of social, emotional and academic learning and teaching to cater for student differences.					
2	Employ a range of teaching practices and strategies, ranging from explicit teaching to problem-based approaches and collaborative learning, to meet the needs of individual students.					
3	Adapt tasks, teaching strategies, content and assessment to meet the diverse learning needs of different students.					
4	Organise and structure classroom activities to maximise engaged time for teaching and learning.					
5	Maximise opportunities for engagement in learning through productive individual, student-student, and student-teacher interaction.					

6	Use whole-class and small-group practices, and tutorials to maximise the rate of learning for all students.					
7	Develop student's understanding and responsibility for their own learning through choice of learning process and product.					
8	Embed strategies in all teaching practices to assess their effectiveness in terms of the enhancement of student learning.					
9	Provide diverse opportunities and contexts for learning so all students are intellectually challenged and gain mastery and a sense of competency in learning.					
10	Utilise a range of teaching strategies based on explicit teaching, problem-based and constructivist methodologies.					
11	Maintain a safe and orderly environment in which students learn free from discrimination and harassment.					
12	Use ICT to leverage student learning, to develop a capacity to solve complex problems, and to reinforce basic skills.					
Total of ratings						
MEAN SCORE FOR PEDAGOGY - TEACHING (Total /Number of items)						

LEARNING: 4 – Pedagogy - Learning

Learning is the process by which individuals acquire new skills and understandings. They achieve this by organising information according to conceptual frameworks and by recognising patterns and relationships. As a student matures cognitively, socially and emotionally their capacity to understand is enhanced.

Effective Catholic schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Recognise that most learning is 'goal directed', even though this may not be explicit or obvious.					
2	Assess, engage and build on student's prior understandings — correcting misunderstandings to ensure that new learning can be sustained.					
3	Implement learning processes centred on students actively 'working' with knowledge to move their understanding beyond their current level.					
4	Provide opportunities for students to 'learn to learn' through self-regulation and meta-cognitive strategies.					
5	Develop students' self knowledge (strengths, limitations) and self management skills (planning, persevering, organization)					

6	Provide opportunities for all students to be intellectually challenged, and to develop higher order thinking, and problem solving skills					
7	Develop students social and emotional skills and capacity to learn and cooperate with others					
8	Help students develop resilience (a capacity to cope with setbacks, failures etc)					
9	Ensure that students are provided with access to new information in the form of facts, data and theories and are challenged and supported to integrate these into their knowledge repertoire.					
10	Provide a deep foundation of factual knowledge organised in conceptual frameworks to enable students to develop high-level problem solving capacities.					
11	Implement learning processes that support the transition of knowledge from short term to long-term retrievable memory.					
12	Develop the capacity of students to transfer knowledge from one area of learning to another.					
Total of ratings						
MEAN SCORE FOR PEDAGOGY – LEARNING (Total /Number of items)						

LEARNING: 5 – Intervention Programs

Regular assessment and monitoring will allow the tailoring of student learning activities to their individual needs in all areas. Thus, all children should be supported in areas where learning poses them with particular challenges or difficulties.

Intervention strategies should provide a safety net for students with special needs as a consequence of their difficulty in managing the regular classroom agenda (eg new arrivals, ESL, students with challenging behaviours or learning difficulties). This includes a need to identify and support gifted and talented students.
All students who experience difficulty in mastering learning in normal classroom contexts are identified through the diagnostic analysis of assessment data and special assistance is provided through appropriate intervention strategies that support them to participate fully in classroom learning.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Narrow the gap between actual outcomes and standards expected for all through early and continuing intervention programs and practices.					
2	Undertake diagnostic analyses of achievement data, develop specific learning plans and set improvement targets for individual students requiring special assistance					
4	Frequently assess student progress as a basis for adapting teaching practice to the learning characteristics and needs of individual students.					
5	Construct learning environments that provide a differentiated curriculum to meet individual student learning needs and styles.					

6	Adapt the use of ICT in the learning environment to support the special learning needs of students.					
7	Actively seek to enrol students with special needs.					
8	Narrow the gap between actual outcomes and standards expected for all through early and continuing intervention programs and practices.					
Total of ratings						
MEAN SCORE FOR INTERVENTION AND SPECIAL ASSISTANCE (Total /Number of items)						

LEARNING: 6 – Monitoring, Assessment and Reporting

Regular, frequent and systematic assessment of the development of all students is undertaken for a range of purposes which include monitoring student progress, providing a basis for future planning of pedagogy and curriculum, providing evidence for accountability purposes, and providing feedback to both students and parents. Assessments can be made of learning and also used for learning. A sound assessment regime is a fundamental requirement of evidence-based classroom practice.

Effective Catholic Schools will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Align and integrate internal school–based assessment with external assessment and testing.					
2	Ensure that the assessment framework is fully aligned with all dimensions of the curriculum and is capable of providing information about lower and higher order learning.					
3	Integrate assessment into the learning environment to inform and support the learning of each individual student.					
4	Use assessment data as direct feedback to monitor and evaluate the effectiveness of teaching practice.					
5	Monitor learning outcomes for relevant sub-groups of students (girls/boys, NESB, ATSI, students with special needs, gifted and talented).					
6	Involve students in assessing and reporting their progress against standards.					
7	Report information about student learning to parents and provide advice about strategies for parents to use in supporting their child's					

	learning.				
8	Provide parents with benchmarks and information to monitor and understand their child's learning.				
9	Have program evaluation procedures in place which inform future program implementation.				
Total of ratings					
MEAN SCORE FOR MONITORING, ASSESSMENT AND REPORTING (Total /Number of items)					

TRANSFORMED LEARNER

For the transformed learner, outcomes are never final and never complete. Today's outcomes are folded into the learning activities of tomorrow and next week and are thereby reconstructed and modified.

The transformed learner will:

	Indicator	Our Evidence (Record here in point form the visible signs that this indicator is present in your school)	Rating 1-Strongly Evident to 4 – Not at all evident			
			1	2	3	4
1	Become a fuller, richer, deeper human being through their learning experiences.					
2	Display intellectual curiosity and a sound knowledge base in different disciplines. (*Learning to know*).					
3	Display critical and creative thinking in different domains. (*Learning to do*).					
4	Demonstrate prosocial values, empathy, respect for others, relationship skills. (*Learning to live together*).					
5	Demonstrate a capacity for autonomy, responsibility for self and others, spirituality. (*Learning to be*).					
6	Demonstrate self efficacy in their capacity as a learner in different domains (social, emotional, physical and academic domains).					
7	Take delight in, and share in the excitement of learning.					
8	Be able to articulate a rationale for life long learning based on their understanding of learning as essential for a meaningful life.					

9	Demonstrate an understanding of the way in which they are connected to the various focuses of their learning, and an openness to further exploration.					
10	Demonstrate growing respect for the integrity of the subject/object of the learning.					
11	Be prepared to use their learning for the transformation of the world in which they live.					
Total of ratings						
MEAN SCORE FOR TRANSFORMED LEARNER (Total /Number of items)						

APPENDIX 2
LTLL Project Outline

The LTLL Project Outline

Concept:

To develop and put into practice a continuum of quality learning and teaching from K to 12 in the Catholic Primary and Secondary Schools in XX. Initially the emphasis will be on stages three and four with a focus on transition through enhancing quality learning outcomes.

Beliefs:

In a rapidly changing world is of paramount importance to address the learning outcomes of students and prioritise learning is the core business of educators.

"We are proposing that pupil learning is the purpose of schools or should be. It is no longer sufficient for schools to sort pupils into those who need to learn a lot, some or little. Instead, learning must be the fundamental purpose of schooling - high level of broad learning to pupils. (Stoll, 2003, pp.74-75)

In realising opportunities to students to achieve learning gain teachers must be creative and adaptive, daring and innovative.

The Project:

To inspire and challenge the creative talents of teachers in and to cultivate a sustainable learning culture across both schools.

To develop strategies that are inclusive of both primary and secondary school environments that utilise the resources of both schools in:

- identifying learning needs of individual students
- addressing the needs of students in support and enrichment
- heightening the leadership opportunities to students
- appropriating resources to students to extend educational outcomes
- enriching student lies through liturgical and social justice opportunities
- developing a flexible approach to teaching resourcing.

Project Activities: (Action Plan to be developed from this)

1. Identifying the learning needs of individual students

Basic skills (Year 3 and 5) Ella, Snap (Year 7) analysis and individual student tracking - data sharing across schools (staff meetings, KLA and Learning and Teaching Committee meetings, year 6 and 7 teachers transitional meetings) Rock and Water programme - extension of program across both schools identifying students (initially boys) with specific needs and addressing this through a variety of strategies (boys assemblies, father-son activities, voice classes - pilot in year 9 English).

2. Addressing the needs of students in support and enrichment

Literacy program in Stages 3 and 4 and peer tutoring. Use of Year 11 students to work with younger students (extending community service program - two periods a fortnight to senior students to work in primary school) Research Expo - extending the Expo to Stage 3 students where students research individual projects in areas of science, technology, geography, mathematics (Science Fair term four, 2006). Mapping outcomes across Stages 3 and 4; Scope and Sequence in Stage 3 (survey, curriculum mapping exercise).

3. Heightening the leadership opportunities for students

Community service project in primary school for year 11 students. Students as mentors - school assemblies (primary school) cross school involvement - presentations, demonstrations etc.

Virtual buddies bash peer support year 10 and year six students via the Internet.

4. Appropriating resources to students to extend educational opportunities

Use of science labs, computer labs, hospitality kitchens, agriculture plot and animals, gymnasium by primary school (Year 6) during staff development days, community days, Term 4.

Use of primary school hall by high school classes.

Links through PDHPE students in year 10 to write Stage 3 and 4 sport units.

Assistance with primary carnivals.

Visual Art/RE project - creating links with primary school teachers with the use of visual arts medium to teach Religious Education. Units in Liturgical Year, Self, Others, Liturgy and Celebration. (Inservice Term 3 afternoon where high school creative arts staff trained primary staff in technique ie utilising a specific artwork for aspects of liturgical year).

PDHPE - teaching of dance to year five and six students by secondary PDHPE staff.

5. Enriching student lives through liturgical and social justice opportunities

Combining liturgies and masses/student committees in preparation and participation in the liturgies.

Community service extension of Year 11 program in primary school.

Sustainable schools initiative - with emphasis on outdoor liturgies and grounds improvement (gardening), curriculum mapping -- energy audits etc.

6. Develop a flexible approach to teacher resourcing

Year 6 and Year 7 teachers working together in classrooms (ongoing)

Combo teachers in Year 7 and Year 6, teacher interchange (long-term)

Secondary teachers in Science, Design and Technology, to take enrichment classes.

Implications

Cultural change: K-12 replacing primary and secondary schools as separate entities.

Development of a shared vision of learning where primary and secondary teachers work and share a common understanding.

Changes in the physicality of the two campuses as resources become shared stop

Genuine transition as teachers in Stage 3 and 4 develop collaborative practice and dialogue.

K-12 initiative needs to be opened to share practices between other primary feeder schools.

Are these processes practical and sustainable beyond transition years?

APPENDIX 3
BRIDGE Project Overview

The BRIDGE project is a collaborative learning venture between Feeder Catholic Primary School and Regional Catholic High School and the title of the project reflects this. Given that there had been discussion about building bridges between our two schools, the title the acronym chosen was BRIDGE, or Building Rich Integrated Diverse Growing Experiences.

The guiding principles were fashioned around the four focus areas of the Diocesan Catholic Education Office: leading, learning, supporting and growing. It was agreed that the project will create opportunities that:

LEAD	develop a Catholic faith community that values living Catholic tradition connections based on the Emmaus paradigm
LEARN	encourage and enable all learners to enjoy learning and to be self-motivated, reflective, autonomous, competent, life-long learners
GROW	promote continuity and coherence of learning and facilitate transition between the stages of schooling
SUPPORT	provide a supportive environment and utilise flexible structures that enables authentic learning and leading

From theses principles the participants then developed a set of outcomes that borrowed from The Essential Learnings as outlined by the Department of Education, Tasmania.

CONNECTING	Learners will embrace a Catholic community in which they value relationships which are characterised by mutual respect, forgiveness, faith and hope
THINKING	Learners will become inquiring and reflective thinkers able to reason, question, make decisions and solve complex problems and recognise connectedness in their learning experiences
COMMUNICATING	Learners will become effective communicators able to create, communicate and convey ideas clearly and confidently in a variety of learning contexts
TEAM BUILDING	Learners will be able to operate in teams and negotiate, collaborative goals and outcomes, and contribute positively and harmoniously in a group
PERSONAL RESPONSIBILITY	Learners will become self-directed and ethical people having positive vision for themselves and their future, developing academic and moral self-concept and contributing to constructive futures
SOCIAL RESPONSIBILITY	Learners will become responsible citizens prepared to participate actively in a democratic community, valuing diversity and acting justly and equitably
GLOBAL RESPONSIBILITY	Learners will become world contributors willing to consider the consequences of innovations, make thoughtful decisions about their application and act to maintain, protect and enhance local and global environments

It was decided to schedule BRIDGE for one period, once a week. The year groups were divided into halves which meant that the program would be

conducted twice each week. This occurred on Tuesday and Thursday mornings in what would be Period 1 at the High School.

There were around 28 students in each group which was a mixture of learners from both year 6 and 7. There were 8 groups in all, with 4 operating at any one time. Each half was managed by a team of middle school educators, which included teaching staff from the high school and the primary school as well as teacher's aides. Three of the groups were based at Regional High School and one at Feeder Primary School and the groups were swapped each semester to ensure that all of the primary students had time at the high school.

The fundamental concept behind BRIDGE was to provide the learners with self-directed learning experiences based on the creation of collaborative projects. This allowed them to work individually and in small teams to design, research and create their finished product. In effect the model was attempting to personalise learning. Upon completion all projects were published. What we have done is to place the "focus on learning first, then achievement, then testing, so we never lose sight of the learning that truly matters as we strive to increase students' achievement" (Hargreaves, 2006, p.32).

Semester 1
- Ethics - bibliography, referencing
- Work skills - motivation, team building
- IT skills - research, enquiry
- Enquiry skills
- Work on matrices based on a famous Australian
- Evaluation and Feedback
- Presentations

Semester 2

- Learning Styles and Multiple Intelligences

- Fertile Question development

- Learners begin work on QWILL (*Questions Which Inspire Learning and Leading)* projects

- Showcase day of QWILL Presentations

- Personal reflections and Survey

- Guest Speakers

b.r.i.d.g.e

Building Rich Integrated Diverse Growing Experiences

Semester 1 Questionnaire

Question	Answer
1. What did you think the BRIDGE program was about before you started?	
2. What do you think are the main goals of the BRIDGE program?	
3. Circle any skills that BRIDGE has helped you improve. You can also write some in.	• IT skills others: • _____ • Research skills • _____ • Social skills • _____
4. What do you look forward to the most in your weekly BRIDGE lesson?	
5. Are there any aspects of the program you do not enjoy?	Yes ☐ No ☐ Name them:
6. Do you prefer to work in a group or individually?	Group ☐ Individually ☐ Why?
7. Do you like the BRIDGE topic for this semester? Why or why not?	Yes ☐ No ☐ Why?

Question	Answer
8. Did you enjoy the fact that you could choose who you wanted to base your research on and what activities you had to complete?	Yes ☐ No ☐ Why?
9. Is this different to your other subjects? How so?	
10. Do you prefer this way of learning? Explain your answer.	
11. Have BRIDGE lessons changed the way you go about learning in other subjects?	Yes ☐ No ☐ Explain.
12. Has BRIDGE changed your attitude towards learning?	Yes ☐ No ☐ Why?
13. How could the program be improved for next semester?	
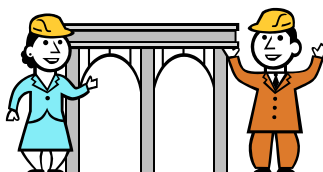
APPENDIX 5
BRIDGE Student Survey
Responses

Question 1: What did you think the BRIDGE program was about before you started?

Response	% n=110
Bridges	20
Undecided/not sure	19
Bringing year 6 and 7 together	18
Research, learning, study skills, organisation	15
Making friends, working with others	14
Working with computers	6
Different activities	3
No response/other	13

Question 2: What do you think are the main goals of the BRIDGE program?

Response	% n=110
Learning, skills development, study	40
Bringing year 6 and 7 together	22
Meet new people, socialisation	21
Learning about famous people	18
IT skill development	15
Research skill development	12
Working cooperatively with others	6
Other/No response	5

Question 3: Circle any skills that BRIDGE has helped you improve. You can also write some in.

	Semester 1 n=110	Semester 2 n=114
Response	**%**	**%**
Research	80	52
IT	55	39
Social	44	28
Public speaking/confidence/presenting	13	1
Team work, cooperation	8	2
Referencing	2	1
Other/none/no response	10	18
Independent Skills	0	4
Literacy	0	2

Question 4: What do you look forward to the most in your weekly BRIDGE lesson?

	Semester 1 n=110	Semester 2 n=114
Response	**%**	**%**
Using the computers	35	17
Socialisation	34	25
Variety of learning	15	1
Nothing	9	25
Choosing my work	8	2
Research	8	3
Not doing much work	6	9
No response	5	9
Having fun	5	2
Other	3	2
Group work	0	4
Changing campuses	0	2
Learning	0	14

Question 5: Are there any aspects of the program you do not enjoy?

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Yes	69	78
No	28	21
No response	3	1
Response	%	%
Speeches/presentations	18	9
Limited choice	16	0
Too many activities	9	0
Not being in groups	8	0
Doing the same thing every week	7	4
Research	7	4
Not being able to use a computer	7	1
Year 6 and 7 not working together	5	6
Lack of time	4	4
Homework	4	3
Writing	4	0
All of it	3	22
Going to Feeder school	1	4
Other responses	9	16

Question 6: Do you prefer to work in a group or individually?

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Group work	69	80
Individually	25	17
Both, depends on the situation	5	2
No response	1	2
	Semester 1	**Semester 2**
Response to individual work	%	%
No disagreements working on your own	26	5
More control working on my own	26	11
Get more work done on my own	22	26
Don't have to depend on others	15	16
To see if I can do it on my own	4	0
Groups muck around	4	5
It's easier	0	5
	Semester 1	**Semester 2**
Response to group work	%	%
Hear other ideas	29	16
More enjoyable	25	25
Get more work done	14	19
Share the work load	22	21
Socialisation	11	15
Easier	11	11
Team work	5	9
More organised	1	0
More confident	1	0

**Question 7: Do you like the BRIDGE topic for this semester?
Why or why not?**

Response	% n=110
Yes	54
No	31
Yes and no	6
No response	5
Responses - affirmative	**%**
Learn about Australians	44
Fun/variety	19
Irrelevant responses	12
Liked the ability to choose	14
Using computers	7
Good introduction for Year 7	2
Responses – negative	**%**
Waste of time/boring	38
Want more choice	24
Friends were in other classes	9
Hard to make choices	9
Don't like the matrix	3
Too much research	3
Too easy	3
Too hard	3

Question 8: Did you enjoy the fact that you could choose who you wanted to base your research on and what activities you had to complete?

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Yes	81	85
No	8	13
Unsure/No response	11	2
Response	%	%
The freedom to choose	42	31
Interesting, fun/ someone I liked/ interested in	42	37
Choice was too restrictive	11	3
Allowed me to focus more on learning	7	0
Too much choice	3	3
Other	3	6

Question 9: Is this different to your other subjects? How so?

	Semester 1 n=110	Semester 2 n=114
Response	%	%
Yes	75	73
No	17	11
No response/Unsure	8	17
Response	%	%
Socialisation, the ability to mix with others	15	3
Working with primary/high school students	14	11
Use of computers	13	7
Choice	17	7
It's easy	7	3
Different/interesting topics	7	7
It's still school	5	0
It crosses a number of subjects	4	0
It's uninteresting	4	4
More focus on research	4	4
It was a set time, different to primary school	2	0
Single response answers	5	8

Question 10: **Do you prefer this way of learning? Explain your answer.**

	Semester 1 n=110	Semester 2 n=114
Response	**%**	**%**
Yes	66	33
No	21	42
No reply/Unsure	12	26
Response	**%**	**%**
Better, more interesting, easier, less listening	25	11
Choice	14	4
Group work is better	12	3
Using computers	12	5
Socialisation/meeting others	11	3
Didn't like using computers so frequently	9	0
Ability to work at own pace	5	2
Prefer to work on my own	3	2
Regular class is easier	3	4
Enjoyed the opportunity to research	2	1
Boring	0	9
Other	6	7

Question 11: **Have BRIDGE lessons changed the way you go about learning in other subjects?**

	Semester 1 n=110	Semester 2 n=114
Response	**%**	**%**
No	65	69
Yes	24	13
No reply/Undecided	11	18
Elaborated Response	**%**	**%**
Learning was the same as other classes	31*	22*
Learning transfer – use BRIDGE approaches	77^	60^
Didn't learn anything new	15*	6*
BRIDGE is BRIDGE it is not like other subjects	15*	5*
Learning is fun	15^	7^
Set our own degree of difficulty	8^	0
I don't like BRIDGE	1*	1*
I like my own way of learning	0	4*
Deeper understanding	0	7^

(* % calculated on the negative responses, ^ % calculated on the positive responses)

Question 12:   Has BRIDGE changed your attitude towards learning?

	Semester 1 n=110	Semester 2 n=114
Response	%	%
No	61	61
Yes	25	23
No reply/Unsure	14	16
Elaborated Response	%	%
It's still school, no impact	34*	19*
Learning can be fun	46^	19^
Improved time management	25^	4^
It's boring	7*	6*
It's still learning	6*	7*
It's better to use computers for research	14^	4^
Makes me think more	7^	15^
Confidence has increased	7^	0^
Already happy with my learning	1*	1*
Other classes are more structured	1*	0*
More serious about learning	4^	4^
Help others	4^	4^
Learnt new things	0^	4^

(* responses based on negative answers,^ responses based on positive answers)

Question 13: **How could the program be improved for next semester?**

Response	Semester 1 n=110 %	Semester 2 n=114 %
More choice of topics	25	4
More group work	19	6
No reply	11	26
It's good – no change needed	7	4
Choose your partners/people your own age	6	1
Don't know	5	11
Make it more fun	5	19
Rotate the groups	5	0
Learn how to make a film	3	0
Do less work	3	1
Irrelevant personal responses	3	0
No presentations	2	0
More outdoor activities	2	0
Choose whether you go to the other school	2	0
Scrap it	2	11
Do a PIP	2	0
Better, more involved teachers	2	1
More time	2	4
Single response answers	8	4
More computer use	0	2
More structure	0	2

APPENDIX 6
Teacher Questionnaire

	Statement	Strongly Agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
1	Students in InteL classes are better behaved than in regular classes	10	40	30	20	0
2	Student engagement in learning activities in InteL is stronger than in regular classes	10	60	10	20	0
3	My involvement in InteL has changed my understanding of learning	20	50	20	10	0
4	Things I have discovered about how students learn during InteL I have utilised in other classes	0	60	20	20	0
5	As a result of my experience in InteL my view of the nature of teaching has altered	10	60	0	30	0
6	My involvement in InteL has resulted in me making adjustments to my teaching practice	0	50	20	30	0
7	InteL provides more opportunities for students to demonstrate leadership within the classroom	20	30	40	10	0
8	I have become more aware of how teacher leadership impacts on student learning	10	50	20	20	0
9	My view of the linkage between formal leadership within the school and learning at a classroom level has changed as a result of my experiences in InteL	10	30	30	30	0
10	The InteL experience should be expanded within the school	20	50	20	10	0

(n=10)

APPENDIX 7
Student Questionnaire

	Statement	Strongly Agree %	Agree %	Undecided %	Disagree %	Strongly Disagree %
1	InteL has helped me improve my skills in information technology	6	57	15	18	4
2	InteL has helped me improve my skills in research	16	52	19	9	3
3	I look forward to going to InteL more than other classes	6	23	26	26	20
4	When researching topics in InteL, I prefer to work in a group	47	22	13	13	5
5	I enjoy the opportunity to choose my own area of research in InteL	36	44	16	4	0
6	My involvement in other subjects is different to InteL because it deals with topics that are relevant to me	5	34	41	15	4
7	I am more involved in InteL because I like the freedom to choose topics	18	33	30	12	7
8	I don't work as hard in InteL because I am able to choose the pace at which I work	16	36	27	19	3
9	InteL is more practical than other subjects	9	34	34	15	9
10	I am more responsible for my own learning during InteL	20	51	22	5	2
11	I now learn differently in other classes because of my experience in InteL	4	24	30	28	14
12	I help other students with their work more often during InteL classes	9	32	27	26	7
13	InteL has helped me improve my social skills	15	28	18	25	14
14	InteL is different to my other classes	43	41	11	3	3

(n=148)

APPENDIX 8
Questionnaire Instructions

Teacher Instructions

At the top of the questionnaire page were the following instructions complete with an example of how to use the Likert scale where (1) was strongly agree, (2) agree, (3) undecided (4) disagree and (5) was strongly disagree:

> *The following statements refer to your involvement in the program known as BRIDGE and/or InteL. Please read each statement carefully and then rank your experiences against the five point scale. Each statement has the option to make further comment should you wish to elaborate on any response. This facility is also available at the end of the questionnaire. By providing further commentary you will be assisting the researcher in the interpretation and analysis of the data. Any extra information will benefit the research and is greatly appreciated.*

Student Instructions

The instructions for the students were slightly different, although the explanation for the Likert scale used the same wording. Once again the five point scale was utilised. The opening statement for the students read:

> *The following statements refer to your involvement in the program known as BRIDGE and/or InteL. Please read each statement carefully and then rank your experiences against the five point scale. Some statements ask you to compare InteL to your regular school classes. Each statement has the option to make further comment should you wish to elaborate on any response. This facility is also available at the end of the questionnaire. By providing further commentary you will be assisting the researcher in the interpretation and analysis of the data. Any extra information will benefit the research and is greatly appreciated.*

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APPENDIX 9
Focus Group Information Letter
to Student Participants

Dear Parent/Guardian,

The Catholic Education Office, Diocese of Xxxxxxx has given approval for a study to be conducted that examines the linkages between leadership, learning and the classroom engagement of students. The study will focus on the experiences of the Year 6 and 7 students in InteL classes in our schools.

The research is being carried out by Brad Campbell, a Doctoral student from the Australian Catholic University. Brad is also the former Assistant Principal from Regional Catholic High School.

The study aims to explore the interrelationship between leadership, both formal and informal, and learning in the wider context.

The initial stage of the research will involve students in Year 6 and 7 completing an online questionnaire. This will take about 20 minutes and will be completed in InteL class time. **If you do not wish your child to complete the questionnaire please complete the slip below** and return it to school by Friday, August 3. If you consent to your child completing the questionnaire you need take no further action.

Following this questionnaire a number of students will be selected at random to participate in focus group sessions. If your child is selected for this next stage of the research you will be contacted by the researcher and there will be a separate permission form to complete.

CRICOS registered provider:
00004G, 00112C, 00873F, 00885B

It is hoped that you will support this research project as it will provide valuable information for us to use as we continue to reshape educational opportunities for the children in our care.

Yours sincerely,

Principal   Principal
Regional Catholic High School   Feeder Catholic Primary School

APPENDIX 10
Descriptive Statistics of the
Student Questionnaire

	N	Minimum	Maximum	Mean	Std. Deviation
InteL has helped me improve my skills in Information Technology.	148	1	5	2.57	.990
I am more responsible for my own learning during InteL.	148	1	5	2.18	.873
I now learn differently in other classes because of my experience in InteL.	148	1	5	3.22	1.087
I help other students with their work more often during InteL classes	148	1	5	2.90	1.093
InteL has helped me improve my social skills.	148	1	5	2.96	1.303
InteL is different to my other classes.	148	1	5	1.83	.943
InteL has helped me improve my skills in research.	148	1	5	2.32	.969
I look forward to going to InteL more than other classes.	148	1	5	3.30	1.198
When researching topics in InteL I prefer to work in a group.	148	1	5	2.08	1.264
I enjoy the opportunity to choose my own area of research in InteL.	148	1	4	1.89	.821
My involvement in other subjects is different to InteL because it deals with topics that are relevant to me.	148	1	5	2.78	.910
I am more involved in InteL because I like the freedom to choose topics.	148	1	5	2.59	1.136
I don't work as hard in InteL because I am able to choose the pace at which I work.	148	1	5	2.57	1.050
InteL is more practical than other subjects.	148	1	5	2.81	1.078
Valid N (listwise)	148				

Australian Catholic University
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School of Educational Leadership

⊕ **ACU** National

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TITLE OF PROJECT: AN INVESTIGATION OF THE LINKAGES BETWEEN LEADERSHIP, LEARNING AND STUDENT ENGAGEMENT.

NAME OF PRINCIPAL SUPERVISOR: ASS/PROF. CHARLES BURFORD

NAME OF STUDENT RESEARCHER: BRAD CAMPBELL

COURSE: DOCTOR OF EDUCATION

Dear Participant,

As you are a teacher involved in BRIDGE in 2006 and/or InteL in 2007 you are invited to participate in a project which will investigate the linkages between leadership, learning and the classroom engagement of students. The initial formulation of BRIDGE as a project fell within the Leaders Transforming Learning and Learners framework a project based at the Australian Catholic University.

The research based around the project will explore leadership and learning and their interrelationship. Participants will be asked to complete a questionnaire that asks them to reflect on things like student engagement and whether InteL lessons had an impact in this area, and whether involvement in InteL has altered teaching practice. Following the questionnaire there will be several focus group interview sessions. The responses of the participants will be digitally recorded, collated and coded and will form the basis of further focus group sessions. The research will examine the link between leadership, learning and student engagement.

The questionnaire can be competed during normal InteL class time, or in your own time. The focus group interviews will be scheduled for a mutually acceptable time.

The potential benefit to the teachers is that they will have the opportunity to reflect on and discuss, with their peers, the impact of a specific pedagogy on student engagement. They will be able to discuss their involvement in class and elaborate on the leadership observed both in class and in more traditional structures. This research also examines the role leadership plays in learning and moves beyond the more formal definitions of school leadership to explore this impact.

Participation in the research project is voluntary. Any person who consents to participate in the research is free to withdraw that consent at any time and need not supply a reason for so doing.

Complete confidentiality will be maintained throughout the course of this research. The schools will be identified with pseudonyms as will the participants. Neither the schools nor the participants will be identified in any way other than by pseudonym in any discussion or publication of the findings of this research.

Any questions regarding this project should be directed to:

Associate Professor Charles Burford on 02-9701 4166, in the School of Educational Leadership, Locked Bag 2002, Strathfield, 2135.

At the completion of the study the findings will be reported to the respective school Principals and an offer will made to discuss the findings with the participants.

This research project has been approved by the Human Research Ethics Committee at the Australian Catholic University. In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Supervisor and Student Researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee care of the Research Services Unit at the following address:

Chair, HREC

C/O Research Services

Australian Catholic University

Strathfield Campus

Locked Bag 2002

STRATHFIELD NSW 2135

Tel: 02-9701 4093

Fax: 02-9701 4350

Any complaint or concern will be treated in confidence and fully investigated and you will be informed of the outcome.

If you agree to participate in this project, you should sign both copies of the Consent Form, retain one copy for your records and return the other copy to the Supervisor or Student Researcher.

Supervisor   Student Researcher

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APPENDIX 12
Parent/Guardian Consent Form

TITLE OF PROJECT: An investigation of the linkages between leadership, learning and student engagement.

NAME OF PRINCIPAL SUPERVISOR: Associate Professor. Charles Burford

NAME OF STUDENT RESEARCHER: Brad Campbell

I _____ have read and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree that my child, named below, may (please indicate with a tick):

☐ complete the questionnaire,

☐ participate in focus group interviews,

☐ be audio-taped during interview.

I realise that I may withdraw my consent at any time. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify my child in any way.

NAME OF PARENT/GUARDIAN:

SIGNATURE:

DATE:

ASSENT OF PARTICIPANTS AGED UNDER 18 YEARS

I _____ understand what
this research project is designed to explore. What I will be asked to do has been
explained to me. I agree to take part in the project, realizing that I can withdraw
at any time without having to give a reason for my decision.

NAME OF PARTICIPANT AGED UNDER 18:

SIGNATURE:

DATE:

SIGNATURE OF PRINCIPAL SUPERVISOR:

DATE:

SIGNATURE OFSTUDENT RESEARCHER:

DATE:

| APPENDIX 13 |
| Student Participant Consent Form |

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Title of project: An investigation of the linkages between leadership, learning and student engagement.

Name of principal supervisor: Associate Professor Charles Burford

Name of student researcher: Brad Campbell

I _____ have read and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree to participate in this activity and realise that I may withdraw at any time. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

NAME OF PARTICIPANT:

SIGNATURE:

DATE:

SIGNATURE OF PRINCIPAL SUPERVISOR:

DATE:

SIGNATURE OF STUDENT RESEARCHER:

DATE:

School of Educational Leadership

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APPENDIX 14
Teacher Participant Consent Form

Title of project: An investigation of the linkages between leadership, learning and student engagement.

Name of principal supervisor: Associate Professor Charles Burford

Name of student researcher: Brad Campbell

I _____ have read and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree that I will (please indicate with a tick):

- ☐ complete the questionnaire (10-15 minutes),
- ☐ participate in focus group interviews (up to 50 minutes),
- ☐ be audio-taped during interview.

I agree to participate in this activity/activities and realise that I may withdraw at any time. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

NAME OF PARTICIPANT:

SIGNATURE:

DATE:

SIGNATURE OF SUPERVISOR: SIGNATURE OF STUDENT RESEARCHER:

DATE: DATE:

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