PRINCIPALS' PROCESSES OF

PROFESSIONAL LEARNING

A Dissertation submitted by Jennifer Ann Clarke B.Ed, M.Ed

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Abstract

When a school community decides to implement innovative curricula, the responsibility for leadership of the associated professional learning processes lies with the principal. The onus is on principals to be leader learners. They adapt their leadership style to the context of the school. They encourage learning as a future-oriented, organisation-wide process. They encourage deep learning, and double-loop learning, and they nurture a culture of collaborative learning. They provide practical support for teacher leadership and teacher learning, and they understand that teachers have differing needs for support during a period of significant curriculum change.

The research methodology used for this study involved a multiple case study design. Principals and staff from three Queensland state schools who participated in the trial of innovative curricula provided the data for the three case studies.

The data collection at three schools related to the processes of professional learning at each site. Interviews conducted with the participants at each school, and observation of meetings and school documentation, provided the researcher with the data to develop a framework for principals who are interested in creating a professional learning community.

Data collected from the schools generally supported the findings of the theorists. However, analysis of the data provided more detailed information than is currently available in the literature to inform the establishment of professional learning processes. Analysis of the data indicated that professional learning can be classified according to four themes: personal learning, leadership-related learning, learning related to innovation, and learning related to processes that support a collaborative culture.

The findings from the literature review and the findings from the case studies were used to construct a framework for professional learning for principals who wish to create a learning organisation. The framework provides a foundation for professional learning programs for principals, and could be used by a range of people or groups, including district office personnel, professional associations, and networks of principals and aspiring leaders.

Certification of Dissertation

I certify that the ideas, research, results, analyses, and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.

Signature of Candidate

Date

ENDORSEMENT

Signature of Supervisor

Date

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CHAPTER 1: INTRODUCTION

1.1 Introduction

1.1.1 Background to the Research Problem

Organisational learning is regarded as being a key characteristic of successful organisations. The outcomes of organisational learning can be positive or negative, depending on the participants' commitment to ensuring quality outcomes for the organisation (Argyris, 1999). At the heart of authentic organisational learning in schools is professional learning – the learning that takes place when administrators, teachers, parents and students engage in professional dialogue, which improves the collective capacity of the school community to improve student achievement (King & Newmann, 2000).

Recent research supports the concept of principals accepting the responsibility for leadership of the professional learning processes in schools. Fullan (2002) acknowledged that the promotion of principals as instructional leaders was a worthwhile strategy for improving student learning: "For some time, educators have believed that principals must be instructional leaders if they are to be the effective leaders needed for sustained innovation" (para. 2). However, Fullan argued that the time has come for a change in the focus of principals' leadership: "Characterising instructional leadership as the principal's central role has been a valuable first step in increasing student learning, but it does not go far enough" (para. 2). Fullan (2002, para. 4) contended that principals need to move on from the role of instructional leaders: "We need leaders who can create a fundamental transformation in the learning cultures of schools and of the teaching profession itself."

Fullan (2002) asserted that one characteristic of principals who are cultural change leaders is the willingness to create and share knowledge: "The Cultural Change Principal is the lead learner in the school and models lifelong learning by sharing what he or she has read lately, engaging and encouraging action research, and implementing inquiry groups among staff" (para. 14). Supporting the notion of principals as leaders of learning, DuFour (2002, para. 13) stated: "I am convinced that a school cannot make the transition to the collaborative, results-oriented culture of a professional learning community without a principal who focuses on learning." Mohr and Dichter (2001) maintained that schools should operate as learning communities that focus on student achievement as their overarching goal. They shared their conclusion that principals need to be leaders of learning:

As principals, we have to be learners and teachers ourselves. Learning just doesn't happen just because we set up structures, bring in outside experts, or send teachers to workshops. Authentic learning requires an authentic learning community that learns from research, from its own experience, and from its analysis of that experience. (Mohr & Dichter, 2001, p. 747)

1.1.2 Queensland Context

Education Queensland personnel have taken advice such as that offered by Fullan (2002), articulating a commitment to Queensland State Schools becoming learning organisations. This commitment is stated in the Department's vision for education for the first decade of the twenty-first century, *Queensland State Education 2010* (State of Queensland Department of Education, 1999, p. 10): "Quality schools will divest themselves of traditional industrial age and bureaucratic restrains to reinvent as dynamic 'learning organisations' in 'learning communities'." However, Education Queensland has not taken formal steps to operationalise the vision of creating learning organisations.

Education Queensland does not currently have formalised learning and development processes that allow principals to focus on problems specific to the schools they lead. However, opportunities do exist for principals to engage in professional development activities designed to enhance their leadership and management skills, and for training in Departmental initiatives or new curricula. The Department's Leadership and Development Foundation has the charter to coordinate learning and development opportunities for school leaders, and professional associations and industrial unions organise learning and development activities for their members. Some principals avail themselves of opportunities to enhance their knowledge and skills through tertiary study, attendance at workshops and conferences, networking, and a variety of training activities. Lewis (2001, p. 4) identified the need for significant transformation in schools as they respond to global changes:

Children entering school today will graduate from secondary education in the year 2013. The world and its boundaries will have changed, the nature and purpose of schools will be different and the role of principals and teachers will have been redesigned and redefined as governments and their communities create a preferred future. It is possible that in the year 2013 the terms principal, teacher, classroom and school will be no more and in their place will be terms more congruent with [the] world in which we will live.

Considering Lewis's prediction about significant changes in the education for children, it appears that principals' engagement in professional learning is critical as schools respond to social, industrial and technological changes that impact on the work of teachers, and what and how students learn. What processes do principals use when leading the implementation of significant educational change? What processes do principals use to engage the school community in professional learning about new or enhanced curriculum, pedagogy and assessment, so that the current and future needs of students can be addressed? How do principals learn these processes?

The focus of this study is an examination of the processes principals use in the curriculum leadership aspect of their role. While it is acknowledged that principals require skills and knowledge in a range of other areas including strategic leadership, human resource management, and financial and resource management, the core business of schools is the achievement of high level outcomes for all students. Therefore, this study focuses on the professional learning processes in which principals engage while leading significant curriculum change in school communities.

1.2 Research Problem

The evidence summarised in the previous section indicates that professional learning is a key factor in ensuring that schools have the capacity to ensure quality student achievement in a rapidly changing world. Principals are responsible for leading professional learning in their schools. Therefore, the problem to be addressed in this research is identified as:

What are the learning processes in which principals are engaged while leading significant curriculum change in school communities?

In order to provide a response to the Research Problem, three questions have been posed as the framework for the conduct of the study:

- 1. What are the essential concepts and processes of professional learning that emerge from a review of the literature relevant to successful school curriculum change?
- 2. What are the key principles of professional learning which principals engage in while leading their schools through significant curriculum change?
- 3. What forms of professional development are proposed for the development of skills that will enable principals to successfully implement innovative curriculum programs?

The response to Research Question 1 is derived from a review of the relevant literature, and is presented in the form of a series of propositions at the end of Chapter 2. To provide a response to Research Question 2, the essential features of the principal's professional learning processes are summarised as a set of key principles to be found at the end of each case study in Chapter 4. The key principles drawn from the case studies are summarised in Table 4.1, in the final section of the chapter. In Chapter 5, the propositions from Chapters 2 and the key principles from Chapter 4 are collated to provide a response to Research Question 3. The propositions from the review of the literature are compared with the key principles drawn from the case studies, and from this comparison, a framework for professional development for principals is presented in Table 5.1. The framework is proposed for the use of principals who may be implementing innovative curricula in their schools.

1.3 Methodology

The focus of this study was on building theory about how principals work, as opposed to the creation of generalisations about their work. Therefore, the research consisted of three parts:

 Conceptualisation of the professional learning of principals from a theoretical perspective;

- 2. Multiple case studies; and
- 3. Creation of a framework for professional learning for principals.

The review of literature presented in this study introduces the range of concepts currently underpinning the professional learning of principals. The findings are compared with the findings from the case studies, which together, contributed to the development of a theory-based framework for learning and development for principals who are engaged in implementing innovative curriculum. This framework is contained in Chapter 5.

The second part of the study consisted of data collection relating to three case studies. The case study method used for this research fitted within the description offered by Wiersma (1995, p. 17): "Essentially a case study involves a detailed examination of a single group, individual, situation or site." Burns (1996) described research using case studies as being suitable for a situation where "the investigator has little control over events, or when the focus is on a contemporary phenomenon within real life events" (p. 365). The research carried out in three schools focused on real life programs in which the researcher had no previous involvement.

When selecting the principals for this study, no attempt was made to try to locate principals whose processes of professional learning were to be found in the literature. The researcher, when selecting the three principals and their schools for this study, considered four points. First, each of the principals had a reputation among Education Queensland personnel as being a leader learner. The choice of these schools was validated by their selection by Education Queensland personnel as participants in Phase 1 of the New Basics Project, an innovative curriculum initiative of Education Queensland. Selection in the trial indicated that the people choosing the schools presumed that the principals had the capacity to be innovative, and to be successful in leading the implementation of New Basics. Second, the researcher believed that the data collected at these schools would contribute to the proposed framework for professional learning for principals presented in Chapter 5. Third, the schools represented a spread of school structures and sizes: large high school, large primary school and medium primary school. Fourth, because the researcher interacted regularly with all principals in her local

education district, she chose to work in schools outside the local area, but which were accessible for data collection purposes.

This qualitative research project was conducted in the regular school setting. Following Wiersma's (1995) advice that "qualitative researchers, for the most part, do research in natural settings; they do not manipulate or intervene (except possibly by their presence) in the situation," the researcher attempted to remain as unobtrusive as possible during visits to the schools for data collection purposes. A case study approach allowed for an in-depth study of the three principals' leadership and learning processes as they worked with staff in implementing New Basics. Interviews, observations and perusal of school documents were the sources for the collection of data.

Interviews were conducted in places, and at times, chosen by the participants, to minimise disruption to the normal school routines. The researcher endeavoured to listen carefully and remain non-judgmental because, as advised by Wiersma (1995, p. 212), "it is the perceptions of those being studied that are important, and to the extent possible these perceptions are to be captured in order to obtain an accurate 'measure' of reality." During the interviews, to illustrate salient points, the participants used documents that they and their colleagues had produced while planning school renewal processes.

After each set of interviews was conducted, the interviews that had been recorded were transcribed and coded. The coding process followed the recommendations presented by Bogdan and Biklen (1992) and Miles and Huberman (1994), and was used to organise the data into manageable units. Three case studies were developed from the data. The findings from the case studies were written as key principles to support professional learning processes adopted by the principals. These key principles, together with propositions from the review of the literature, were used to inform the development of a framework for professional development for leader learners.

1.4 Limitations and Assumptions

When selecting subjects for the case studies, the researcher chose to interview key personnel who had demonstrated positive attitudes to developing innovative ways of implementing programs and processes that met the needs of their schools and associated communities. Therefore, from the outset, it was recognised that the findings of the case studies may not be able to be extrapolated across the broad range of principals employed by Education Queensland. The schools chosen were structurally and culturally different, and different responses due to the structures were likely. However, the researcher assumed that the processes demonstrated by the principals would be sufficiently representative of processes used by other principals who are leader learners to provide the basis for a framework for principals' professional learning and development.

The study is limited to three state schools in one geographic area of Queensland, and is not necessarily representative of all schools in the State. The study does not include small primary or secondary schools, and schools in metropolitan or geographically isolated areas. The principals each nominated two teachers or middle managers whom they regarded as curriculum leaders to participate in the study. The middle managers or teachers who were interviewed may have been biased in their views, and may not have been representative of the whole sample of curriculum leaders.

The backgrounds of the interviewer and informants may also have biased the communication during the interview. Issues that could have biased the interview data included the professional experience, gender, age and non-professional backgrounds of the interviewer and the informants. The informants' responses to the interview questions may been influenced by what they perceived as being the purpose of the interviews. (Minichiello, Aroni, Timewell, & Alexander, 1995).

1.5 Study Outline

Chapter 1 provides an outline to the study, including the background to the research problem, the problem itself, justification for the research and the methodology used. In Chapter 2, the literature relevant to the study is summarised under the headings of Leadership for Organisational Learning, Principal as Leader-Learner, and Schools as Learning Organisations. The chapter concludes with a list of key propositions about principals' professional learning that provides a response to Research Question 1.

The methodology used for the study is outlined in Chapter 3, while Chapter 4 consists of three case study reports derived from interviews with the principal and selected staff

from each of the schools, as well as perusal of documents. Each of the case studies concludes with a list of key principles. These principles are based on a set of criteria, and represent the findings about professional learning processes at the school. The chapter concludes with a comparison of the principles from the three schools, and this provides a response to Research Question 2.

Chapter 5 begins with a comparison of the propositions from the review of the literature and the key principles drawn from the case studies. This discussion provides a response to Research Question 3. The chapter concludes with implications for theory and practice, as well as recommendations for further research.

1.6 Conclusion

As has been outlined briefly in this chapter, Fullan (2002) and other researchers emphasised the need for principals to become leaders of learning organisations in order to meet the challenges of providing educational programs for students living in a rapidly changing world.

In line with the recommendations of Fullan (2002), authors of Education Queensland's strategic planning documents articulated a systemic commitment to creating schools as learning organisations. However, Education Queensland personnel have not taken action to ensure that professional development and training activities that focus on enhancing the particular professional learning processes in individual schools are available to principals. Therefore, this study examines the processes of professional learning embraced by the principals of three schools while leading significant curriculum change in the schools.

The introductory section of this chapter provides a context for the research. The Research Problem and Research Questions provide direction for the conduct of the study. An overview of the methodology introduces the design of the study. Using these elements as a foundation for the study, the report proceeds with a review of the literature in Chapter 2.

CHAPTER 2: REVIEW OF THE LITERATURE

2.1 Introduction

This study investigates the processes of professional learning that principals use while implementing significant change in schools. There is no single body of research that encapsulates the knowledge upon which such an investigation could be based. Consequently, this review comprises a series of sections that cover several fields of research relevant to the research problem. The sections include leadership for organisational learning, principals' learning and leadership, schools as learning organisations, and the specific issues of learning and change associated with implementing innovative curricula in schools.

The first section of the review addresses the nature of learning organisations and organisational learning, as well as leadership for the latter. This section highlights attributes that researchers promote as being appropriate for leaders wishing to foster a culture of learning in their organisations. The second section considers leadership as it relates to school principals, as well as the principal's responsibility to be a leader who promotes learning in the school community. This section also includes a review of research related to the concepts of shared and parallel leadership, and professional development for principals. The third section addresses the concept of schools as learning organisations. This section also addresses several topics related to the implementation of new curricula: alignment of curriculum, pedagogy and assessment, the role of the teacher, professional learning, and management of change in schools.

To conclude Chapter 2, a summary of the findings from the literature is presented as a list of propositions. The propositions relate to Research Question 1: "What are the essential concepts and processes of professional learning which emerge from a review of the literature relevant to successful school innovation?"

2.2 Leadership for Organisational Learning

To introduce this section, the terms "learning organisation", "learning community", and "organisational learning" are defined and discussed. These terms are used throughout this study. The concept of leadership for organisational learning is reviewed in the second part of this section.

2.2.1 Learning Organisation - Learning Community

A learning organisation refers to one social entity, whereas a learning community contains more than one social group (Ramirez, 1999). If these descriptions are extrapolated to include educational institutions, a school in which the teachers actively share new knowledge to improve learning outcomes for their students could be regarded as a learning organisation. If this enthusiasm for learning extends beyond the immediate school environment to involve parents and other contributors to the school, this loosely-coupled entity referred to as the "school community" could be called a learning community.

In describing a learning organisation, Senge (1990a) offered the following scenario: Most of us at one time or another have been part of a great "team," a group of people who functioned together in an extraordinary way – who trusted one another, who complemented each others' strengths and compensated for each others' limitations, who had common goals that were larger than individual goals, and who produced extraordinary results... What they experienced was a learning organisation. (Senge, 1990a, p. 4)

Senge declared that learning organisations are possible because "not only is it our nature to learn but we love to learn" (p. 4).

Argyris and Schon (1992, p. 3), when explaining the nature of learning organisations, stated: "Generically an organization may be said to learn when it acquires information (knowledge, understanding, know-how, techniques or practices) of any kind and by whatever means." Argyris (1992) declared that all members of an organisation, managers and employees, should critically reflect on their own behaviour, and to ensure that they contribute positively to the detection of problems, designing solutions, and producing actions to solve the problems. Senge (1990a, p. 3) provided the following definition of learning organisations: "Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together." Leithwood and Aitken (1995) described a learning organisation as "a group of people pursuing common purposes, . . . with a collective commitment to regularly weighing the value of those purposes, modifying

them when that makes sense, and continuously developing more effective and efficient ways of accomplishing those purposes" (p. 41).

While Senge (1990a), and Leithwood and Aitken (1995) provided descriptions of successful organisations in global terms, Bolman and Deal (1997) focused on the strategies needed to develop an environment in which employees are satisfied with their working environment. They advocated for organisations to adopt effective human resource strategies that align the needs of organisations and individuals:

Organizations need people (for their energy, effort, and talent), and people need organizations (for the many intrinsic and extrinsic rewards they offer), but their needs are not always well aligned. When the fit between people and organizations is poor, one or both suffers: individuals feel neglected or oppressed and organizations sputter because individuals withdraw their efforts or even work against organizational purposes. Conversely, a good fit benefits both: individuals find meaningful and satisfying work, and organizations get the talent and energy they need to succeed. (p. 119)

With the comments of Senge (1990a) and Bolman and Deal (1997) in mind, it is timely to report that researchers in the field of human resource management have focused on the organisational behaviour of employees. Purcell (2003) described the research carried out by the Work and Employment Centre at the University of Bath focusing on the connection between individuals and organisations, and what management practices are effective in generating better performance from individuals. Purcell explained that employees create their own "a psychological contract" (p. 13) with the organisation for which they work, that is, they develop expectations about work and career opportunities. He described their willingness to put in extra effort on the job as "organisational citizenship behaviour" (p. 13), and the choices people make about the way a job is done, as "discretionary behaviour" (p. 14). Purcell advocated for greater understanding of the links between psychological contracts and the organisational citizenship behaviour of employees: "We need a clear understanding of why a breach of the psychological contract can lead to a reduction in commitment to the organisation and a decline in the work performance" (p. 13). Purcell explained that researchers had concluded that "the crucial factor linking HR practices to performance is the way these trigger discretionary

behaviour" (p. 14). The research done by Purcell may provide the data necessary to understand the human resource practices that support the creation of learning organisations, as described by Senge(1990a) and Leithwood and Aitken (1995).

2.2.2 Organisational Learning

While Robinson (2001) expressed reluctance to provide a precise explanation of organisational learning, she concluded:

A complete theory of organizational learning needs to explain not only how organizations adapt [or not] to their environment; . . . how errors are detected and corrected [or not]; not only how problems are solved but why they may be ignored or solved badly. (p. 60)

Argyris (1992) explained that organisational learning occurs under two conditions:First, learning occurs when an organisation achieves what is intended; that is there is a match between its design for action and the actuality of outcomes. Second, learning occurs when a mismatch between intentions and outcomes is identified and it is corrected; that is, a mismatch is turned into a match. (p. 8)

The concept of organizational learning stems from a view that individuals learn, and in doing so may or may not contribute to the overall effectiveness of the organisation. The value of individual learning is evident when individuals collectively share their learning in order to exert positive change for the good of the organisation. "Organizations do not perform the actions that produce the learning. It is individuals acting as agents of organizations who produce the behavior that leads to learning" (Argyris, 1992, p. 8). Organisations can create conditions that support learning, but individuals may use their biases to deter successful problem solving (Argyris, 1992). O'Sullivan (1997) agreed with this view, stating that if people learn as part of a group, then the group must be learning, even if the learning is inappropriate or dysfunctional.

Success in a rapidly changing world hinges on the perceived ability of an organisation to respond to technological, industrial and social changes in a meaningful way: "A defining feature of the learning organization is the capacity of people in complex and unpredictable environments to create a desired future that gives the organisation a competitive advantage" (Hill, Harvey, Harrison, & Clarke, 1999, p. 26). Hence,

organisations have seized upon the concept of the learning organisation as a strategy for ensuring rapid organisational development (O'Sullivan, 1997). In supporting the need for organisations to become learning organisations, Senge (1990a, p. 4) stated: "The organizations that will truly excel in the future will be the organizations that discover how to tap people's commitment and capacity to learn at *all* levels in an organization."

2.2.3 Leadership for Organisational Learning

2.2.3.1 Leadership in perspective.

Helgesen (1996) declared that, in the past two decades, leadership as a topic has attracted significant attention, as organisations seek "to adapt to a level and pace of change that can seem frightening and that is unpredictable" (p. 19). She stated: "A great, almost urgent, renewal of interest in the subject of leadership has characterised the last two decades. Universities have initiated courses, or even whole departments, to study, teach, and encourage leadership" (p. 19). Leadership as an organisational quality was first raised by Barnard (1968), who observed that leadership may be exerted by anyone in the organisation. Limerick, Cunnington and Crowther (1998) contended that this concept was lost as the corporate world moved into a systems model of management but has recently re-emerged in the literature. This renewed interest in the concept of shared leadership can be attributed to the emergence of a new paradigm of organisational management referred to by Limerick et al. (1998, p. 43) as the "fourth blueprint", or post-industrial leadership and management, one characteristic of which is "collaborative individualism." A fourth blueprint organisation is characterised by a culture that places high value on autonomous, interdependent, proactive, empowered, collaborative individuals" (Limerick et al., 1998, p. 43). Leadership in a fourth blueprint organisation is characterised by organisation-wide leadership, or "a high density of diverse multiple leadership roles that together are able to sustain and transform the organisation" (Limerick et al., 1998, p. 45).

2.2.3.2 Leadership for change.

In an era of continuous change, one role of the leader is to position the organisation to be productive rather than stagnant. Schein (1996) argued: "Leaders now have to begin to think like change agents, because the problem is not only how to acquire new concepts and skills, but also how to *unlearn* things that are no longer serving the organisation

well" (p. 64). Lakomski (2001) asserted that one way in which organisations can adapt to accelerating change and its unexpected challenges is to transform themselves into learning organisations: "Ongoing learning is believed to be the best preparation for the future, and it is the leader's responsibility to see that it happens" (Lakomski, 2001, p. 68). Schein (1996, p. 67) provided a list of characteristics that he considered desirable for a future-oriented leader:

- 1. Extraordinary perception and insight into the realities of the world . . . ;
- Extraordinary levels of motivation to enable them to go through the inevitable pain of learning and change . . . ;
- 3. The emotional strength to manage their own and others' anxiety as learning and change become more and more a way of life;
- 4. New skills in analysing cultural assumptions . . . ;
- 5. The willingness and ability to involve others and elicit their participation . . . ; and
- 6. The willingness and ability to share power and control according to people's knowledge and skills

Argyris (1993) explained that the learning within an organisation is "crucial in building an organization that is vigilant about detecting and correcting errors, dedicated to producing innovations, and ready to change to meet the demands of the environment, which itself is often changing" (Argyris, 1993, p. 5). In this environment, members of the organisation are encouraged to adopt a critical attitude, focusing on quality, innovation, and reflecting on whether the organisation has the capacity to meet future demands for its products or services.

Bolman and Deal (1991) offered three propositions for leadership that is receptive to organisational change or improvement. The first proposition for leadership is that, in order to lead an organisation that is responsive to change, leadership needs to be tailored to the current context of the organisation. Schein (1996) reinforced this view when he declared that leadership should be responsive to the situation, the task to be undertaken and the capacity of employees to carry out their duties. Gronn and Ribbins (1996) also supported the notion that a leader's style cannot be divorced from the context of the organisation when they stressed the need for research into leadership to take into

account the influence of the context on the findings, rather than to generalise leadership free of contextual influences. Gronn and Ribbins (1996) argued for better understanding of the impact of context on leadership strategies:

... the significance of context continues to be badly undertheorized in leadership, but that, if reconceptualized as the sum of the situational, cultural, and historical circumstances that constrain leadership and give it its meaning, context is the vehicle through which the agency of particular leaders may be empirically understood. (para. 6)

Bolman and Deal's (1991) second proposition for leadership for change is that engagement between leaders and other members of an organisation is flexible, and likely to change over time: "Leaders are not independent actors, nor is the relationship between leaders and those whom they lead a static one. The relationship is interactional; leaders both shape and are shaped by their constituents" (p. 409). In order to understand the style of leadership appropriate for an organisation, leaders must recognise that leadership "is not simply a matter of what a leader does but of what occurs in the relationship between a leader and others" (Bolman & Deal, 1991, p. 409). Bolman and Deal (1994) encouraged leaders to be cognisant of the relationships which exist in their organisations: "If we equate leadership with formal position, we disregard the complex, co-operative relationships among a number of people that are required to get things done - or change the way they are done" (p. 80).

Bolman and Deal's (1991) third proposition for leadership for change is that, in order to maximize the knowledge and skills of all members of the organisation, leaders should nurture non-positional leadership in recognition of the knowledge held by all workers. This is particularly pertinent as technology enables workers to access information previously only available to those holding leadership positions (Bolman & Deal, 1991; Helgesen, 1996). In support of non-positional leadership, Helgesen (1996, p. 20) asserted: "The equation of leadership skills with position must by its nature breed frustration and cynicism among those in the ranks, denying them a feeling of ownership in the enterprise in which they are engaged and discouraging their full participation." Handy (1996) and Schein (1996) also advocated for leadership that values the contribution of all members of the organisation. They recommended personal attributes

for leaders that include confidence in oneself as an open-minded leader, care and concern for other people, and a willingness to welcome and acknowledge the contribution of grassroots leaders to the organisation. Hesselbein (1996) argued that the future-oriented leader acknowledges that people are an organisation's greatest asset and demonstrates this belief through personal relationships and actions.

2.2.4 Characteristics of Leaders of Learning Organisations

The style of leadership that supports the development of a learning organisation could be more a collection of particular aspects of various styles of leadership than one discreet style. To lead an organisation in which individuals are respected and acknowledged as leaders, Handy (1996, p. 8) suggested that a leader in a learning organisation needs the following characteristics:

- "A belief in oneself" the self-confidence to take risks, combined with the humility to accept that one makes mistakes and can learn from others;
- 2. "A passion for the job", combined with a desire to keep in touch with the rest of the world;
- 3. "A love of people", combined with a capacity to accept the loneliness of being a leader; and
- 4. Preparedness "to live vicariously", accepting the intrinsic rewards gleaned from the achievements of others.

Senge (1990b) highlighted the concept of multi-faceted leadership when he outlined the roles of "designer," "teacher," and "steward" for leaders of learning organisations:

These roles require new skills: the ability to build shared vision, to bring to the surface and challenge prevailing mental models, and to foster more systemic patterns of thinking. In short, leaders in learning organizations are responsible for building organizations where people are continually expanding their capabilities to shape their future – that is, leaders are responsible for learning. (Senge, 1990b, p. 9)

As a designer, the first task of the leader is to design the guiding principles for the organisation, that is, the purpose, vision, and core values by which people will live. "The second design task involves the policies, strategies and structures that translate guiding ideas into business decisions" (Senge, 1990b, p. 10). The third aspect of design is ensuring that suitable processes exist for ensuring that policies, strategies and structures are continually improved.

As a teacher, the leader is responsible for ensuring that everyone in the organisation has a current view of reality. Senge (1990b, p. 11) stated: "What we carry in our heads are assumptions." Senge also advised that the role of the teacher is to challenge the perceptions of people so that they see beyond their superficial view of systemic structures, patterns of behaviour and events. The leader as teacher challenges people's mental models and helps them engage in double-loop learning to identify the underlying causes of, and to find solutions to, problems which may face the organisation.

As a steward, a leader operates on two levels. One is commitment to the people they lead, and the second is commitment to the whole organisation. An effective leader appreciates the impact of one's leadership on people who are dedicated to the organisation, and on the organisation as a whole (Senge, 1990b). Leaders who adopt a stewardship role are proactive in changing the way organisations operate, so that their attempts benefit not only their own organisation, but achieve greater success and higher productivity for all organisations (Senge, 1990b).

Two more characteristics of effective leaders of learning organisations could also be included: commitment to genuine collaboration (Johnston & Caldwell, 2001), and support for professional development (Bell & Harrison, 1998; King & Newmann, 2001). Senge (1999, p. 59) stated: "The essence of leadership – what we do with 98 percent of our time – is communication." Therefore, effective communication should also be added to the list of desirable attributes for leaders of learning organisations.

The authors referred to above presented their views about the essential characteristics of leaders of successful learning organisations. Would the leader of an organisation be able to take the work of one author, adopt the recommended characteristics or behaviours and create a learning organisation? The answer is "Probably not," because heed should also be paid to the advice of Bolman and Deal (1994) and Schein (1996) who challenge leaders to be cognizant of the complex relationships that exist between them and the people in their organisations. Leaders who strive to create learning organisations may consciously adopt particular behaviours, but they also need to value and utilise the

leadership skills and knowledge held by other members of the organisation (Bolman & Deal, 1994; Helgesen, 1996; Schein, 1996).

2.2.5 Summary

In summary, a learning organisation is said to exist when a group of people function together in an extraordinary way. They share common goals. They learn to learn together, and they collaborate. They complement one another's strengths and weaknesses, and they produce extraordinary results (Senge, 1990a).

Leaders of learning organisations need to be responsive to the context of the organisation, understand what has to be achieved, and to be aware of the capacity of employees to undertake their duties (Schein, 1996). Leaders of learning organisations need to understand the relationships within their organisation, and should nurture non-positional leadership (Bolman & Deal, 1997). Leaders of learning organisations need to encourage success by maximising the input of individuals at all levels of the organisation.

2.3 The Principal as Leader-Learner

This section focuses on various aspects of the role of the principal as leader of a learning organisation, including principal leadership and the concept of teacher leadership, as well as professional learning, and the need for professional development for principals and teachers.

2.3.1 The Context for Principals as Leaders of Learning Organisations

To establish the current context for Queensland's State School principals, reference is made to *Queensland State Education 2010* (State of Queensland Department of Education, 1999). This document outlines the vision and goals for State education in Queensland for the first decade of the 21st century. The concept of schools as learning organisations is one of the key drivers of the document. Throughout *Queensland State Education 2010*, the authors articulated a commitment to ensuring that schools are, or will become, learning organisations: "A strong and viable state system supported by government will have: . . . schools that are dynamic learning organisations in networked learning communities" (p. 13). From this statement, the inference is made that there is a

systemic expectation that principals have, or will acquire, the leadership skills to establish a culture of learning in their schools and associated school communities.

2.3.2 Professional Learning

When all teachers in a school and the administration team continuously seek to engage in, share, and act on their learning, they seek to enhance their effectiveness as professionals so that students benefit (SEDL, 1997). "As an organisational arrangement, the professional learning community is seen as a powerful staff development approach and a potent strategy for school change and improvement" (SEDL, 1997, para. 3). Andrews, Lewis and Crowther (2001) referred to "professional learning" in the school context as the congruence between teachers' practical professional knowledge and public professional knowledge. They asserted that teachers' practical knowledge should be grounded in educational research, and advised that teachers should not assume that all of their practical knowledge is of good quality. Andrews et al. (2001) stated: "When teachers' practical (tacit) professional knowledge is combined with public professional knowledge, a new form of contextualised professional knowledge may be created and used with great effect" (p. 13).

Hopkins (2000) explained that a "professional learning community" is one of four key concepts which, together, shape school capacity. The other three components include teachers' knowledge and skills, program coherence, and technical resources. When expressing views similar to those articulated by Andrews et al. (2001), Hopkins asserted that professional development for individuals is not effective unless the learning takes place in a professional learning community in which the learning is shared with others. In supporting the existence of professional learning communities, Fullan (2000) declared that many researchers, including Newmann and Wehlage (1996), "have found that the existence of collaborative work cultures (or professional learning communities) makes a difference in how well students do in school" (Fullan, 2000, para. 5).

Fullan (2000) asserted that the formation of a professional learning community is regarded as a key factor in the operation of a successful school. Professional learning occurs when teachers publicly share their own professional knowledge, so that learning "takes place through professional dialogue and deliberation" (Andrews et al., 2001, p.

14) and "results in a shared understanding of the meaning of successful pedagogy in that context" (Andrews et al., 2001, p. 15).

Researchers have described learning as taking place on two or more levels. O'Sullivan (1997) described surface learning as the acquisition of facts, skills and concepts. "In contrast, deep learning consists of looking for patterns, relating knowledge, skills and concepts to specific contexts and seeking to understand and apply, rather than merely recall or demonstrate" (para. 30). Deep learning, as defined by Fryer (1997) and O'Sullivan (1997) is required if the individual or organisation aims to reflect, understand and apply what has been learnt to develop or change behaviours.

Argyris (1992) emphasised his belief that leaders are reluctant to engage in deep learning, and may put up barriers to learning. The barriers are evidenced by their inability to ". . . identify the ways they often inadvertently contribute to the organization's problems, and then change how they act" (p. 127). Argyris further recommended that leaders "must learn how the very way they go about defining and solving problems can be a source of problems in its own right" (p. 127). Therefore, the ability to reflect on one's behaviour and to anticipate its impact on the organisation is critical in avoiding the perpetuation of problems as described by Argyris.

The terms "single-loop learning" and "double-loop learning" were coined by Argyris (1992) to explain his view of two levels of problem solving. Argyris (1997) explained that there are two ways to correct errors: "The first is to change the behavior This is single-loop learning. The second way is to change the governing values that lead to counterproductive behavior. This is double-loop learning" (para. 8). The first, or single-loop learning, refers to a focus on "identifying and correcting errors in the external environment" (Argyris, 1992, p. 127). While acknowledging the importance of correcting errors, Argyris declared that if learning is to persist, and there are to be positive changes in the environment, managers and employees must also examine their behaviour to find the source of the problems, and to take action to address the cause of the identified issues. This is double-loop learning.

While Argyris used single-loop and double-loop learning to describe organisational learning, Senge (1990b) categorised learning as "adaptive" and "generative." He described adaptive learning as the practices that people adopt to be able to cope with, or survive in, their environment. Adaptive practices arise from a desire to improve a problematic situation. On the other hand, generative learning stems from a desire to challenge the source of the problem, and to adopt strategies to create long-term improvement of the situation. Generative learning refers to creative thinking, looking at alternate ways of viewing the environment, and being creative in problem solving, rather than relying on tried and accepted management strategies. Senge explained why organisations engage in generative learning: "The impulse to learn, at its heart, is an impulse to be generative, to expand our capability. This is why leading corporations are focusing on *generative* learning, which is about creating, as well as *adaptive* learning, which is about creating." (p. 8).

Sergiovanni (2001) explained the contextual nature of generative learning:

Generative learning – learning that is understood and can be used to create new learning – doesn't take place in a vacuum. It is always contextual. What is learned depends on one's prior knowledge; learning takes place best when bridges or scaffolds are developed that link the new with the old. (p. 229)

Generative learning involves looking beyond the daily business of the organisation, and understanding how systems impact on each section of the organisation, so that problems can be identified at their source, rather than trying to address problems without an understanding of their origins. Carneiro (2000) contended that, in a learning organisation, adaptive learning and generative learning both are important, and both appropriate in particular contexts. However, "the best blend of adaptive and generative learning remains a matter of scholarly dispute. Adaptive skills are useful in a context of constant but continuous or incremental change; generative capacities define leaders in their response to radical innovation." (Carneiro, 2000, para. 51).

In learning organisations, adaptive, surface, or single-loop learning is appropriate for solving immediate, survival problems, described by Carneiro (2000, para. 48) as "the reaction to external stimuli, dealing with threats and behaving in accordance with standards of flexibility." When searching for long-term, creative solutions to problems,

people at all levels in the organisation need to have the capacity and the motivation to engage in generative, deep, or double-loop learning.

2.3.3 Principal Leadership

Handy and Aitken (1986) argued that school leadership is more problematic than leadership of other organisations, because of the high expectations placed upon schools by the wider community: "[Schools] are more difficult, perhaps, and more complex than other organizations because of the expectations laid upon them and because of the critical place that they have in our society" (p. 32). Having conducted many interviews over a period of 12 years with a range of eminent individuals whom he categorised as "educational leaders," Goldberg (2001, p. 761) concluded that there are many ways to achieve success in educational leadership: "It's just too complex, too varied, and too subject to change for any singular answer."

Bell and Harrison (1998) also acknowledged the complexity of school leadership. They recognised the impact of changed attitudes to leadership and management during the 1990s that influenced the traditional, largely unquestioned authority of principals. "Increasingly, they must see themselves in a negotiating role with their education authorities, with government and community bodies and attitudes, with parents, and (perhaps least familiarly of all), with the experiences and views of their own students" (p. 155). Fullan (2002, para. 3) promoted the concept of principals as change agents: "We need leaders who can create a fundamental transformation in the learning cultures of schools and of the teaching profession itself." Bell and Harrison claimed: "the post-authoritarian professional needs, above all, to have people qualities – to have high levels of interpersonal skills, and to lead by example" (p. 157). The focus for this style of leadership is centred on valuing the work of teachers, and encouraging and supporting teachers to accept leadership roles (Bell & Harrison, 1998; Helgesen, 1996).

Similar models of leadership have been variously described as 'distributed leadership' (Handy & Aitken, 1986; Silins, Zarins, & Mulford, 1999), 'shared leadership' (Ogawa & Bossert, 2000), and 'parallel leadership' (Crowther, Kaagan, Ferguson, & Hann, 2002). Crowther et al. highlighted the positive outcomes that occur when teachers, through their commitment to student outcomes, emerge as leaders in their communities.

Based on their research, Crowther et al. claimed that they have "strong evidence that school-based interventions, involving teacher leadership and parallel leadership, can produce enhanced educational outcomes" (Crowther et al., 2002, p. xix).

De Pree (1999) argued that the leader is "the only one who can hold the organisation accountable" (p. 20), and cannot delegate this role. However, the principle of subsidiarity described by Handy (1996), proposes that it is inhibiting for members of the organisation if the leader takes on responsibility that should lie with them. "More simply put, the principle means that stealing people's responsibilities is wrong because it ultimately deskills them" (Handy, 1996, p. 5). Bolman and Deal (1997), basing their theories on the work of Maslow's (1954) hierarchy of personal need, argued that people do not respond well to being treated like children, and are motivated by having opportunities to meet their higher-level needs for self-esteem and self-actualisation. Bolman and Deal, as well as Handy, reinforced the benefits of utilising the leadership qualities of all members of the organisation.

The findings of a study conducted by Silins et al. (1999) demonstrated that leadership for a school as a learning organisation has two important dimensions: "The leadership behaviours of the principal and the leadership team in the school; and, the extent that leadership is distributed throughout the whole teaching staff" (p. 8). Based on the findings of their research, Silins et al. published a list of six facets of leadership designed to promote organisational learning in schools. These include vision and goals, culture, structure, intellectual stimulation, individual support and performance expectation. The first three dimensions reflect Senge's role of designer, described in the previous section. The dimension of intellectual stimulation relates to the teacher role, while the latter two dimensions reflect Senge's promotion of leaders as stewards. Principals and teacher leaders need to be involved in each of the six dimensions of leadership offered by Silins et al. if the school is to be regarded as a learning organisation.

Newmann and Wehlage (1996) asserted that the capacity of a school's teaching staff to produce high quality outcomes for students is directly affected by the quality of school leadership and knowledge and skills of the teachers: "The effectiveness of a school staff

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depends much on the quality of school leadership and the available pool of talent in the existing teacher population" (p. 37). However, based on the principle of subsidiarity, one task of the principal is to ensure that the teachers are competent to undertake the roles and tasks expected of them, rather than putting into place controls that encourage teachers to be dependent on the principal to make decisions (Handy, 1996). Two implications arise from Handy's recommendation. The first is the need for training and development to ensure individual competency, and the second is the need to establish structures to empower teachers to assume responsibility and to be accountable for their actions.

Silins and Mulford claimed that schools that have high leadership capacity and broadbased participation include all staff in leadership development, and involve teachers, parents and students in all decision making processes. As a result of their research into linkages between learning organisations, leadership practices and teacher leadership, Silins and Mulford (2000, para. 11) stated: "The creation of formal positions may promote teacher leadership, however, schools that operate as learning organisations encourage teachers to assume informal leadership roles."

As a strategy for school improvement, DuFour (1999) advocated the creation of an environment in which teachers can learn and develop leadership skills. Bell and Harrison's (1998) views appear to concur with those expressed by DuFour. They stated: "A crucial component of principals' expertise will be their ability to generate similar high levels of leadership among all their staff, who will all become members of learning teams" (p. 148). Bell and Harrison argued that teachers want to work in an environment where their learning is continuous, and where they are involved in the decision making of the school. DuFour (1999, para. 15) stated: "Empowered teachers and strong principals are not mutually exclusive, and it is imperative that schools have both."

Sheppard and Brown (1999, as cited in Silins et al., 1999, para. 8) found that the models of school leadership that promote the development of school communities as learning communities "find more in common with cultural, collaborative approaches in which teachers are viewed as partners, than with the technological, hierarchical, rational planning models." These findings were similar to those reported by Crowther and his

colleagues (Crowther, 1996; Crowther, Hann, Olsen, McMaster, & Ferguson, 1999; Crowther, Hann, & McMaster, 2001). Garrett (1997) contended that processes that support and encourage participative leadership should be instigated. Garrett, as well as Davies and Ellison (1997), recommended that modelling, mentoring and coaching be adopted as processes for ensuring that teacher-leaders are given opportunities to acquire the skills to undertake the leadership roles to which they aspire. The stages of the coaching process include setting the desired outcomes, delegating authority for decision making, practising the set tasks, evaluation and reflection. As well as developing the skills of leading and managing, Davies (1996) suggested that aspiring leaders also need to be privy to information which supports the decision making process. Without access to information to guide constructive decision making, teacher leaders could become puppets of the principal, rather than being active participants in the leadership of the school.

Education Queensland recognised that a focus on people, and preparedness to be innovative, are necessary if schools are to be responsive to changed societal and industrial expectations of education:

There is a challenge facing education in Queensland as we move into an era where knowledge supersedes information and technology transforms longstanding relationships of time and space. It is to become a learning society in which global forces favour the adaptable, and the key resources will be human and social capital rather than just physical and material resources. (State of Queensland Department of Education, 1999, p. 8)

Principals who aspire to lead quality schools have a responsibility to establish learning organisations. Bell and Harrison (1998) explained that one way to do this is to become skilful at leading learning, and generating high levels of leadership of learning amongst school staff.

2.3.4 Principals as Learners

A search of the literature revealed a significant amount written about principals as leaders, and their role in developing schools as learning organisations. Less research has been conducted about principals as learners, and principals as leaders of professional learning. Therefore, the literature about leading learning generally was reviewed to inform this topic, using the research findings of Argyris as a starting point. While Argyris (1992) supported the concept of learning organisations, he criticised the ability of leaders to learn:

Success in the market place (in the 1990's) increasingly depends on learning, yet most people don't know how to learn. What's more, those members of the organisation that many assume to be the best at learning are, in fact, not very good at it. I am talking about the well-educated, high-powered, high-commitment professionals who occupy key leadership positions in the modern corporation. (Argyris, 1992, p. 127)

Argyris (1999) declared that, while leaders are able to collect data about operational issues and solve basic problems, they are not good at reflecting on their work and uncovering potentially threatening or embarrassing information that, if used effectively, could motivate and produce real change: "A learning leader must assess the adequacy of his organization's culture, detect its dysfunctionality, and promote its transformation, first by making his own basic assumptions into "learning assumptions" and then by fostering such assumptions in the culture of his organization" (Argyris, 1999, p. 5).

DuFour (2002), using his own experiences as a school principal, explained the positive outcomes for teachers and students that resulted from his transition from being an instructional leader to a leader of a professional learning community. When contrasting his previous role of instructional leader with his newly adopted role of leader as learner, DuFour said:

My efforts should have been driven by the questions, To what extent are the students learning the intended outcomes of each course? and What steps can I take to give both students and teachers the additional time and support they need to improve learning? (para. 7)

According to DuFour, the change in focus from teaching to learning resulted in a significant change in the structure and culture of the school. With support, the teachers moved to working collaboratively, rather than individually, and changed their teaching practices to focus on improving student learning outcomes. DuFour maintained that the role of the principal was to focus on learning for teachers as well as students: "I am convinced that a school cannot make the transition to the collaborative, results-oriented

culture of a professional learning community without a principal who focuses on learning" (para. 13).

Johnston and Caldwell (2001) expressed the view that, when establishing a learning organisation, the principal has a clear responsibility to model learning, to disseminate knowledge, and to encourage teachers to share their knowledge and skills with their peers. Johnson and Caldwell's beliefs indicate an expectation that principals themselves are responsible for learning, including an understanding of the processes of learning as described by various authors, including Argyris (1992), Fryer (1997), Hopkins (2000); and O'Sullivan (1997). Learning is more than just the acquisition of knowledge and skills: "Learning is the changing of behaviour" (Swieringa & Wierdsma, 1992). Fryer (1997, p. 1) defined learning as:

... a process of active engagement with experience. It is what people do when they want to make sense of the world. It may involve an increase in skills, knowledge, understanding, values and the capacity to reflect. Effective learning leads to change, development and a desire to learn more.

Argyris (1999) declared that, by being prepared to model being learners, and acknowledging that others want to contribute to the effectiveness of the organisation, leaders foster learning as part of the culture of the organisation.

2.3.5 Summary

In summary, principals are encouraged to value and utilise the work of teachers (Handy, 1996; Helgesen, 1996). Newmann and Wehlage (1996) claimed that the effectiveness of a school's teaching staff is affected by the quality of school leadership. Writing from his own experience as a principal, DuFour (1999) reinforced the need for principals and teachers to work collaboratively, sharing a focus on improving student learning outcomes.

Principals have a responsibility to model learning (Johnston & Caldwell, 2001) and to set up an environment in which professional learning occurs. Fullan (2000) claimed that having a professional learning community is a key factor in operating a successful school.

2.4 Schools as Learning Organisations

When explaining the emergence of the concept of schools as learning organisations, Silins et al. (1999, para. 4) contended that the concept arose out of "difficulties experienced in bringing about school reform." This section covers a range of topics, all of which relate to schools as learning organisations: school culture, building school capacity, professional learning for principals and teachers, the impact of change on school communities, and curriculum, pedagogy and assessment. The section concludes with a brief explanation of Education Queensland's response to the need for innovative curricula to meet the changing needs of students.

2.4.1 School Culture

To begin this section, it is appropriate to define "school culture" because the term will be used throughout this study to describe the complex, undefinable set of values, beliefs and customs that make each school special. Deal and Peterson (1999, p. 2) provided the following definition of school culture:

... the term *culture* provides a more accurate and intuitively appealing way to help school leaders better understand their school's own unwritten rules and traditions, norms, and expectations that seem to permeate everything: the way people act, how they dress, what they talk about or avoid talking about, whether they seek out colleagues for help or don't, and how teachers feel about their work and their students.

Stoll and Fink (1996, p. 81) argued that culture is "elusive and hard to capture because it is largely implicit and we only see surface aspects." They contended that, despite being difficult to define, culture is a significant factor in school change. When considering a school's professional learning processes, an assumption can be made that the beliefs held by the school community about professional learning, and the value placed on ongoing learning for teachers, are reflected in what has been termed the culture of the school.

2.4.2 Schools and Organisational Learning

Lewis (2001) contended that research into the benefits of adopting a culture of learning applies as much to education as it does to business and industry: "The notion of a 'learning community' although spawned from a post-industrial economy, is recognised as the appropriate response to the information age" (p. 5). Lewis recommended that

schools establish themselves as learning communities that support a culture in which everyone, including the principal, teachers, students and parents, are learners. Lewis explained that such communities value collegiality, teamwork, creativity and a shared vision for the future. The challenges that schools experience in ensuring continuous improvement were recognised by Handy and Aitken (1986) who argued that, while schools and other organisations share similar organisational concepts, they are also very different to one another.

O'Sullivan (1997, para. 3) argued that principals and middle management should be leaders in the creation of learning organisations: "Now is the time to wrest learning back for the profession – particularly headteachers and their senior and middle 'management' – in other words: re-invent schools as truly learning organisations and reengineer their structures and processes for life long learning."

What characteristics are observable if a school is a learning organisation? Research conducted by Silins et al. (1999) found that a range of dimensions have to be in place for a school to be regarded as a learning organisation. These dimensions included a trusting and collaborative climate, initiative and risk taking, shared and monitored goals, and professional development for all staff. The school environment is noted for the support school leaders provide for teachers as they work collaboratively, share information, and feel valued as they take the initiative in experimenting with new teaching and learning strategies. In a learning organisation, teachers participate in all aspects of the school's decision making processes and have access to professional development that will enhance their capacity to improve their performance. Basing his findings on the work of Leithwood, Jantzi, and Steinbach (1995), Stevenson (2001, p. 104) claimed:

School conditions that are conceptualised as directly affecting organizational learning are a shared vision or mission, a culture grounded in norms of collaboration and risk taking, structures for open and inclusive decision making, shared and systematic strategies for goal setting, and sufficient resources and appropriate policies, especially for professional development.

2.4.3 Building School Capacity.

Newmann and Wehlage (1996) identified the need for dimensions, such as those listed by Stevenson (2001), to operate interdependently for a school to build capacity and achieve success as a learning organisation. They cautioned those educators who assume that changing the organisational structure of a school will automatically lead to improved learning. "The tools of school restructuring do not assure a schoolwide focus on learning of high intellectual quality or authentic teaching" (Newmann & Wehlage, 1996, p. 28). Newmann and Wehlage warned that intellectual priorities could be swept aside as teachers, parents and students become preoccupied with the daily issues which school personnel have to address. These issues included student conduct and managerial tasks. Newmann and Wehlage (1996, p. 29) described the challenge of building school capacity:

In short, the challenge is not just to adopt innovation, but to learn how to use new structures to enhance faculty and student concern for learning of high intellectual quality. Without aiming toward this end, there is little reason to implement innovative structures.

Silins et al. (1999) identified the need for school-based systems and structures to be supportive of organisational learning, and highlighted the need for communication systems where teachers talk to each other in an open manner, seeking to share experiences and information. In this environment, teachers and principals respect and share the professional knowledge and experience held by other educators, including parents. Silins and Mulford (2000) reported that teachers' perceptions of the availability of resources to promote their effectiveness not only promotes a feeling of self-worth, but also is important in promoting their support for organisational learning. While knowledge increases through communication, access to time and resources further facilitates the learning process, and signifies that professional development is held in high regard by the school community (Silins et al., 1999; Silins & Mulford, 2000).

Silins and Mulford (2000) argued that, to ensure learning of high intellectual quality, teachers have to be highly competent and committed to carrying out the myriad of tasks involved in the education of students. However, having a group of highly skilled individuals is not enough, according to Newmann and Wehlage (1996) who expressed

the view that the task of schools is "to organise human, technical and social resources into an effective, collective enterprise" (p. 29). To create high-level organisational capacity, Newmann and Wehlage advised that schools have to generate a common vision for student learning, and build a collaborative, cooperative environment to work towards that vision. Interdependent structures enhance opportunities for teachers to collaborate and communicate in a meaningful way. However, having observed teachers organised into teams, but not having time to share information, Newmann and Wehlage (1996, p. 38) advised: "There must be time for the teams or other groups to communicate and work together." Hargreaves (2001) also asserted that teachers should be allowed time during the school day to collaborate: "Making time available during the school day helps improve the quality of curriculum, teaching, and learning that teachers can prepare for their students" (p. 172).

2.4.4 Professional Learning for Principals and Teachers

When researching appropriate forms of principals' professional development, Evans and Mohr (1999) explored whether they could encourage principals to reflect on their behaviour, and adopt changed behaviours that would make a genuine difference in their schools. Through their work with principals at the Annenberg Institute for School Reform, Evans and Mohr developed a set of seven beliefs that provides a comprehensive framework for principals to use to guide their own learning processes. The seven beliefs are summarised below:

- 1. Principals' learning is personal and yet takes place most effectively while working in groups;
- 2. Principals foster more powerful faculty and student learning by focusing on their own learning;
- 3. While we honor principals' thinking and voices, we want to push principals to move beyond their assumptions;
- 4. Focused reflection takes time away from "doing the work," and yet it is essential;
- 5. It takes strong leadership in order to have truly democratic learning;
- 6. Rigorous planning is necessary for flexible and responsive implementation; and
- 7. New learning depends on protected dissonance. (Evans & Mohr, 1999, p. 532)

When they evaluated their professional development sessions, Evans and Mohr (1999) asked the principals to describe what they were doing differently in their schools because of their involvement in the sessions. This method of evaluation was considered to be a more accurate assessment of the success of the sessions than did a "1 - 5" rating scale because, if principals had not changed their practice, the sessions were not considered to be worthwhile. Evans and Mohr (1999, p. 532) based their principles on their convictions about professional development:

Principals' work is essential. Principals who re-examine their belief systems and transform their practice facilitate change at their schools. Good professional development for leadership scrutinizes its own belief system, content and process. Everyone, including the facilitators, stretches and grows, and that truly makes a difference.

Similarly, the programs for professional development for principals offered by the Australian Principals' Centre (O'Mahony, 1999) are based on four key principles:

- Personal meaning, personal knowledge, experience and critical reflection must be recognised and utilised as essential knowledge that school leaders bring to the learning context;
- 2. Action, practicality, pragmatism, doing, and experiencing are vital links for involvement in the learning process where learners become responsible for their own learning . . . ;
- 3. Collegiality, collaboration, co-operation, mentorship and reciprocal support are vital components . . . ; and
- 4. Empowerment, control, ownership, self-direction and risk taking need to be encouraged. (p. 2)

The facilitators at Australian Principals' Centre gauged the success of their program by how well principals use their learning in the school setting, including changes in leadership behaviours, and the impact of their learning on school practices and outcomes. O'Mahony (1999, p. 2) explained the reasoning behind the evaluation processes: "Making the connections between what is gained through a professional development program and carrying out any resultant action back in a school is the litmus test of a successful program" (p. 2). Darling-Hammond, Ancess and Falk (1995) argued that, if a school is to develop as a professional learning community, the teachers should have genuine professional development opportunities. The existence of such opportunities represents a symbol of the school's commitment to excellence in teaching and learning, and reflect commitment to supporting the achievement of high standards generally expected of students. In order to promote high standards of teacher competence and capacity to implement curriculum, Darling-Hammond (1998) recommended that professional development becomes an ongoing part of teachers' daily work. Darling-Hammond et al. (1995) suggested that schools set up partnerships with high-quality sources of professional development, for example, universities and learning networks that transcend school boundaries. Scribner (1999) declared that teachers value attendance at workshops, even with their recognised negatives, because workshops provide an opportunity to overcome professional isolation, and share innovative teaching ideas.

Acquisition of sophisticated knowledge, and development of innovative teaching strategies, require teachers to engage in learning opportunities "that are more powerful than simply reading and talking about new pedagogical ideas" (Darling-Hammond, 1998, para. 10). Darling-Hammond proposed that teachers learn best in a learning community: "Teachers learn best by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see" (para. 10). DuFour (2002) shared his own learning experience gained from changing the focus of his attention from teacher improvement to a whole school focus on professional learning aimed at improving student performance:

When learning becomes the preoccupation of the school, when all the school's educators examine the efforts and initiatives of the school through the lens of their impact on learning, the structure and culture of the school begin to change in substantive ways. (para. 8)

2.4.5 Impact of Global Changes on School Communities

"Change has become normal and persistent Constant change, and increasingly rapid change, can be seen to be the norm" (Davies, 1996, p. 12). Evidence of significant change impacting on education lies in the proposition offered by Limerick et al. (1998) who argued that the corporate world has entered a post-industrial phase where knowledge is the primary resource. "To be accurate, it is not even knowledge that is the resource of the collaborative participants – it is the knowledge of how to use knowledge, or knowledge technology" (Limerick et al., 1998, p. 213). Drucker (1994, p. 204) contended that knowledge will become a valuable resource for all workers:

Education will become the centre of the knowledge society, and schooling its key institution.... In fact, it may not be too fanciful to anticipate that the acquisition and distribution of formal knowledge will come to occupy the place in the politics of the knowledge society that acquisition and distribution of property and income have occupied in the two or three centuries that we have come to call the Age of Capitalism.

In order to take up the challenge posed by Drucker, school communities need to confirm their status as learning communities, and to ensure that teachers have the attitudes, skills and knowledge to be confident as leaders in a knowledge society. Hargreaves (1997) argued for the reculturing of school communities so that they have the capacity to take control of change processes rather than having change imposed upon them. Stoll and Fink (1996) explained that, while some models of school culture assume that schools have one culture, other models propose that school culture is made up of various subcultures. Stoll and Fink proposed that in large secondary schools, the culture is influenced by the subsets of teachers that are based on common interests, and that it is this departmentalisation that can provide effective barriers to school-wide change.

Hargreaves (cited in Stoll & Fink, 1996, p. 88) proposed that teachers have several subcultures, namely:

- individualism bounded in metaphors of classrooms as egg crates or castles, autonomy, isolation and insulation prevail . . . ;
- collaboration teachers choose, spontaneously and voluntarily, to work together, without an external control agenda . . . ;
- contrived collegiality . . . teacher's collaborative working relationships are compulsorily imposed by administrators . . . ; and

 balkanisation – in this form of collaboration, teachers are neither isolated nor work as a whole school. Balkanised cultures . . . are characterized by insulation of subgroups from each other

Hargreaves also proposed a fifth subculture suited to meeting the needs of schools in a postmodern world. Stoll and Fink (p. 88) described the fifth subculture:

The moving mosaic - . . . Hargreaves promotes the notion of teachers flexibly and creatively engaged in different problem-solving tasks. Their orientation is one of continuous learning and improvement. They are characterized by collaboration, opportunism, adaptable partnerships and alliances. Thus membership of groups overlaps and shifts over time to meet the needs of the circumstance and context.

Stoll and Fink (1996, p. 81) asserted: "Understanding school culture is a vital part of school improvement." Various features of school culture that contribute to successful curriculum implementation and student outcomes have been identified by several researchers:

- 1. principals as curriculum leaders (Glatthorn, 1997);
- 2. teachers as leaders of learning (Cranston, 2000);
- commitment to professional development (Cranston, 2000; Darling-Hammond, 1996);
- 4. collaborative work cultures or professional learning communities or partnerships (Cranston, 2000; Fullan, 2000); and
- 5. focus on student work through assessment, and instructional practice aligned with student work and assessment (Fullan, 2000, p. 581).

Cranston (2000) contended that the impact on schools of rapid global changes has resulted in principals' roles evolving from educational and curriculum leadership to meeting managerial and accountability demands. However, Glatthorn (1997), while recognizing the functions competing for principals' attention, stressed the need for principals to be curriculum leaders. Tirozzi (2001) also supported the need for a focus on curriculum delivery and student learning outcomes as the core business of schools. Tirozzi predicted the emergence of a new educational environment, in which "the principals of tomorrow's secondary schools will be recognized as leaders of curricular change, innovative and diversified instructional strategies, data-driven decision making, and the implementation of accountability models for students and staff" (p. 438).

Authors of *Queensland State Education 2010* (State of Queensland Department of Education, 1999) acknowledged the need for schools to be responsive to changes in culture, society, families, and work practices when they stated:

- 1. The structure and character of the family is changing in ways that are unprecedented (p. 4);
- 2. Students face a diversity of experience of different cultures- from the diverse ethnic groups in our society and from technologically and globally driven changes to our culture (p. 4); and
- 3. The use of knowledge in the creation, production and the distribution of goods and services is increasing The speed and intensity of the change and their mutual interaction are of a new order (p. 5).

Silins et al. (1999, para. 4) asserted that a working environment that is structured to support professional learning is essential if schools are determined to meet the challenges offered by changes such as those listed above: "Schools that function as learning organisations in a context of rapid global change are those that have systems and structures in place that enable staff at all levels to collaboratively and continuously learn and put new learnings to use." Johnston and Caldwell (2001) supported this assertion, arguing that learning is a necessary, ongoing activity in educational organisations that wish to succeed.

Tirozzi (2001) outlined principals' accountability in relation to the success of schools, and recommended that teachers accept responsibility for student outcomes: "Teachers must be held accountable for improved student performance in their respective classrooms" (p. 438). Tirozzi supported his expectations of teachers by recognising the need for collaboration in the alignment of curricula, the setting of high standards, and a sustained commitment to student learning. Glatthorn (1997) also recommended the sharing of curriculum leadership between administrators and classroom teachers. Shared leadership needs to be characterized by collaboration and flexibility, with all parties working together to determine the balance between principal and teacher leadership.

Cranston (2000) acknowledged that organisational reforms challenge the traditional roles and responsibilities, competencies and attitudes of teachers. Cranston (2000, para. 2) noted other challenges experienced by teachers: "Globalisation, technology, and significant community, social and work changes are complex and interrelated influences requiring teachers to become expert curriculum leaders, networkers and partnership builders if they are to successfully prepare our citizens of the future." Cranston's statement indicates that the expanding nature of teachers' roles result in teachers working outside, as well as inside, the classroom. A longitudinal study conducted by Cranston (2000) in six Brisbane schools confirmed that teachers are now likely to be engaged in processes beyond the classroom, including:

- 1. working as a member of the school council and other strategic planning committees;
- 2. leading curriculum change, not only in the classroom, but across the school and possibly the district;
- 3. establishing partnerships beyond the school;
- 4. establishing and participating in local, global and electronic professional networks;
- 5. accepting responsibility for self-development; and
- 6. promoting the school in the wider community.

Teachers who are prepared to become engaged in all or some of the activities listed above have the potential to make a positive contribution to a professional learning community. Fullan (2000, p. 582) explained that reculturing or "the process of developing professional learning communities in the school" is the key to making a difference to the quality of student learning outcomes.

2.4.6 Curriculum

O'Sullivan (1997) described schools as having various spheres of activity that have life cycles, and require appropriate learning opportunities for students, staff and school communities to ensure their successful implementation. These activities include documenting and implementing local and systemic priorities, curriculum planning, pedagogy, and assessment and reporting.

Curriculum, as the basis for formal learning in schools, could be considered from two perspectives. One perspective is the formally stated curriculum that is the collection of goals, subject area content, unit plans, teaching strategies and evaluation methods. The second perspective is the dynamics of teaching and learning. These include the learning environment, motivators for learning, interactions between students and teachers, and what students have learnt regardless of curriculum content. Sergiovanni (1991) argued that the latter perspective, or what he calls "curriculum in use," is more "influential in determining the type and quality of teaching and learning than is the subject-matter taught" (p. 193).

Fullan (2002, para. 32) contended that effective principals are crucial in generating significant, sustainable educational reform: "School improvement depends on principals who can foster the conditions necessary for sustained education reform in a complex, rapidly changing world." Fullan (2000) declared that factors impacting on curriculum development and implementation include the environment external to the school: parental and community expectations, technology, government policy, corporate connections and the wider education profession.

Teachers and principals now operate under a microscope in a way that they have never had to do before. This new environment is complex, turbulent, contradictory, relentless, uncertain and unpredictable. At the same time, it has increased the demands for better performance and greater accountability. (Fullan, 2000, p. 582)
Fullan (2002) described the principals who effectively lead cultural change as having moral purpose, understanding change processes, having the capacity to improve relationships, being able to create and share knowledge, and being able to learn in context. These leaders also have to be able to cultivate parallel leadership, and generate coherence, concentrating on student learning as the focus of school reform.

Historically, Australian schools have implemented formal curricula that have been developed centrally with little input from school-based personnel, and with little regard for the diversity of schools that would be implementing the curricula. Gibson (1992) highlighted the gap between curriculum development and its implementation in the classroom when he stated: "Guaranteeing that curriculum policy is carried into the classroom and implemented as it was conceived has always been rather hazardous" (p. 1). According to Gibson, teachers were not generally involved in evaluating old curricula, and were removed from the decision-making surrounding the development of the new curricula. They received minimal training in the structure of the new curricula and how the writers expected that it would be implemented. Johns and Dimmock (1999) also recognised the divide between curriculum policy aims and school practice, noting that schools are often removed from the factors influencing policy makers, just as the policy makers are not driven by the constraints and opportunities experienced by schools in delivering the curricula.

New structures established in Queensland schools during the 1990s, with a focus on localized decision-making, resulted in the reconceptualisation of decision-making practices related to curriculum implementation. The *Queensland School Reform Longitudinal Study* (*QSRLS*) (State of Queensland (Department of Education), 2001a), recommended professional development for teachers with a particular emphasis on pedagogies, and the building of learning communities in schools. Based on the results of the *QSRLS*, Education Queensland developed a range of strategies focused on improving the quality of teaching and learning in Queensland State Schools. These strategies included a trial of New Basics, training for all teachers focusing on improved pedagogy, and a review of assessment and reporting processes.

In research done during the 1970s and 1980s, teaching effectiveness focused on linking teaching behaviours with achievement test scores (Sergiovanni, 2001). Sergiovanni stated: "The behaviors of teachers that correlated with high student outcomes were considered to be effective" (p. 226). When focusing on student achievement as a measure of teacher productivity, Sergiovanni argued that the research failed to recognise the subtle differences in teaching practices that distinguish outstanding teachers. Recent research has focused on the use of knowledge to reason, to solve problems, and to create new knowledge. Sergiovanni defined knowledge as being limited or generative. He described generative knowledge as leading to "more learning, new learning, more expansive learning, and the transfer of learning" (p. 226), whereas limited knowledge is knowledge that is accumulated and stored, but not used to create new knowledge.

The research, described by Sergiovanni (2001), focused on the active construction of knowledge through "providing students with opportunities to answer questions, to discuss and debate meanings and implications, and to engage in authentic problem solving in real contexts" (p. 227). Sergiovanni (p. 229) described the active construction of knowledge as authentic learning: "Authentic learning calls for student work to reflect the *construction of knowledge*; through *disciplined inquiry*; to produce discourse, products, and performances that have meaning to students *beyond being successful in school.*" Authentic learning, as defined by Newmann, Secada, and Wehlage (1995), results in students being actively engaged with the curriculum. Newmann, et al. (1995) proposed that four standards should be present for authentic learning to take place. These standards are:

- 1. higher order thinking (p. 29);
- 2. deep knowledge (p. 31);
- 3. substantive conversations (p. 35); and
- 4. connections to the world beyond the classroom (p. 40).

Sergiovanni (2001) asserted that learning and teaching cannot be separated, just as learning and teaching cannot be separated from assessment processes. Lewis (2001) contended that one task of the principal in establishing a learning community is to "align assessment and learning experiences, moving from a model of remediation to one of prevention and continuous improvement" (p. 6). The "Report of the Assessment and Reporting Taskforce" (State of Queensland (Department of Education), 2002b), reflected the views expressed by Sergiovanni (2001) and Lewis (2001) that curriculum, pedagogy and assessment should be closely interrelated and interdependent: "Assessment is a key aspect of the teaching and learning process. Assessment builds from the curriculum: assessment tasks come from, or are embedded in, curriculum tasks" (State of Queensland (Department of Education), 2002b, p. 4).

At the forefront of curriculum renewal in Queensland is the New Basics Project currently being trialled in 59 of 1296 Queensland State Schools. The Project began in 38 schools in 2000 (Phase I), and 21 schools joined the Project in 2001(Phase II). New Basics models the recommended alignment of curriculum, pedagogy and assessment to engage students in future-oriented learning: "The New Basics Framework is an integrated framework for curriculum, pedagogy and assessment that deals with new student identities, new economies and workplaces, new technologies, diverse communities and complex cultures"(State of Queensland (Department of Education), 2000, para. 3). New Basics is aimed at addressing the issues of change, particularly in relation to identifying knowledge and skills required for the future, and providing more efficient and effective linkages between curriculum, pedagogy and assessment.

Curriculum planning and assessment in New Basics schools is organised around Rich Tasks that give students the opportunity to solve substantive, real life problems using cognitive, linguistic, physical and electronic tools. The purpose of using Rich Tasks as curriculum organisers is to simplify a seemingly crowded curriculum in a manner that will focus on student learning (State of Queensland (Department of Education), 2001). The use of Rich Tasks "focuses a large proportion of the school's organisational capacity on intellectual engagement and relevant work . . . - the two characteristics that research identifies as necessary for improved outcomes" (State of Queensland (Department of Education), 2001, p. 5). Three-year curriculum plans culminate in the presentation of Rich Tasks, which were described as "a culminating performance or demonstration or product that is purposeful and models a life role"(p. 5).

Lewis (2001) declared that the development of a learning culture would result in the school being forced "to reflect on the alignment or lack of alignment of their approaches to learning, teaching and assessment; and the ways they record, reflect and report aspects of this relationship" (Lewis, 2001, p. 5). Assessment needs to be authentic, that is, to "require a performance that will still have currency after formal schooling ends" (Tanner, 2001, p. 25). Shepard (1995) argued that, not only should assessment enhance a child's learning, it should also be rigorous enough to influence the teaching and learning process.

In brief, the factors impacting on successful creation of schools as learning organisations include:

- leadership roles of principals and teachers (Cranston, 2000; Crowther et al., 2002);
- 2. collaborative work cultures (Silins et al., 1999);

- appropriate organisational structures (Newmann & Wehlage, 1996; Silins et al., 1999);
- professional development for principals and teachers (Darling Hammond et al., 1995; Silins et al., 1999);
- 5. capacity to manage change (Davies, 1996; Hargreaves, 1997); and
- alignment of curriculum, pedagogy and assessment (Lewis, 2001; Sergiovanni, 2001).

In summary, researchers have expressed a belief that schools as learning organisations support ongoing improvement in outcomes for students. In order to create schools as learning organisations, a process of reculturing may have to occur. Establishing supportive organisational structures will not alone change pedagogy. Significant long-lasting change will only take place if there is a positive change in the culture of the school, so that the school-wide focus is on professional learning to support improvement in student learning.

2.5 Conclusion

Current research indicates that organisations, including schools, benefit from an environment where leadership is shared across the organisation. The principal has a responsibility to be a leader of learning. In a vibrant learning organisation where the principal, teachers, parents and students engage in worthwhile learning activities, and where the culture of the school supports emerging leaders who focus on implementing quality curricula that is aligned with students' current and future needs, the outcome should be exceptional student learning outcomes.

The review of the literature has focused on principals as learners, and leaders of learning organisations. To provide a response to Research Question 1, a list of propositions about professional learning has been drawn from the research reviewed in this chapter. The propositions are based on a desire to learn from the collective findings of eminent researchers, and a desire to provide practitioners with recommendations for effective leadership of professional learning communities. Three criteria have been used to select the propositions:

- 1. The proposition is promoted by international researchers;
- 2. The proposition is located in the work of multiple theorists; and
- 3. The proposition has the potential to be observable in the work of principals of Queensland state schools.

The following is a list of defensible propositions developed from the literature using the criteria listed above:

- Professional learning of principals can be viewed as an organisation-wide process that engages principals and teachers (Bell & Harrison, 1998; Johnston & Caldwell, 2001; Crowther et al., 2002; Helgesen, 1996);
- Professional learning of principals should be future oriented (Hargreaves, 1997; Lewis, 2001; Schein, 1996);
- Professional learning can be linked to a range of leadership styles (Handy, 1996; Schein, 1996; Senge, 1990b);
- Systemic imperatives can act as a stimulus for professional learning (O'Sullivan, 1997; Stevenson, 2001);
- Professional learning can be either deep or superficial (Argyris, 1992; Fryer, 1997; O'Sullivan, 1997);
- Professional learning can be either adaptive or generative (Senge, 1990b; Sergiovanni, 2001);
- 7. Professional learning has a double-loop quality (Argyris, 1992; Senge, 1990b); and
- School context affects the dynamics of professional learning (Fullan, 2000; Gronn & Ribbins, 1996; Schein, 1996).

In Chapter 5, the propositions above will be compared with the key principles drawn from the case studies to provide the basis for a framework for learning and development for principals whose goal is to work with teachers to successfully implement innovative curriculum programs.

CHAPTER 3: METHODOLOGY

3.1 Introduction

In Chapter 1, the overall direction of the study was identified as an investigation of the processes of professional learning that principals adopt when implementing innovative curriculum in their schools. Three Research Questions were developed to provide a framework for the study. Through a review of the literature from several fields, Chapter 2 identified characteristics of professional learning that are relevant to principals of state schools in Queensland. Chapter 3 will build on Chapter 2 by clarifying the focus of the study, delineating the research questions, outlining the research plan, and describing the methodology used for data collection and analysis in the study. In the following sections, theoretical and practical dimensions of the research design will be addressed.

Research Question 2 provides the parameters for the empirical investigation: "What are the essential features of the learning processes in which principals engage while leading their schools through significant curriculum change?" This study focuses on processes of professional learning used by the principals of three schools while they were implementing significant curriculum change. The implementation of the New Basics Project provided the framework for the principals' professional learning for the purposes of this study.

<u>3.2 Justification for the Methodology</u>

Denzin & Lincoln (2003, p. 9) contended that "qualitative research, as a set of interpretive activities, privileges no single methodological practice over another." However, Wiersma (1995) advised that the two factors that should be considered when determining the methodology for research are the need to be systematic, and to ensure validity. First, Wiersma recommended a systematic process for qualitative or quantitative research. The five steps in the process include: "Identifying the problem, reviewing information, collecting data, analysing data and drawing conclusions" (Wiersma, 2000, p. 4). These steps are suited to educational research and Wiersma advised that they are not lock-step, and may overlap or be integrated according to the type of research being undertaken.

Second, the researcher has to consider the issue of validity simultaneously from two perspectives. "Internal validity is the extent to which results can be interpreted accurately, and external validity is the extent to which results can be generalized to populations, situations and conditions" (Wiersma, 1995, p. 5). When considering the use of qualitative research methodology, proponents of the positivist paradigm contend "that there is a reality out there to be studied, captured, and understood, whereas postpositivists argue that reality can never be fully apprehended, only approximated" (Denzin & Lincoln, 1998, p.8).

Further discussion about methodology related to this study is contained later in this chapter.

3.2.1 Case Studies - Theory

While acknowledging the different paradigms that have influenced qualitative research over time, Denzin and Lincoln (p. 4) offered a generic definition of qualitative research: Qualitative research ... consists of a set of interpretive, material practices that make the world visible. They turn the world into a series of representations, including field notes, interviews, conversations At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them.

Wiersma (1995) described case study as being commonly, but not always, associated with qualitative research. When defining qualitative research, Ertmer (1997, p. 155) stated: "... *qualitative research* is a broad term that encompasses a variety of approaches to interpretive research." Denzin and Lincoln (1994) described qualitative research as being "multimethod in focus, involving an interpretive, naturalistic approach to its subject matter" (p. 2). Miles and Huberman (1994) reinforced this view when they stated: "One major feature is that [well-collected qualitative data] focus on *naturally occurring, ordinary events in natural settings,* so that we have a strong handle on what 'real life' is like" (p. 10).

Another feature of qualitative research relates to the collection of the data from an onsite source where the researcher is able to experience the nuances of the context. Miles and Huberman (1994) argued that on-site collection of data allows the researcher to provide the reader with vivid analyses of lived experience, thus creating richness not possible if the data were collected by telephone or written response.

Minichiello, et al. (1995, p. 5) contended that an interpretive approach to qualitative research allows for "understanding of direct lived experience rather than construction of abstract generalisations." Yin (1989) asserted that survey or experimental strategies are not suitable methodologies for research in complex real life situations. An example of interpretive research methodology is case study. Yin contended that, when undertaking research, the case study method is suitable for presenting data that will contribute to the body of "knowledge of individual, organisational, social, and political phenomena" (p. 14). Burns (1996) advocated for the use of case study research as it enables exploration and description of the real-life context, allowing for 'how', 'who', 'why' or 'what' questions to be asked.

Yin (1989) advised that case study methodology is appropriate when researchers are examining contemporary events over which they have no control. In supporting the use of case study in educational settings, Lancy (1993, p. 140) stated: "The case study, used alone or as part of a large-scale quantitative study is the method of choice for studying interventions or innovations. And education is replete with these." Case study allows an investigator "to retain the holistic and meaningful characteristics of real-life events – such as … organizational and managerial processes" (Yin, 1989, p. 14). Burns (1996) stated: "The case study … typically involves the observation of an individual unit, e.g. … a family group, a class, a school, a community" (p. 364).

Stake (2003) contended that a researcher who does not have an intrinsic interest in one case may choose to study a number of cases that may be similar when investigating a particular issue. Stake contended that the similarities or differences between multiple cases may be important to development of a better understanding about a wider range of cases. Stake (p. 138) referred to the study of multiple cases as *collective case study*. Yin (1994) asserted that there are advantages and disadvantages when using multiple-case

studies as opposed to single-case study. In support of multiple-case study, Yin (p. 52) stated: "The evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust." Yin raised the extensive resources and time needed to conduct multiple-case studies as one of the disadvantages.

Wiersma (2000) advised that a positive aspect of case study is that it allows some flexibility in the design of the study, so that adjustments can be made in response to the data collected in each phase of the data gathering. Collection of data over a period of time, rather than during one session, gives the researcher the opportunity to collect data that may explain the cause and effect of particular events that happen during the data collection. Miles and Huberman (1994, p. 10) stated:

Data collected over a sustained period makes them powerful for studying any process...; we can go far beyond "snapshots" of "what?" or "how many?" to just how and why things happen as they do – and even *assess causality* as it actually plays out in a particular setting. And the inherent *flexibility* of qualitative studies (data collection times and methods can be varied as a study proceeds) gives further confidence that we've really understood what has been going on.

To gain an in-depth understanding of the events or processes being investigated, Patton (1990, p. 90) advised: "It is more desirable to have a few carefully done case studies with results one can trust than to aim for large, probabilistic samples with results that are dubious because of the multitude of technical, logistic, and management problems." When designing multiple-case studies, Yin (1994, p. 53) advised that the researcher should consider whether the results are likely to be replicated across the studies: "Each case must be carefully selected so that it either (a) predicts similar results or (b) produces contrary results but for predictable reasons." Yin (p. 54) contended that an important step in replicating studies of multiple cases is "the development of a rich theoretical framework" that "later becomes the vehicle for generalizing to new cases." When the similar issues are being studied in three school sites, comparison of the results is likely to uncover similarities and differences between the sites, thus allowing for the development of a rich, theoretical framework as described by Yin.

3.2.2 Data Collection Processes for Case Studies

Yin (1994) declared that a major strength of case study research is the opportunity to use a variety of sources of evidence which allows for triangulation of the data: ". . . any finding or conclusion in a case study is likely to be much more convincing and accurate if it is based on several different sources of information" (p. 92). Minichiello et al. (1995) contended that interviews are one of the best forms of data collection when seeking to interpret the meaning of someone's actions. However, Wiersma (2000) advised that other sources of data may be available that may contribute to the research problem. "These other sources often consist of records maintained on a routine basis by the organization in which the study is being conducted" (p. 263.)

Yin (1994) listed six sources of evidence that could be used for data collection when employing case study methodology: documentation, archival records, interviews, direct observation, participant observation, and physical artefacts. Burns (1996) argued that the main techniques used for data collection when using case study methodology "are observation (both participant and non-participant depending on the case), interviewing (unstructured and structured), and document analysis" (p. 365). Best and Kahn (1998, p. 248) offered a similar range of data collection sources, but included questionnaires, psychological tests and inventories. When listing sources of data, Ertmer (1997, p. 158) chose to be more general in her approach: "Data gathered in case studies can be in the form of words, images, or physical objects."

Yin (1994) also confirmed the need to use multiple sources of data. In support of interviews as a significant source of data, Yin stated: "Interviews are an essential source of case study data, because most case studies are about human affairs" (p. 85). However, he cautioned that interviews should be regarded as being verbal reports, and may be subject to bias or poor recall. For this reason, to ensure validity, Yin advised that data collected during interviews should be corroborated with information from other sources.

3.2.2.1 Interviews.

Siedman (1998) contended that, at the heart of in-depth interviewing is a desire to understand the experience of other people, and how they interpret that experience. One of the core elements of being human is the ability to symbolise experience through language (Siedman, 1998). By interviewing people, the researcher is able to access the context of people's behaviour, and to understand the meaning of that behaviour. Siedman (p. 4) stated: "To observe a teacher, student, principal, or counsellor provides access to their behavior. Interviewing allows us to put behavior in context and provides access to understanding their action." Interviews, rather than surveys, are a means of accessing personal interpretations of social situations (Yin, 1994).

Minichiello et al. (1995, p. 62) and Gillham (2000, p. 60) described various forms of interviews as being on a continuum, ranging from unstructured interviews to structured interviews. Focused or semi-structured interviews would be placed between unstructured and structured interviews on the continuum. Unstructured interviews, while being focused on the interviewer's research interests, are likely to resemble an informal conversation. Semi-structured interviews are organised around a list of topics, without specific questions or fixed ordering of the questions. Formal, structured interviews are conducted with a predefined set of questions, in a specific order, to ensure comparability with other studies or to prevent differences between interviews (Minichiello et al., 1995). Minichiello et al. (p. 65) stated: "Both unstructured and semi-structured (or focused) interviews involve an in-depth examination of people and topics."

When describing interviews as a data collection technique for case studies, Yin (1994, p. 84) stated: "Most commonly, case study interviews are of an open-ended nature, in which you can ask key respondents for the facts of a matter as well as for the respondents' opinions about events." Minichiello et al. (1995) explained that open-ended questions are asked when the researcher wants information on how the respondent thinks or feels about the topic. The responses often lead to further questions, making the analysis of data more complicated than if closed-ended questions were asked. Closed-ended questions are those questions which the respondent can answer with "Yes/No/Don't know" or other defined response such as a name or number. Minichiello et al. offered the following criticism of closed-ended questions: "The primary criticism of closed-ended questions is that they do not allow the researcher to find out from the informant what is relevant to them or allow them to express different views" (p. 63).

Gillham (2002) explained that, despite the enormous amount of time involved, interview are an appropriate means of data collection when the questions that the researcher wishes to ask are open-ended, a small number of people are involved, and they are easily accessible. Also, interviews are appropriate if anonymity is not important and a 100% response rate is desirable. Gillham (p. 62) contended that "a great strength of interviews is that you can pick up ... nuances which are often quite subtle."

When describing the practical issues associated with interviewing, Minichiello et al. (1995) concluded that there are no rules or one best method for doing in-depth interviews. Instead, Minichiello et al. outlined the strategies that they found helpful as experienced researchers. Before starting interviews, they considered how to approach the informants, and how many interviews would be useful. For example, the interviewer may tell "the informant a little about the general nature of the research issue and how the researcher intends to conduct the entire project" (Minichiello et al., 1995, p. 78). At interview, the interviewer considers how to establish rapport with the informant, and how the questions will be asked. Minichiello et al. (p. 80) described recursive questioning as a strategy for establishing a conversational interaction: "It enables the researcher to do two things - to follow a more conversational model and, by doing this, to treat people and situations as unique. The interaction in each interview directs the research process." When using recursive questioning, the responses to the initial questions may result in the interview drifting away from the proposed structure of the interview. Minichiello et al. (p. 81) reported that interviewers have developed tactics to keep the interview on track: "They use transitions to refocus the informant's attention on the topic or issue." Transitions are used to connect something said by the informant with the topic of interest. Consideration should also be given to the types of questions asked so that the responses cover a range of information. Minichiello et al. (p. 88) described a range of question types including descriptive, structural, opinion, feeling, knowledge, sensory and background demographic questions. Probing questions are used to elicit more information than prompted by the initial question, and cross-checking is used to verify the honesty of the informant's responses. Finally, the interview should be closed using verbal and non-verbal cues aimed at maintaining rapport with the informant.

3.2.2.2 Direct observation and document analysis.

Burns (1996) and Best and Kahn (1998) asserted that, together with in-depth interviewing, observation and document review are the main techniques for collecting qualitative data. When describing the use of observations as a source of data, Best and Kahn stated: "When observation is used in qualitative research, it usually consists of *detailed notation* of behaviours, events, and the contexts surrounding the events and behaviors" (p. 253). Yin (1994) advised that visits to the case study site should provide opportunities for direct observation, ranging from formal to casual data collection: "Observational evidence is often useful in providing additional information about the topic being studied" (p. 87).

A case study researcher may use a wide range of documents as sources of data. Burns (1996) advised that the documents might include minutes of meeting, agendas, policies, administrative reports, files, diaries, budgets, and photographs. He advised that such documents are "important as another way to corroborate evidence devised from other sources" (p. 372). However, Burns cautioned that documents are written with a specific purpose or audience in mind, and that they may be biased or be inaccurate.

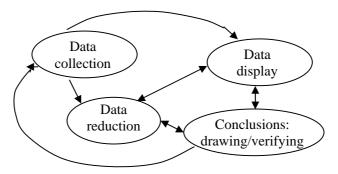
Hodder (2000) recommended that documents should be interpreted according to the context or conditions under which they were produced. He cautioned that meaning is taken, not from the writing of the documents, but from the reading thereof: "Once words are transformed into a written text, the gap between the 'author' and the 'reader' widens and the possibility of multiple reinterpretations increases" (Hodder, 2000, p. 704). Hodder also raised the concern that "as a text is reread in different contexts, it is given new meanings, often contradictory and always socially embedded" (p. 704). Despite his concerns regarding the use of documents as sources of evidence, Hodder did support the comparison of texts with other data. Comparison of the contents of documents with other sources of data allows for particular biases to be recognised and understood.

3.2.3 Data Analysis - Theory

The purpose of data analysis is to find meaning in the information collected from one or more sources. Minichiello et al. (1995, p. 247) described data analysis as "the process of systematically arranging and presenting information in order to search for ideas." Data

analysis can be divided into three stages that Minichiello et al. (1995, p. 247) described as "coding the data," ". . . refining one's themes and propositions," and ". . . reporting the findings." Miles and Huberman (1994) offered a similar process for data analysis, illustrated in Figure 3.1, which incorporated data collection, data reduction, data display and drawing or verifying conclusions.

Figure 3.1. Components of data analysis: Interactive model (Miles & Huberman, 1994, p. 12)



Tesch (1990, p. 119) explained that there are two basic methods of organising data: "1)... from prior material, such as the theoretical framework adopted and/or the research questions ...; or 2) it can be constructed from the data themselves." The data reduction process involves segmenting the data into "meaning units," described by Tesch (1990, p. 116) as: "a segment of text that is comprehensible by itself and contains one idea, episode, or piece of information." After the data are divided into meaning units, the units are categorised according to "recurring themes or events which stand out" (Minichiello et al., 1995, p. 248).

Miles and Huberman (1994), and Bogdan and Biklen (1992) recommended a process of coding as a means of categorisation, and offered a list of generic codes for use by researchers. The codes suggested by Bogdan and Biklen (1992, pp. 167-172) included:

- 1. Setting/Context: material that allows you to place your study in a larger context;
- 2. Definition of the situation: how the subjects define the setting or particular topic;
- 3. *Perspectives*: ways of thinking about the setting shared by all or some subjects;
- 4. *Ways of thinking about people and objects*: understandings of each other, of outsiders and of the objects in their world;
- 5. Process: sequences of events, changes over time;

- 6. Activities: regularly occurring kinds of behavior;
- 7. *Events*: specific activities that occur in the setting or lives of the subjects;
- 8. *Strategies*: tactics, methods, ways, techniques, ...ways people accomplish things;
- 9. Relationships and social structure: regular patterns of behaviour; and
- 10. *Methods*: material pertinent to research procedures, problems, joys, dilemmas.

The physical handling of data, (that is, notes, transcripts of interviews, documents collected on-site), involves several steps. Bogdan and Biklen (1992, p. 175) stated: "It is difficult, if not impossible, to think deeply about your data unless you have the data sorted and in front of you." According to Bogdan and Biklen, the first step is to number all of the pages sequentially. The second step is to read the data, and think about possible coding categories. The third step is to read the data again, and to segment the data into meaning units. The fourth step is to assign codes to the units of data. The codes should be assigned a notation for ease of reference. Bogdan and Biklen recommended that the researcher "go through all of the data and mark each unit (paragraph, sentence, etc.) with the appropriate coding category" (p. 177), and a reference to the original transcript. Wiersma (1995) presented two key characteristics of a coding system: "(1) the system accurately captures the information in the data relative to what is being coded and (2) this information is useful in understanding the phenomenon being studied" (p. 218).

The fifth step relates to the physical sorting of data. Bogdan and Biklen (1992) offered two methods for sorting data: "The Cut-Up-and-Put-in-Folder Approach" (p. 177) and "The File Card System" (p. 179). Minichiello et al. (1995) recommended the use of index cards. In using the first method, the identified units of data are cut up, sorted into the category identified by the code, then stored in manila folders. The second method involves pasting the units of data onto index cards, and storing the cards in file boxes. A range of computer software packages is available for sorting data into files and sub-files. The use of computers has the advantage of being able to handle large quantities of textual data. When the data have been sorted, the next step is the process of 'writing-up'. Minichiello et al. (1995) asserted that the data analysis and writing-up processes cannot be separated. "In fact, the analytic and writing-up processes are totally intertwined" (p. 273). One method of writing up the research, and drawing conclusions is to present the data in the form of a case study. Wiersma (1995) stated that his work "does not separate case study as a general research methodology because case study is recognized more as a way of reporting research and can cut across other types of research" (p. 17).

3.3 Research Procedures

3.3.1 Introduction

The research methodology was designed for the collection of data that inform a response to the research questions. In response to Research Question 1, "What are the essential concepts and processes of professional learning which emerge from a review of the literature relevant to successful school innovation?", a summary of the current literature relevant to the conceptualisation of the professional learning of principals was presented in Chapter 2.

In response to Research Question 2, "What are the essential features of the learning processes in which principals are engaged while undertaking significant curriculum change?", research was undertaken in three schools as described below. The literature review and the data collection were undertaken concurrently, as per Wiersma's (2000) advice regarding ethnographic research. There were times when the data collection commanded more of the researcher's attention than the literature review and vice versa.

The Research Problem was investigated through a qualitative case study approach, involving three case studies. Based on Patton's (1990) advice that researchers should aim for quality rather than quantity when collecting data, this research is limited to three in-depth case studies, rather than a greater number presented in less depth, and thus of less value for the purpose of this study. Case study methodology was used for this research because it offered a strategy for collecting and analysing data in a real life context. The cases were presented and analysed using concepts from the literature as the major organising categories:

• Setting;

- School as a learning organisation;
- Leadership for professional learning;
- Learning, curriculum and change; and
- Principal as leader learner.

Following the advice of Yin (1994) and Wiersma (2000), interviews were considered an appropriate data collection strategy for this research because the researcher wanted to gain the participants' personal interpretations of events related to professional learning and the implementation of innovative curricula. School documents and direct observation were also used as data sources. An eight-month data collection period provided an opportunity for the researcher to build upon the collection of data about the events in the school pertinent to the study. During the second and third interviews, the participants were able to provide the researcher with updates on how the processes of professional learning had developed, how the curriculum implementation was progressing, as well as explaining why particular events had occurred.

3.3.2 Selection of Schools

Three schools were selected for this study, taking into account the following factors:

- presumed innovative leadership;
- researcher's anticipation of the usefulness of the data;
- variance in size and sector; and
- convenience for the researcher.

First, the researcher perceived that the principals of the schools above had a reputation for innovative leadership. Prior to, and separate from this study, the schools were selected by Education Queensland personnel to participate in Phase I of the New Basics Project, a trial of innovative curriculum implementation in Queensland State Schools that was described previously in Chapter 2. The selection of the schools for the trial recognized the school community's apparent preparedness to adopt innovative approaches to curriculum implementation. While keeping in mind the limited validity of external perceptions of internal school operations, three schools were selected where innovation was perceived to be happening. Second, from the outset, the researcher aimed to produce research findings that could be used by principals when endeavouring to enhance their professional learning processes. Therefore, she wished to conduct research in schools where the principals were presumably innovative leaders. This presumption appeared to be validated by the schools' selection for the trial of New Basics. When planning the study, the researcher anticipated that the data collected at the three schools would be useful in the construction of a framework for professional learning for principals, but she was also conscious of not manipulating the data collection to suit this purpose.

Third, the schools include a range of sizes and sectors. Highgrove State High School (not its real name) is one of two large secondary schools in a non-metropolitan city. Hillview State School (not its real name) is a large primary school in the same city. Riverbend State School (not its real name) is a medium sized primary school in a rural town relatively close to the city where the other two schools are located.

Fourth, the researcher did not wish to collect data in local schools in which she works on a regular basis. A cohort of schools implementing New Basics was located in an area reasonably accessible to the researcher, and three of the principals of these schools indicated their willingness to be involved in this study.

3.3.3 Selection of Participants

The three principals of the schools described in the previous section were invited to participate in the study. Each of the principals was contacted by telephone, and sent an email (Appendix A) confirming the request to be involved in the study. Each of the principals agreed to be interviewed and nominated members of staff, whom they regarded as teacher leaders in curriculum implementation, who might also be involved in the study. Each of the teachers had been an active participant or leader in implementing innovative curricula. While the researcher was aware that the people nominated by the principal might not represent the full thinking of all of the teachers, she accepted that they were individuals who had important insights into the processes in the school. The research strategies that were used provided the researcher with some opportunity to test the validity of their perceptions, and to enquire further if it appeared

desirable to do so. (To protect the identity of the participants, fictitious names have been used.)

William, the principal of Highgrove State High School, had 10 years experience as a secondary principal, and had been at Highgrove for four years at the beginning of the study. Robert had six years experience as principal in small primary schools prior to his appointment to Hillview State School. Margo had 10 years of experience as a primary school principal, and had been principal of two smaller schools before her appointment to Riverbend.

At each school, interviews were conducted with two other members of the professional staff nominated by the principal as being curriculum leaders. These people were either deputy principals, heads of department or teachers. At Highgrove, William nominated Brian and Anne. Brian's substantive position was Head of Department. However, he was acting as Deputy Principal when the study began, while Anne was a teacher librarian. Both Brian and Anne made significant contributions to the learning and development of the teachers of Highgrove, with Brian being a key leader in the implementation of New Basics in the school.

Hillview State School experienced several changes in principal during the course of the study, with Robert taking leave for a term, returning to the school for a short period, and then leaving permanently to take up another position. During Robert's absences from the school in 2000, Milton, the Deputy Principal, acted as Principal. The second principal interview was conducted with Milton. David was appointed to the school as principal at the beginning of 2001, and the third principal interview was conducted with him. The researcher was aware that the change in principalship may impact negatively on the outcomes of the study. However, given that similar disruptions to school leadership occur in many schools, the researcher decided to continue collecting data at the school, believing that the data associated with how the changes impacted on implementing innovative curricula would contribute positively to the study.

Robert nominated Milton, Deputy Principal, and Sean, an upper-school teacher, as the other two participants in the study. One interview was conducted with Sean. For the

second and third interviews, Milton seemed reluctant to release Sean from classroom duties to be interviewed, and stated that Sean would not make himself available before or after school for interviews. No reasons were offered for Sean's lack of ongoing participation in the study.

At Riverbend State School, Margo nominated Ken and Kate, whom she regarded as key leaders in the processes of curriculum renewal that had taken place since Margo's appointment to the school. The teachers made themselves available for interviews before school or during their non-contact time. When Margo was asked to act as relieving principal at another school for a year, Rose, one of the teaching staff, was appointed as acting principal at Riverbend. One interview was conducted with Rose.

3.3.4 Data Collection

3.3.4.1 The interview process.

Three visits were made to each school over a period of eight months (Table 3.1). These were timed to fit in with the researchers' work commitments, the schools' schedule of events. The visits were also spread across an extended period to allow for the collection of data that would allow for the explanation of cause and effect of particular events (Miles & Huberman, 1994).

Research Stage (Data Collection)	Purpose	Procedure	Date
Pilot Study	To test validity of the study	Interviews with experienced principals.	1999
Case Study 1 Highgrove	Orientation and Interviews	Interviews with Principal, Head of Department and Teacher Librarian.	October 2000 December 2000 May 2001
		Attend and observe curriculum planning meeting for New Basics	December 2000
Case Study 2 Hillview	Orientation and Interviews	Interviews with Principal, Deputy Principal and Teacher.	October 2000 December 2000 May 2001
Case Study 3 Riverbend	Orientation and Interviews	Interviews with Principal and two Teachers.	October 2000 December 2000 May 2001
Literature Review	Review current literature relevant to the study	Collate data gathered from the literature pertinent to the study.	2000

Table 3.1. Chronology of data colle	ection
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The data for this research were collected from two main sources: interviews with principals, interviews with teacher leaders. Some data were collected from school-based documents that the teachers used to illustrate their responses during interview. The researcher attended one teacher meeting at Highgrove as an observer. The first two sets of interviews were conducted at the beginning and the end of the fourth school term of 2000, and the third set of interviews was carried out early in the second term of 2001. Before each visit to the schools, the principals were contacted by the researcher, and a suitable date and time was arranged for the visit and the interviews. The principal advised the other participants in the study of the arrangements for the visit.

The interviews were conducted on-site, with visits to each school being arranged at times convenient to the principal and staff. The actual location for the interview was chosen by the person to be interviewed. The principals and deputy principals chose their offices, while the teachers selected a classroom, library or other suitable room. If the interviews were scheduled before the school day began, and the teacher chose to be interviewed in the classroom, interruptions by students preparing for class were dealt with during the interview.

The face-to-face, in-depth interviews were organised in a semi-structured style, described by Minichiello et al. (1995, p. 61) as a "conversation with a specific purpose – a conversation between researcher and informant focusing on the informant's perception of self, life and experience, and expressed in his or her own words." During each visit to the schools, interviews were conducted with the principal and the other two participants. During the first visit to each school, the two teachers, or teacher and deputy principal, were interviewed together if they requested that this be done. The researcher's purpose in doing this was to provide a comfortable environment for the participants, none of whom had previously been involved in interviews about their professional learning. During the second and third visits to the schools, the teachers and deputy principals were interviewed individually because it was organisationally convenient to conduct the interviews this way.

The interviews were tape-recorded with the permission of the respondents. As recommended by Minichiello et al. (1995), a series of open-ended questions related to

the topic was prepared to guide the interview (see Appendix B). In this way the topics related to the research were covered, and the respondents were encouraged to express their views about, and expand on, particular issues. As suggested by Trochim (1999), clarifying questions were asked if the respondent provided information that needed explanation or further clarification.

3.3.4.2 The interview questions.

Three sets of interviews were conducted at the schools. Using knowledge of the literature, the researcher developed the questions for the interviews. The questions were organised to facilitate the collection of data that covered aspects of individual and school processes pertinent to Research Question 2. The first set of interviews focused on establishing the context of the school, the culture of the school in relation to professional learning, and the principals' personal attitudes to learning. The second set of interviews focused on the professional learning processes at the school. Questions were asked about the school as a learning organisation, development of curriculum and pedagogy, leadership and professional development. The third set of interviews focused on the principals' leadership skills, development of a learning community, and change processes.

During the first set of interviews, the researcher asked the principals how they believe they acquire knowledge, what motivates them to learn, their views of their responsibility as a leader of learning, how they use their knowledge, and how they share their learning. They were asked whether they evaluate the effect of their learning on the progress of the school. Questions were asked about perceptions of what actions or attitudes facilitate, as well as hinder, professional learning in the school. The professional learning associated with the school's involvement in the implementation of New Basics was also discussed.

The deputy principals and teachers were asked about the culture of the school in relation to implementing innovative curriculum, and the influence of the principal on their learning. They were also asked about their attitudes to professional learning, what they had learnt in the previous couple of years, and how they promote ideas that they believe would effect positive change in school policy or procedures. During the interviews, the respondents were encouraged to use school-based documentation to support their statements.

The second set of interviews began with the principals being asked to comment on a quote from Wildy and Punch (1997, p. 96): "Where once power was legitimately located at the top, it is now distributed throughout the organisation." This prompted a discussion about leadership and parallel leadership. The interview continued with questions about the establishment of a vision for the school and the extent to which the vision guides the principals' professional learning. The principals were asked about their roles as learners, and how they share their learning with other principals and the teachers. They were questioned about the challenges facing them in developing the school as a learning organisation, and what advice they would give to other principals about establishing their schools as learning organisations. The interview concluded with a discussion about the impact of professional learning processes on the progress of the implementation of New Basics.

In order to corroborate the evidence provided by the principals, the deputy principals and teachers were asked about curriculum implementation, the challenges involved, and the sustainability of curriculum development. They were also asked about the culture of learning in the school, and how the teachers promote ideas that they believe, if implemented, would improve the quality of teaching and learning, and lead to enhanced student outcomes. Facilitators of, and barriers to, professional learning were also discussed. At each school, specific questions were asked about items that were raised in the first interview, to either clarify or update the data already collected.

The third series of interviews, conducted during the first semester of the following school year, was used to reflect on the learning journey that had taken place in the schools since the second set of interviews with principals and teachers. Topics raised also included the personal traits of the principals as leader learners, skills required for leadership, the need for principals to have knowledge of the content of new curricula, the development of a learning community, and change management.

At the time of the third interview, approximately a year had lapsed since the schools had received approval for participation in the New Basics Project. It was appropriate to reflect on the professional learning processes associated with implementing new curricula. The interviews of principals began with a question about the personal traits that the principals brought to the school as leaders of curriculum implementation. The principals were asked about their role in curriculum development, using the implementation of New Basics as an example of new curricula. They were also asked to outline the skills and knowledge that they believe a principal needs when implementing new curriculum. The respondents were asked to describe the facilitators of, and barriers to, the development of the school as a learning community. Another question focused on the role of the administration team in organising learning and development activities, and about the level of shared understanding about the vision for the school. The principals were asked to assess their school communities as learning communities. The final question focused on the change management strategies used by the principals and whether the strategies were overt or covert.

The deputy principals and teachers were asked similar questions, including their view of the principal's role in implementing new curriculum, the facilitators of, and barriers to, the development of the school as a learning organisation, and the role of the administration team in learning and development for teachers. The respondents were also questioned about their perception of the level of shared understanding about the vision for the school as a learning organisation. They were asked to comment on their view of the changes that had occurred, and how the administration team had managed the change. If the participants raised other issues related to the research, they were encouraged to share their opinions on these issues.

The dominant source of data was interviews. The data collected during the interviews were supported by school documents that the respondents brought to the interviews to support the claims they made about processes that had taken place in the schools. Appendix B contains the interview protocols and Appendix B1 contains the interview guide for three sets of questions addressed to the principals, as well as those asked of the teachers, while Appendix C provides a two-page sample of the transcripts of the interviews. Appendices E, F and Genevieve contain samples of school documentation

provided by the respondents during interview to illustrate their responses to the interview questions. Appendix E2 contains the researcher's observation notes taken at a meeting at Highgrove during which 20 teachers discussed the practical aspects of implementing New Basics.

3.3.4.3 Participant observation and document analysis.

At Highgrove, the large high school, the researcher attended one teachers' meeting with the purpose of observing the professional dialogue of the teachers. The aim of the meeting was to discuss the Rich Tasks produced by the Year 8 classes involved in New Basics (Appendices E1 and E2). At the two primary schools, during the interviews, the participants produced school documents that they believed would assist in describing the processes about which they spoke (Appendices E, F and G). The documents had been produced in the context of specific school activities. The contextualised interpretation of the documents assisted the researcher in using the information to support or challenge the participant's claims, or to detect their biases.

3.3.5 Data Analysis Process

The data collected at each school, using interviews, observation and documentation, was analysed and presented as a case study. In Chapter 4, the three case studies are presented, using a similar format for each study, to allow detailed analysis of the findings. The interactive model of data analysis as described in Miles and Huberman (1994, p. 12) was used to examine the data that related to Research Question 2. The data analysis process was undertaken in three stages: data display, data reduction, and drawing conclusions.

Following each visit to the schools, the data collected at each site were analysed, using processes outlined by Bogdan and Biklen (1992) for mechanically sorting the data collected during the interviews and observations. The analysis of the data took into consideration both methods suggested by Tesch (1990), with a process of coding the data being undertaken initially, followed by a second process of analysis that focused on extracting data that could be used to provide a response to the research questions. The following paragraph provides a description of the first stage of the data analysis process used by the researcher.

First, following the advice of Bogdan and Biklen (1992), transcripts were made of the tape-recorded interviews (Appendix C). The pages were numbered sequentially, and each page was annotated with a reference to the interviewees, and the date and place of the interview. Second, the transcripts were read, and possible codes were considered. Third, the data were segregated into units that reflected the codes suggested by Bogdan and Biklen (1992), listed previously in Section 3.2.3. For the purposes of this study, the codes described above were considered suitable for the data display and data reduction processes, and were not modified by the researcher. Fourth, the units of data were assigned codes, and referenced with sufficient detail to allow for tracing of quotations to the original transcript. The units of data were identified by interviewee, interview details, page and code. Fifth, the units of data were sorted according to their codes, and collated using the 'cut-up and put-in-a-folder' approach described above (Appendix D).

The second stage of the data analysis process was to analyse the data within each code to select the information that could be used to provide a response to Research Question 2: "What are the essential features of the learning processes in which principals are engaged while leading their schools through significant curriculum change?" For example, from the data coded as "Setting/context", information was selected about the school as a learning organisation. From the data coded as "Process", information was extracted about processes for implementing New Basics. Views of leadership, teacher leadership and parallel leadership were extracted from the data coded as "Perspectives". Thus, the conclusions drawn from the case studies were extracted using a two-stage process. The first stage involved breaking the data into units of meaning, and organising them according to the codes provided by Bogdan and Biklen (1992). The second stage involved selecting the data from each code that would illustrate the processes of professional learning in the school.

A range of documents, such as a rich task, strategic planning outlines, and records of meetings, was used to verify and corroborate the interpretation of the data collected at all three schools during the interviews (Appendices E, F and G). At Highgrove, the researcher observed a meeting of teachers involved in implementing the trial of New Basics, and collected a copy of the rich tasks (Appendix E3) that were discussed by the teachers at this meeting. The data obtained from this meeting (Appendix E2)

corroborated the claims made by the teacher and head of department who participated in the study. At Hillview, Milton made extensive use of school documentation (Appendix F1) to explain the processes of school renewal, and his perspective on professional learning (Appendix F2). At Riverbend, the teachers used the documents (Appendix G) during the interviews to illustrate and substantiate the points they made about the processes of school renewal that had occurred before this study commenced.

From the data collected at the three schools, three case study reports were written. The reports are to be found in Chapter 4. At the end of each report, the findings are listed as a series of key principles that reflect the processes of professional learning that were observed by the researcher to be taking place in the schools. The principles were developed to provide a response to Research Question 2. The principles, based on the data collected from the interviews, observations and documentation, were developed according to three criteria:

- 1. The principle is supported by evidence from multiple sources;
- 2. The principle has the potential to be observable in more than one school; and
- The principle has the potential to be observable in the work of principals in Queensland state schools.

To provide a response to Research Question 3, the propositions found at the end of Chapters 2 and the key principles from each of the case studies in Chapter 4 are collated in Chapter 5. The propositions from the review of the literature are compared with the key principles drawn from the case studies, and from this comparison, a framework for professional development for principals is presented in Table 5.1.

3.4 Reliability and Validity

Denzin & Lincoln (2003) highlighted the tension between proponents of positivism and post positivism: "The positivist and postpositivist traditions linger like long shadows over the qualitative research project" (p. 14). Denzin and Lincoln further explained: "In the positivist version it is contended that there is a reality out there to be studied, captured and understood, whereas the postpositivists argue that reality can never be fully apprehended, only approximated" (p. 14). In order to establish the concepts of validity and reliability in a qualitative context, (Lincoln, 1985, p. 290) offered four questions

that inquirers are able to use to establish the trustworthiness of a study, that is, to convince the audience that the research findings are worth considering:

- *"Truth value"*: How can one establish confidence in the "truth" of the findings of a particular inquiry...;
- *Applicability*: How can one determine the extent to which the findings of a particular inquiry have applicability in other contexts or with other subjects?;
- *Consistency*: How can one determine whether the findings of an inquiry would be repeated if the inquiry were replicated with the same subjects in the same context?; and
- *Neutrality*: How can one establish the degree to which the findings of an inquiry are determined by the subjects and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer?

Lincoln argued that the four questions above can be translated into the terms "internal validity," "external validity," "reliability" and "objectivity."

Yin (1994) advised that, as with all research, construct validity, internal and external validity, and reliability should be carefully considered when using case study methodology. Yin recommended three approaches to increasing construct validity: multiple sources of evidence, a chain of evidence, and review of the draft case study report by the key participants in the study. External validity refers to the extent to which results or findings are generalisable beyond the immediate case study. Concerns about internal validity arise in causal or explanatory studies when inferences are being made, and all of the contributing factors cannot be verified or identified (Yin, 1994).

When pursuing reliability, Yin (1994, p. 45) advised that the researcher should seek to "be sure that, if a later investigator followed exactly the same procedures as described by an earlier investigator, and conducted the same case study all over again, the later investigator should arrive at the same findings and conclusions." However, Burns (1996, p. 322) claimed: "Qualitative research does not pretend to be replicable. The researcher purposely avoids controlling the research conditions and concentrates on recording the complexity of changing situational contexts." To ensure that a similar case study can be undertaken, the researcher must document the research procedures accurately enough to

allow another researcher to undertake a similar study, thus minimising errors and biases in the study (Yin, 1994).

Minichiello et al. (1995) raised the issue of bias that the researcher or informant may unintentionally bring to an interview, and thus detract from the reliability of the data: "Informants can manipulate the researcher's interpretation and definition of a situation – just as the researcher can – by half answering questions, not answering them, or making misleading statements" (p. 186). Yin (1994) and Minichiello et al. advocated the use of different sources or methods to corroborate evidence to try to detect possible sources of bias in either the informant's account or the researcher's analysis or interpretation of the data.

This study used four sources of evidence, including:

- 1. data from the principals;
- 2. data from teachers, heads of department or deputy principals;
- 3. documents related to strategic planning; and
- 4. observations of a meeting of teachers.

In this study, concern about internal validity was addressed by using multiple interviews at each site so that data from the principals were confirmed or challenged by the teachers or associate administrators who participated in the study. If data from one source appeared to contradict the data from another source, clarifying questions were asked so that the researcher could understand the reason for the contradictions. During the interviews, the participants from Hillview and Riverbend used school-based documents (Appendices F and G) to clarify or support the claims they made about the school planning processes that they described. Perusal of the documents confirmed or denied the claims made by the participants. Observation of a meeting at Highgrove at which teachers were planning for assessment of New Basics rich tasks (Appendix E2) allowed the researcher to further validate the claims made by the principal and other informants about the school's involvement in New Basics. The case study reports were sent to the principals for confirmation, and their responses are included at the end of each case study.

It cannot be claimed that the findings from each of the three school sites in this research could be generalised across other schools in Queensland or elsewhere. However, the data collection process could be replicated, so that similar studies could be conducted at any school site, thus allowing another researcher to obtain an accurate representation of key informants' views about principals' professional learning, learning communities and organisational learning in any chosen school.

3.5 Ethical Considerations

Ethical clearance, a process that required an application for research to be approved by the Office of Research and Higher Degrees, was obtained from University of Southern Queensland before the conduct of the research (Appendix H). As part of the process for conducting research with human subjects, the researcher sought consent from Education Queensland as the employer of the persons to be interviewed. An "Application to Conduct Research in Education Queensland State Schools and Other Units" was completed, and duly approved by the Manager of the relevant District Office (Appendix I).

3.6 Limitations

Limitations that are often associated with case study research methodology were considered in the planning and implementation of the data collection, and analysis processes. The following paragraphs summarise the major limitations that were taken into consideration.

First, the sample of schools was small. Three schools from one geographic location could not be considered to be representative of all state schools in Queensland. Second, the sample of principals was selected according to their involvement in the New Basics Project. The researcher also had prior knowledge of the each principal's commitment to professional learning and to school improvement. It could not be claimed that the principals were randomly selected from the range of principals of Queensland state schools. When these two points are considered, the findings of the case studies could not be considered to be representative of all principals of Queensland state schools. Therefore, from the outset, it was recognised that the findings of the case studies would not be able to be generalised across the broad range of principals, their learning styles and attitudes to learning. Acknowledgement of this limitation is in line with Burns' (1996, p. 13) caution:

Because of the subjective nature of qualitative data and its origin in single contexts, it is difficult to apply conventional standards of reliability and validity. Contexts, situations, events, conditions and interactions cannot be replicated to any extent nor can generalisations be made to a wider context than the one studied with any confidence.

A third limitation to be considered was the changes in leadership at Hillview State School that took place during the data collection period. Given the problem being investigated, the data collected had the potential to compromise the findings of the study. However, as each case study was treated individually, the findings from Hillview contributed to the overall findings of the study. Fourth, the data were drawn predominantly from the interviews conducted with the respondents at each school. Despite the researcher's attempts to use a variety of sources of data, the interviews remained the main avenue for data collection.

The involvement of a single researcher throughout this investigation was a fifth possible limitation. The researcher attempted to minimise the influence of personal perceptions and bias by asking open-ended questions, avoiding leading questions, and not offering personal opinions. Dialogue during the interviews was focused on the questions that had been planned by the researcher, and any further questions that arose from the responses given by the participants. Clarifying questions or "nudging probes" such as those described by Minichiello et al. (1995, p. 91) were used when the participant gave incomplete or vague information. Appendix C provides a two-page extract from a transcript of interview involving both Ken and Kate from Riverbend State School. This extract provides an example of the interaction between the researcher and the participants in the study, and illustrates the researchers' use of open-ended questions and nudging probes.

3.7 Conclusion

The use of qualitative research methodology was appropriate for research in school settings as it allowed for data collection over a sustained period, with built in flexibility regarding timing of visits to the schools to collect the data. The choice of the case study approach allowed the researcher to ground the data in the context of the school, thus

ensuring the data were enhanced by the participants' first hand experience of the complexities of the local environment. The case study methodology also provided an opportunity for the researcher to triangulate the data, with data sources including the principal, other administrators or teachers, and documents or observations at each site.

To achieve the objectives of the study, the researcher attempted to establish a clear and detailed understanding of contextual factors that influence the professional learning of principals, and how they use their learning while implementing innovative curriculum in their schools. This chapter provided both a rationale for, and detailed description of, the methodology employed to achieve the objectives of the study.

CHAPTER 4: THREE CASE STUDIES

4.1 Introduction to Case Studies

Chapter 4 comprises three case study descriptions that constitute the findings of the research. The three reports have been generated from the data analysis procedures that were delineated in Chapter 3. Each report consists of an integration of two elements. The first element comprises concepts encompassed by the review of the literature. The researcher took the position that not all concepts that emerged from the review of the literature would necessarily be reflected in the findings of the study as the researcher did not attempt to organise the data collection and analysis to reflect the review of the literature. The second element comprises concepts that are encompassed by Research Question 2: The school as a learning organisation; The principal as leader learner; Leadership for learning; and Learning, curriculum and change.

As stated in Chapter 3, the data derived from the combination of sources were initially sorted according to the codes recommended by Bogdan and Biklen (1992). Chapter 4 provides a selection of the data derived from interviews with principals, other school-based participants, documents, and researcher observation.

The case study descriptions contain a number of direct quotations from the interview data. The quotations are included to highlight information provided by the participants. The reference for each quotation is contained in the case study text. An example of the nature of the interview data record is contained in Appendix C.

At the conclusion of each case study is a list of key principles developed from the data analysis. The key principles are the medium used by the researcher to compare and contrast the processes of professional learning in each of the schools with the findings of the review of the literature. The key principles for each case study were based on the following considerations:

- The principle is supported by evidence from multiple sources;
- The principle appears to be generalisable across more studies; and
- The principle has the potential to be observable in the work of Queensland school principals.

The key principles were derived from data that suggested both positive and negative actions. In most cases, positive actions were used as the basis for the principle. In some cases, negative experiences, failures, and gaps in understanding were used to derive the principles.

4.2 Case Study: Highgrove State High School

4.2.1 Case Study Synopsis

Over the period of this study, the teachers at Highgrove State High School were involved in planning for, and implementing, New Basics. As a foundation for significant change in curriculum and pedagogy, the principal had determined that one priority was to establish good relationships across the school. He believed that positive working relationships needed to be established before the teachers could work collaboratively to address the challenges associated with adopting a new and innovative curriculum.

At the beginning of the study, the principal expressed frustration about the slowness of change in the school. He also expressed a belief that the staff were ready to implement new curricula. At the completion of the study, one quarter of the teachers were involved in implementing New Basics in four of the eight Year 8 classes. The original plan had been to implement it in two of these classes. While the principal's aim of building school capacity through shared decision making was being realised by the end of the data collection period, it appeared that the school community may not have been adequately prepared, at the commencement of the study, to make significant changes in curriculum delivery. The distance travelled in terms of curriculum implementation over the period of data collection was not substantial.

During the data collection period, the principal's professional learning could be summarised as covering a range of areas. The study focused on the principal's processes of learning associated with implementing new curricula. However, the principal also engaged in learning about the development of leadership skills, understanding the context of the school, engaging teachers in professional learning, change management, and strategies for shared decision-making. Highgrove is a large state high school, set in a non-metropolitan city in a geographic area highly sought after by teachers. For many years, Highgrove enjoyed a reputation for good academic outcomes for students, and recently moved to be more inclusive of students whose needs are best met through alternate educational pathways.

Highgrove State High School is one of two large high schools in a provincial city in south-east Queensland. It has a student population of approximately 1200 and teaching staff of 85. The teaching staff is generally stable, with some teachers having been at the school for more than 20 years. Few new teachers are appointed to the school each year. For many years, the school enjoyed a reputation for having a focus on sound academic education. William explained that the school had moved to be more responsive to changing student needs, now offering opportunities for students to access vocational education and training, as well as the subjects traditionally taught at the school: "This school has had an academic focus for 50 years, and to bring into the senior school more apprenticeship style has been significant."

The teachers at Highgrove State High School deliberated over whether they should participate in the trial of the New Basics Project, but eventually decided that they would do so. The Studies Committee decided that the trial of New Basics would begin with four of the eight Year 8 classes. When a meeting of interested teachers was organised to discuss the proposed implementation plan, 25 teachers attended, a far greater number than first expected. At the conclusion of the study, New Basics Project was being successfully organised and implemented at the school.

For the purposes of the study, interviews were conducted with:

- William Principal;
- Brian Head of Department Agriculture, Acting Deputy Principal, Term 4, 2000; and
- Anne temporary Teacher Librarian, based in the Library.

4.2.3 Highgrove as a Learning Organisation

William attempted to change the attitudes of the teachers from dependence on the principal as key decision maker to engagement in shared leadership and shared decision making. To effect the changes, William set up committees that he expected would make informed decisions about matters that affected the staff and students. However, the studies committee, which was responsible for decisions regarding the implementation of New Basics, lacked the capacity to make decisions without direction from William. The data indicate that this situation was changing by the end of the data collection period.

William, the principal, had been at the school for four years when this study began in 2000. He described his style of leadership as being quite different to that of previous principals who were reputed to have been dictatorial leaders. William explained that he preferred to encourage teachers to take on leadership roles, and that some of the teachers were not used to this style of leadership. William's perception was that some teachers expected the principal to be visible, leading the way, providing direction all of the time.

The school is situated in an area much sought after by teachers who apply for transfer after spending time in schools situated in less favourable geographic locations. William explained the expectations of some of the teachers transferred to the school:

A lot of people who get transferred here - we get people from late 20s to 50s age range – they tend to see this area as a retirement area. So they are used to having a principal working with them every step of the way, so it is quite an interesting culture to work through. It is not insurmountable.

William explained that he had challenged the attitudes of teachers who expected him to be a dictatorial leader:

Since I've been here for four years, I've been trying to get everyone working together and acknowledge that each person is a leader. But there is still at the back of their minds that a lot of people who've been here for 20 plus years and they have worked with a number of principals of that [dictatorial] style, that the principal needs to be here showing them the way, the direction, every day of the week.

Brian and Anne supported William's view that a change in the attitudes of the teachers was desirable. Brian said:

There is a problem with carry over with the history of the place. We've got a fairly stable staff. Principals have been dictators so staff haven't made decisions. If they have made decisions, they have expected that if the principal doesn't like it he will overturn that decision. Eventually it will get better, but it's got a way to go.

William perceived that the teachers generally supported the notion of professional learning. However, he found that his attempts to modify the teachers' attitudes by using research findings to support his views about the need for improved pedagogy were initially unsuccessful: "If you use the language about learning organisations and technical papers these guys just freak out." When asked why this happens, he replied:

They have an abhorrence for anything that is research-based. So, we address the same issues without using technical jargon. They showed us that they believe in learning organisations so we have to do it in a surreptitious way rather than a full-on, research basis.

William declared that he had to be mindful of the prevailing attitude that policy must be rigidly applied to all decision making, thus making the management of change a cumbersome exercise. William claimed that the influence of committed Queensland Teachers' Union (QTU) members ensured that any changes to school procedures and processes were made through bureaucratic channels. He articulated a belief that the QTU's philosophy of protecting teachers' industrial rights unnecessarily hindered innovation and change.

Any change has to be worked through step-by-step. There is a very strong awareness in this school about making sure that every policy situation is met, where in my previous school, if we had an issue we talked about it, and worked on it together. In this school, you certainly operate in a different fashion.

When speaking about the school as a community of learners, Brian described the teachers generally as being in three groups on a continuum:

At this point I would say we have got 50% of our staff are at the excited stage – who dearly love to sit with colleagues and discuss curriculum. We have got 5-10% who, if they were totally honest, would fit into the category of "I left college and I knew everything I needed to know and I don't want to know any more." They will learn through osmosis or what. They turn up, they'll be negative about it, but being there they absorb something. Then you have got that group who are in the middle who will take it on – they are keen to learn - they are not necessarily excited about it but see we need to do something for our kids.

From a teacher leader perspective, Anne voiced her perception that some teachers accept responsibility for tasks beyond their core teaching duties, while others want to be given direction, and don't want to make significant decisions. Brian was more critical when he said: "They want to have their say, but they still want to be told. And part of it is, 'If I am told what to do and I don't like it, I can whinge about it and I can get great enjoyment from whingeing about it."

The following example illustrates how the attitudes described above affected the capacity of the school to implement innovative curriculum changes. In 2000, the teachers agreed, in principle, that the school should participate in the New Basics Project. Reluctance to change the existing curricula and pedagogy was reflected in the initial unwillingness of many teachers to be involved in the project, even though a review of junior school curriculum indicated that change to the year 8 curriculum was desirable. William explained: "There is a large group who don't want to change, but there is a large group who are saying, 'We want to change and New Basics is providing us with that opportunity for change.""

During the second interview, Brian contended that the benefit of having teachers leading the New Basic trial was that it would continue in spite of any changes in administration. During the concluding interview for this study in late semester 1, 2001, Brian enthusiastically described how, once teachers started working together implementing the New Basics trial for Year 8 classes, their enthusiasm increased:

It came up like something out of the fire, these teachers working together on the tasks for Year 8. It has taken the pressure off trying to set up something artificial

to have teachers working together. They have been generating that themselves and they are now talking to teachers they have never spoken to in all their time here. Anne reported that she, too, had witnessed the changes in teacher interactions through their involvement in New Basics. "We've implemented and completed one unit of work. We've managed to develop some cross-departmental conversation. It is a huge step forward. We've overcome hurdles."

4.2.4 Leadership for Professional Learning

William believed that positive relationships are the basis for the establishment of a learning organisation. As well as establishing good relationships, he also fostered an environment of shared leadership. William wanted to nurture the leadership capabilities held by many of the teachers. He refrained from dictating the direction of change, but was frustrated by the apparent unwillingness of teachers to make decisions on behalf of their peers.

When describing Highgrove as a learning organisation, William declared that "[the teachers] showed us that they believe in learning organisations," but he also stated that "[this school] is not a learning culture for easy change." William reported that he had deliberately embarked on a process of improving relationships across the school, having expressed a belief that good relationships are the foundation for a learning organisation. In William's opinion, when he first arrived at the school, relationships between the teachers were not conducive to them working and learning collaboratively:

When I came there wasn't a very good set of relationships in this school. We are going through a stage where we think we have got relationships right but the next stage is a big jump because everyone is nice to each other, but to say "Let's progress the issue" is coming on in a fairly interesting way.

William offered the following example of the need for well-established, positive relationships as a foundation for teachers working together as a learning organisation. He said that during his first year at the school, he reviewed the academic results of all year levels. He found that the junior school results indicated high levels of achievement in Year 8, but that these achievements were not reflected in the Year 10 results. Therefore, he provided the teachers with the data to support his observations. William

claimed that this was not sufficient to motivate the teachers to change their teaching strategies: "Because they didn't know me, they didn't jump on board. These guys need to develop a lot of trust." Brian and Anne agreed that a "them and us" feeling existed between administration and teachers, but contended that it was unjustified. William maintained that trusting relationships are also a foundation for shared decision-making in a school.

Another challenge for William was to turn around the attitudes of those teachers who had demonstrated cynicism about developing and implementing new curricula designed to meet the current and future needs of students. William chose to address the challenges slowly, believing that this would lead to more lasting improvement than if he dictated changes for which the teachers did not accept ownership. William explained that he had established a range of committees in the school to support shared decision-making. These committees included a Studies Committee and a Futures Committee. Having declared that he would support the decisions made by the committee members, William was determined that he would not tell the staff what to do in relation to the direction of the New Basics trial. Brian confirmed William's attitude: "He [William] said, 'The decisions are made by committees in this school. The curriculum committee has decided to be part of the New Basics trial, and I support this.'" During interview, William explained his reasons for insisting that the committees make decisions: "There are so many people with great leadership skills in the school, but they still want the principal to be the leader of any learning and teaching experience."

William expressed a desire to change the culture from teacher dependency on the principal as key decision maker to acceptance of the notion of parallel leadership being embedded across the school. In the researchers' view, he demonstrated his commitment to parallel leadership at a plenary session attended by the researcher (Appendix E – New Basics Meeting Agenda). After four days of working in groups to develop New Basics rich tasks (Appendix E – Highgrove Rich Tasks), twenty-five teachers had come together to develop assessment strategies for the rich tasks. The meeting was led by Brian: William came into the meeting, observed proceedings for a short period, did not speak to the group, and left quietly.

To support his strategy of developing leadership across the organisation, William expected the Studies Committee to create strategies for the development and implementation of revised year 8 curricula, including the trial of New Basics. He resisted interfering in the decision making of the committee, watching the teachers rambling in their discussions, not coming to any conclusions. With regard to implementing New Basics for Year 8 in 2000, William described the situation as follows:

With our stuff on developing the year 8 curriculum, one of the things I tried not to do is to stand up and tell them, "This is the way we are going to do it," and I left the Studies Committee to sort of find their way through that. Then I found that they were just meandering around. They had ideas but they just couldn't come to a decision. One of the other deputies said, "William, you are going to have to say something at a staff meeting and show which way to go."

I said, "That's bullshit - it offends everything about people learning together." And she said, "No, no, they are really craving it." So, about six weeks ago I decided they weren't getting there fast enough, and I decided I would have to do something. So, I got up at a staff meeting. I tried not to be too prescriptive, but from the way I spoke, they could see what I wanted to see. I tried not to say, "This is what I want," but to say, "These are some things to consider." Lo and behold, the next day they had made up their minds. There was a critical change then.

Anne and Brian described how William inspired teachers to greater effort by acknowledging what they have achieved and expressing his appreciation for their efforts:

William is visible in the school. He says "Thank you" after I have been involved in something out of the ordinary. He shows his appreciation. I think all of those things add up to doing things better. (Anne)

It is enough to do an extra bit, and this keeps growing. You get another "Thank you" - you are more prepared to go a bit further. It's a comment that let's you know he knows you have done something extra. (Brian) Brian and Anne also described how William supports teachers by ensuring that those who are interested are given opportunities to act in higher banded positions: "He leans heavily towards professional development for staff, for example, acting positions."

When speaking about the role of the principal in leading the implementation of new curriculum, William expressed his belief that all principals need to understand the philosophical underpinnings of new curricula. He shared his concern that his absence from the classroom, in his role as principal, may have led to the loss of his deep curriculum knowledge: "I know my teachers are relying on me to do some of the leadership, but I am feeling funny about that because I don't have the ability to implement the knowledge." Anne expressed surprise at a similar comment from William made during a New Basics in-service activity. She said she was not sure why he should be concerned about not having in-depth knowledge of the new curriculum, particularly if the school's curriculum leaders kept him informed of progress and developments.

Anne supported the attitude that principals need to have knowledge and understanding of new curricula:

In terms of New Basics, I would expect the leader to have some understanding – not every detail of the units that have been planned and how each teacher is doing it in the classroom, but I would expect them to understand how this school is implementing it.

In her opinion, principals should be supportive of the teachers, to show enthusiasm for curriculum, and to be available for teachers to discuss issues with them: "You want to know that he cares. It is not a personal thing. You need to know that he supports the idea."

From the views expressed by Anne and Brian, it appeared that William's preferred style of leadership had contributed to a sense of frustration among the schools' curriculum leaders, and a feeling of uncertainty about the direction of the trial of New Basics. Brian said that William had repeatedly stated: "'We don't have to be part of it [New Basics]. It is your decision. We can pull out of it if we want to.' So everybody has been sitting round doing nothing." Brian claimed that action began after William had made a statement to the teachers about their participation in the trial. Brian conceded: "Probably what we have got is not what William wants personally, but it is what will work in this school." He also admitted: "If William had done what we wanted him to do, we wouldn't be in the strong position that we are in now."

While Brian and Anne expressed an understanding of William's style of leadership, they also shared their frustration with William's unwillingness to step in and take action, rather than maintain a rigid stance on delegating the decision-making to the committees. Brian explained his view of William's actions:

I was frustrated when we were calling for volunteers [to take on New Basics] and William was sitting not saying anything. William was forced into making a statement. He could have said, "We don't have to be." It would have been much easier if he had said, "We are in."

They perceived that William was not able to interpret a situation and take appropriate action, while William may have been adhering to his decision to encourage the teachers to take on leadership roles. Having acted as deputy principal for a term, Brian expressed an understanding of the difficulty involved in balancing administrative team input into the leadership of curriculum implementation while maintaining teacher ownership of the process. Anne summed up the tension between William's support for teacher leadership and the teachers' expectations of him as a leader: "That's a leadership style that we don't associate with being a leader. I expect leaders to be autocratic." This statement reinforces the validity of William's assumptions, stated previously, that the teachers expected the principal to be the school's key decision maker.

At Highgrove, there appeared to be multiple challenges for William whose vision was to have all teachers and administrators engaged in professional learning. From a personal perspective, William demonstrated that he engaged in critical reflection, gaining an understanding of the context and culture of the school, before making decisions about the leadership strategies he would use to promote teachers' capacity to produce improved outcomes for students. From a human resources perspective, William provided leadership in changing the culture of the school by improving relationships and encouraging a change in the teachers' attitude to the role of the principal as leader, and endorsing teacher leadership across the school. From an organisational perspective, William established structures to support teacher leadership and organisational learning. From a curriculum perspective, he gathered data to support his arguments for enhancing the learning processes for teachers and students while acknowledging his own concern about his diminishing knowledge of new curricula.

4.2.5 Learning, Curriculum and Change

For William, the challenges to establishing professional learning and innovative curriculum change lay in motivating the teachers and heads of department to embrace innovation. He believed that change processes that affect teachers are best led by teachers. He was frustrated with the slowness of change, but chose to allow the changes to take place gradually to ensure teacher commitment to them.

When asked about the visibility of the management of change in the school, all three interviewees described it as being more covert than overt. Brian cited the example of a head of department (HOD) offering a radical suggestion for curriculum organisation that engaged the attention of all teachers:

When we started talking about next year, one HOD said, 'Let's do it totally – develop a structure without subjects totally.' The moment that came out people started to drop dead all over the place. If we hadn't had people saying we should do away with all subjects, and people trying to take us a long way in one fell swoop, we wouldn't have been able to start those conversations about change and constant changes.

Brian used this example to explain that, at Highgrove, the impetus for change may come from a variety of sources, not just planned curriculum renewal such as New Basics.

Brian explained how he carefully planned the process for curriculum change in relation to adopting New Basics in half of the year 8 classes. He organised in-service in the foundations of New Basics for the administrators, followed by similar in-service sessions for the teaching staff. Brian judged the success of his in-service by the response of one of the deputy principals who had been an advocate for having the curriculum organised in key learning areas: Dean (deputy principal), when we decided to go through with New Basics, was very disappointed. There were grave concerns last year by a number of us that he would get control of studies in the school because we felt he would swing it away from New Basics, and New Basics would fail in the school. Dean would now be my biggest supporter of New Basics in the school as of three weeks ago. I organised an inservice for admin and heads of department – whole day – at the end of it Dean is this New Basics person – remarkable – and has now taken on New Basics with the enthusiasm that he had for the KLAs and it has eased my workload dramatically.

Dean recognised and accepted Brian's leadership skills and knowledge, and supported him in taking a leading role in implementing New Basics. Dean demonstrated that he had the capacity to think laterally about implementing curricula, focusing on student learning outcomes, rather than on key learning areas as curriculum organisers. He modelled for the rest of the staff a capacity to change firmly-held beliefs about teaching and learning.

Attitudes, relationships and organisational structures all contribute to the successful establishment of a school as a learning community. The three interviewees for this case study described the factors that they believe support or hinder professional learning, and the establishment of a learning community. William described the promoters of professional learning as vibrant teachers, using Brian as an example. Brian had acted as a deputy principal, but preferred to return to his substantive position of head of department, taking on the challenging task of leading the implementation of New Basics. William stated: "Once [the teachers] decide to do something about [a problem], it is a much more powerful weapon in the school. Too often we have admin leading things in the perception of teachers." William reported that, in his experience, if teachers and heads of department recognise a problem and find a solution, other teachers are more willing to adopt ownership of the solution than if the principal or deputy principals lead the problem solving.

When Anne was asked about her perceptions of the factors that sustain or hinder professional learning, Anne focused more on the qualities of the teaching staff than she did on time and resources. Anne listed the facilitators of curriculum change as those people "who give a little extra to get things done, those who encourage and support and put in the extra time and effort." In contrast, Anne described the factors that thwart professional learning as being teachers who are critical, whinge to colleagues, and engage in subversive conversations in an attempt to engage the support of their peers in disparaging innovation. She also listed lack of time and money, running out of enthusiasm, and inadequate facilities as hindering progress.

William described one of the factors that hinder innovative curriculum development as the cynical attitude held by some teachers to those of their colleagues who have good ideas. "Whether we like it or not, any innovation is seen as being for a principal's or deputy's promotion." To support this statement, William used the example of the introduction of a successful traineeship program in the senior school. The program was organised by one of the deputy principals who later gained promotion to the principalship in another school. William shared his view that the teachers were unwilling to acknowledge that the deputy principal introduced the traineeships to meet the needs of students, and not for his own interest in having examples of leadership projects to add to his curriculum vitae.

In William's opinion, one role of the administration team is to initiate learning and development by collecting and analysing data, and prompting discussion by posing challenging questions: "We have to be the ones to dig through the hard data and ask the difficult questions." He gave an example of when, in his first year at the school, he suggested that practice for the Queensland Core Skills test would advantage the Year 12 students. He said that it took three years for the teachers to realise the benefits of pre-test practice for improving student outcomes: "It frustrates me that things take three to four years to happen. We have to keep salting the ideas to get any action."

William expressed his concern that the QTU discourages teachers' professional learning. To support this opinion, he offered several examples, including the use of Individual Development Plans (IDPs) for all teachers to identify, implement and monitor their professional learning needs:

We wanted to work on IDPs for our teachers but again the QTU was very quick to say that we can only do that on a voluntary basis. We can't make people do it and to me that is ridiculous. How the hell can you improve as a school, as a teacher, if you don't have some IDPs going?

During a meeting to review the rich tasks planned by the teachers as part of the implementation of New Basics, a group of Highgrove teachers demonstrated that they were able to work collaboratively and learn from one another. At the meeting, the researcher observed teachers working and learning together productively with a view to improving outcomes for students (Appendix E2).

While William was frustrated by the issues which he believed hindered the implementation of improved practices, he recognised that in the area of technology, teachers had improved their skills and knowledge despite the cost involved with providing suitable hardware:

Given the physical structures they have moved a hell of a long way. Physically it costs us a lot to get all of our staffrooms hooked up computer wise. Those are the sorts of issues that are a pain in the bum for them and for me.

4.2.6 The Principal as Leader Learner

William viewed himself as a learner, and was selective in choosing the people with whom he wished to network. He claimed that competition for promotional positions within Education Queensland precluded genuine sharing of ideas among his colleagues. Sharing of good ideas could give a colleague an unfair advantage when applying on merit for the principalship of a higher banded school. William's focus was on quality professional learning opportunities, and he found these through a close network of trusted friends and colleagues.

William depicted himself as a learner, and articulated a belief that all principals should be learners. He acknowledged the challenges associated with having time to actually read and learn about new curricula. "One of the difficulties of the principal in a large school is to balance up the other material if you like – the business side of things – with a curriculum focus." William said that his motivation for learning, as a classroom teacher and later a principal, had always been his desire to ensure that students can access an educational program that meets their current and future needs. He cited the example of the school moving away from a focus on academic programs, to include vocational education and training, and programs that meet the needs of students with disabilities.

William described his areas of learning as being "across the whole spectrum," not centred only on his own school. He expressed a willingness to share ideas with his peers, but claimed that the prevailing attitudes held by Education Queensland personnel did not encourage this, probably because of competition for promotion, and fear of plagiarism. William assumed that principals who are competing for promotional positions would not share best practice because they feared their colleagues would plagiarise their ideas. A sense of frustration emanated from William when he described the current situation in his education district where the principals isolate themselves from one another as professionals.

Unfortunately, we don't have those sorts of networks set up, I don't believe anyway. Very rarely do we sit and talk to people and bare the heart about what we want to learn, and what we want to do because we feel someone is watching us, or maybe can score some brownie points by using us in certain ways.

William listed his sources of professional learning as reading, searching the Internet, networking, and being involved in professional associations as much as possible. William said that he attempts to share the knowledge he has acquired, for example, by handing out journal articles that he thinks are interesting or pertinent. He shared his concern that a limited number of the teachers actually read them: "I shared a paper about middle-schooling which I thought was a brilliant paper and I got three responses outside the admin. And then I was left wondering whether I should do that sort of thing."

William claimed that his colleagues spent up to half of each day networking via email and the telephone. However, he said that he limited his networking to issues where he felt a strong need to gather information to resolve a problem. William also claimed that he gained a lot from talking to mentors and trusted friends. He stated that, for professional dialogue to occur, "you have to be comfortable with people at the same time. It's a mutual respect." William described his own networking: I've got a mate whom I started teaching with. I see him once or twice a year, and I probably have more professional dialogue on those occasions than I do with some of my colleagues here, because I rate him as a better professional thinker than some of my colleagues here. That is not intentional but I have got a lot of respect for his thinking.

A valued source of professional learning for William was the outcome of his experience at an Assessment Centre. He claimed that one of the recommendations from the Assessment Centre was for him to work with a mentor to challenge and clarify his perspectives on leadership, learning and development. William described the meetings with his mentor as being very positive:

I met with [a lecturer] from the University up there. He and I met once a fortnight for about six months afterwards, and it was probably the most stimulating time in the deputy principalship or principalship that I've ever had.

As a means of developing a learning organisation, William offered the idea of "communities of practice," where teachers and principals network and share their ideas, to create a situation where opinions are challenged and debated, leading to improved practice in classrooms. At Highgrove, several teachers were trained in the use of *Student Protocols Training*, a training package developed and delivered by the Australian National Schools Network. Brian and Anne described the use of the Protocols as a very effective process for encouraging robust debate between teachers in a supportive environment. During a meeting observed by the researcher, the teachers used the process for reviewing the rich tasks they had developed for New Basics. The teachers claimed that using Protocols centred the discussion on the task, allowing them to present, challenge and debate their work in a positive manner.

When William was asked to comment on how he evaluates his learning and its impact on the development of curriculum, his response reflected the difficulties associated with working in a large school where opportunities to directly influence staff are less forthcoming than they might be in a smaller school with fewer staff. William explained:

Frustration mostly. Yeah – that is probably when I go through my frustration times. I feel I have learnt things and I sit down and ask what impact has that had

on my operation or the school's approaches and invariably it doesn't come up to the level that I would like to see and I have to stop and say, "Why is that?"

As well as William's personal evaluation of the progress made, he reported that feedback from the District Director and school staff indicated that effective changes had taken place.

Talking to the District Director, it has moved but it still has a long way to go. I would like to be a more effective change agent. But people tell me that it is more effective that way, and that I am a more effective change agent than they are used to in the school. In some ways, we have moved a long way.

From the data gathered during the interviews, it appeared that William did not openly discuss his leadership strategies with the rest of the administration team and teaching staff. Had he engaged in metastrategic leadership, the pace of change may have been accelerated.

4.2.7 Learning from the Highgrove Case Study

The context of William's learning encompassed several interrelated areas, including personal learning, innovation, leadership related learning, and collaborative learning. While the data indicated an interrelatedness between the school culture, principal's leadership style and context of the school, they also indicated that the principal had to make difficult decisions about how best to support the emergence of teacher leadership.

This section summarises the findings derived by the researcher from the Highgrove Case Study. The conclusions drawn, particularly in relation to what the principal learnt, are those of the researcher, based on data collected during interviews, and observations made by the researcher while attending a teacher meeting focused on evaluating the use of rich tasks and the implementation of New Basics.

The evidence suggested that William learnt that his leadership style had to match the context of the school: He acknowledged that the leadership style he employed in his previous school was not appropriate in this larger school. William also learnt that

strategies to manage change have to be tailored to the context of the school, and to the competencies of the teachers. He learnt that trying to make changes without acknowledging these factors leads to frustration for himself as a task-oriented leader. William indicated a sense of deep frustration regarding the attitudes of a number of staff and their readiness to engage in change, but recognised that he would have to control his response to the situation because he was keen to expedite this change process. He recognised the complexity of the change process, and was considerate of the effect of the changes on the people with whom he was working.

The data indicated that, at the end of the data collection period, a shared vision for Highgrove State High School had not been established. Rather, there appeared to be an emerging understanding of the aims of the school. William demonstrated that he had a vision for the school as being a provider of quality educational programs that met the needs of all students. William described how he worked towards creating a school environment that focused on high-level achievement for all students, endeavouring to do this by establishing the school as a learning organisation. However, the data indicated that not all teachers were engaged in processes that focused on achieving that vision. The use of overt strategic leadership in the creation of a shared vision, and clearly defined processes for organisational review and decision-making, may have lead to greater alignment of the expectations of the administration team and those of the teachers.

William encouraged the teachers to be responsible for their own learning, and to accept leadership roles in curriculum development and implementation. However, his vision for the school as a learning organisation may not have been understood by all of the teachers. This lack of shared understanding of a vision, values or direction for the school may have contributed to the teachers' reluctance to make decisions about the new curricula. Alternatively, the teachers may have lacked the skills to be deeply involved in decision making, and this may have contributed to their apparent dependence on the principal to make significant decisions. The perceived confusion about roles and responsibilities in shared decision-making may also have perpetuated the teachers' dependency on William as decision maker. The data collected for this study indicated that William has a focus on personal mastery. One of the challenges facing William was to confront the attitudes of the teachers who appeared to hold a view that their existing knowledge and skills were sufficient to enable them to do their jobs in a satisfactory manner. William learnt that teachers learn in response to their own perceptions of their personal and professional needs. He learnt that teachers are motivated by meaningful changes in curriculum and pedagogy. Using data, however meaningful to the principal, will not alone provide the motivation for changed or improved teaching practices.

William acknowledged his frustration with the reluctance of some teachers to adopt leadership roles. Evidence suggested that he learnt that providing the structures for shared decision making, and expecting teachers to emerge as leaders, is not sufficient to create an environment of distributed leadership. In the transition from an environment of dictatorial leadership to one of distributed leadership, the principal may have to lead the change processes.

Evidence indicated that William was frustrated with the slow pace of change, particularly in relation to improvement in teaching and learning. However, William did not appear to make a concerted effort to encourage teacher leadership, and nurture rapid changes in pedagogy. William's choice to slowly make changes stemmed from his perceptions about the size and culture of the school. He believed that, in this large school with a strongly embedded culture, changes made unhurriedly, and with commitment from the teachers, would be meaningful and long lasting. William learnt that patience is required to not intervene while changes continue to evolve, however slowly. Comments from Brian and Anne suggested that William was confronted with making a decision about the length of time he should wait for changes to evolve, and intervening to provide guidance when processes were not working effectively.

During interview, Anne provided evidence that she held a stereotypical view that leaders should be autocratic – she may have meant dictatorial. She also expressed a perception of William that indicated that he did not communicate to the teachers his vision for quality education for all students through innovative curriculum. Perhaps this perception developed because Anne was based in the Library, and not in a large staffroom. While

she was not isolated from her colleagues, she may have had less daily professional conversation with her peers than she would if she had shared a staffroom with other teachers. Perhaps it arose because there was a lack of understanding across the school about William's preferred style of leadership, his desire to establish a learning organisation, and his support for genuine sharing of knowledge and experience among the staff.

The data indicated that, while William acknowledged that he changed his leadership style when he came to Highgrove, questions remain as to whether or not William's leadership was aligned with the context of the school. William perceived that the school would benefit from experiencing distributed leadership, and set up a committee structure to encourage teacher leadership and support shared decision-making. He contended that decisions about curriculum and pedagogy should be made by the teachers directly involved in delivering educational programs, and encouraged the teachers to make decisions based on school data where appropriate. However, data collected from Brian and Anne indicated that the teachers required William's reassurance in making decisions that would significantly affect the direction of the school's curricula.

William's stance on creating an environment where teachers are encouraged to emerge as leaders may have been too early in the change process. William shared his opinion that there are "many great leaders in the school." Maybe William's orientation to leadership, as derived from his experience at previous schools, had led him to the view that leadership rests, not only with the principal, but also with the teachers. Perhaps his knowledge of the teachers and the school environment indicated to him that opportunities to demonstrate their leadership skills had not previously been available to them.

Given William's comments about heads of department employing strategies that discouraged teacher leadership, should the support for parallel leadership across the school start with professional development in a range of leadership strategies for the middle managers? Data from the interviews conducted with Brian suggested that, with William as principal, teachers and middle managers did become involved in shared decision-making when the opportunity arose through the implementation of New Basics. From the data derived from the Highgrove case study, a range of principles that highlight the features of the principal's professional learning processes has been developed. The following list of principles is not definitive, but highlight the key issues that meet the criteria outlined at the beginning of this chapter.

At Highgrove, the professional learning processes adopted by the principal were characterised by the following principles:

- 1. employment of a significant, systemic innovation as a stimulus for professional enhancement;
- 2. access to networks outside the school for professional learning;
- recognition of the school's professionals as mutualistic learners and potential leaders;
- 4. establishment of formal processes and structures to promote teacher engagement in decision making;
- employment of informal processes to focus attention on ways to achieve quality student learning outcomes;
- 6. alignment between the principal's leadership style and the context of the school;
- 7. linkages between professional learning and processes of organisational development, for example, development of a shared vision;
- 8. linkages between principal learning and teacher learning;
- 9. focus on personal mastery;
- 10. inter-relatedness between principal frustration and teacher dependency;
- adoption of an evolutionary approach to problem solving and school improvement to promote sustainability; and
- 12. recognition of relationship-kindling as inseparable from change processes.

These key principles were developed from the researcher's understanding of the key issues raised by the three informants at Highgrove. This understanding was influenced by the researchers' knowledge of the literature. The development of the principles was a complex process, and took place over a period of time. The process required major conceptual intervention as the researcher found difficulty in developing a set of key principles that could be written in a format similar to the principles from the other two case studies, when data from the three schools suggested that the contexts were quite

different. The researcher was conscious of two issues: Each principle had to reflect the processes of professional learning specific to Highgrove, and the principles had to be written in a form that could be used across all three case studies. The researcher encountered major difficulties in finding a form that fitted three different case study contexts, so that the principles could be compared in the last section of this chapter. She did not attempt to manipulate the content of list of the principles by referring to the propositions from the review of the literature, or to the principles from other two case studies.

FEEDBACK:

After William read this case study report, he wrote:

It made some very good reading for me and has helped me greatly in the planning that I needed to do for this year. Your points are very good ones. We reached a crisis in our New Basics implementation last year with the assessment overwhelming both staff and students. I think I let things "roll" too long trusting in the leadership of teachers and HoDs. I have now realised that I need to take a strong stand on a number of issues to lead the school effectively through the next stage of growth. This is a real challenge to change the way we have operated for some years.

4.3 Case Study: Hillview State School

4.3.1 Case Study Synopsis

Robert set himself the task of enhancing the knowledge and skills of the teachers at Hillview State School. He wanted to see teachers working together to improve their competencies. He wanted teachers to engage in professional learning. In an attempt to establish the school as a learning organisation, and to improve school capacity through organisational learning, Robert set up teaching teams. The team structure was still in operation at the conclusion of the study, and the teachers, having engaged in team development processes, were reported to be working together productively. However, changing the structure of the school was not sufficient to change the teachers' attitudes towards professional learning. While Robert viewed himself as an avid learner, he did not remain at the school for long enough bring to fruition his strategies for developing a learning organisation.

During the period of data collection for this study, the acting principal maintained existing processes and structures. Decisions about the implementation of new curricula were suspended until the arrival of a new principal the following year.

From his experience at Hillview, Robert learnt that relationships within the school community are an important foundation for innovation and creativity. He also learnt that, in a large organisation, influencing the attitudes and work practices of individual teachers is more difficult than in a small organisation, and has to be addressed in a different manner.

Hillview State School is situated in a provincial city in a location highly sought after by teachers. The school is relatively new, and after a period of stable leadership, experienced several changes in leadership before, and during, the data collection period for this study. Hillview is one of a cluster of schools that made a submission to be a trial school for New Basics.

Hillview State School was opened in the early 1980s and has an enrolment of 580 students and a staff of 21 teachers. The average age of the teaching staff is mid-40s and most have been there for 10 years or more, some since the school opened. The school has primarily had long-serving principals, with the previous principal having been at the school for 12 years.

For the purposes of this study, the people interviewed were:

- Robert: acting principal term 2 4, 1999 and term 1 and part of term 2, 2000; on leave for eight weeks; appointed as permanent principal from the beginning of term 3, 2000; left the school at the beginning of term 4, 2000;
- Milton: deputy principal terms 1, 2 and 3; acting principal during Robert's absences in terms 2 and 4, 2000; long service leave term 1, 2001;
- Sean: teacher upper school class; and
- David: new principal from January 2001, retired at the end of 2003.

Between 1999 and 2001, there were several changes in the principalship, resulting in a lengthy period of instability for the school. After acting as principal at Hillview during terms 2, 3 and 4, 1999 and the first semester in 2000, Robert was appointed permanently to the school in July 2000, stayed for one term, then left to take up another position. Milton (deputy principal) acted as principal during Robert's absence. From the beginning of 2001, David, an experienced principal, was relocated permanently to the school.

The researcher recognised from the outset that the changes in principalship were problematic in terms of this study. However, as this situation of interrupted leadership does occur in schools, the researcher had the opportunity to study the effect of disruption to the principalship on the professional learning processes of the school.

4.3.3 Hillview as a Learning Organisation

Robert perceived that the focus of teachers' learning should be on improving outcomes for all students. He believed that previous principals had been autocratic leaders, and he tried to change teacher attitudes from reliance on the principal for decision making to acceptance of the responsibilities associated with parallel leadership. Robert perceived that there was a lack of innovation, and the answer to this would be for the school to establish itself as a learning organisation.

Robert declared that his early analysis of the quality of teaching and learning at the school indicated that the school was in a state of decline rather than progressing: "The staff thought the school was moving, but when we started going through some processes we realised that the school was going nowhere. If anything it was sliding and that was reflected in our data." He attributed this to the school having been through a period where the leadership style of the principal, according to Robert, was autocratic, and was no longer appropriate for leadership of the implementation of innovative systemic initiatives. He expressed his impatience with what he referred to as "the dependency model," indicating that the teachers were used to relying on the principal for all aspects of leadership including decision-making, approval, and counselling for their personal problems. "I use the analogy 'Dad's home.' It's a dependency model. They don't need me to do anything, but I am a security blanket." Milton contended that lack of strong leadership had been a barrier to the development of the school as a learning community, while Robert declared that innovation at the school had stalled because it was not a learning organisation. While Robert offered ideas about the need for the teachers to be learners, and described strategies he had used to promote change in teachers' attitudes to professional learning, his desire to quickly change the culture of the school community may have been detrimental to his success as a leader at Hillview.

Milton supported Robert's perception of the teachers' mind-sets regarding leadership: "There used to be a culture where the principal was at the top, and the principal was the focus of the efforts in the school." He acknowledged that Robert had tried to change this concept of the principalship so that the energy of the school community was focused on outcomes for students. Robert articulated a vision of moving the school from a model of dependency on the principal to establishing a learning community. Robert and Milton attempted to reinforce the change in focus by developing a new management structure. Milton explained that they displayed the models (Appendix F), on the wall in the principal's office and invited staff to view the models and provide feedback as part of a consultation process. The aim of the process was to change the focus of energy across the school from being principal-centred to student-centred. Milton claimed that some teachers did view the models, and offered comments and suggestions for improvement.

Robert perceived that, in addition to minimising teachers' dependence on the principal, there were other issues that also needed to be addressed before the school could call itself a learning organisation. One of these was the quality of relationships across the school, and another was the willingness of all teachers to change their pedagogy to meet the current and future needs of students. Before attempting to implement changes in pedagogy, Robert perceived that a change in attitude and skills was required: "What I had to get right was the culture. I wasn't going to tackle the curriculum until I got the culture right. This is about creating a professional learning organization."

One strategy used by Robert to change the outlook of teachers was to establish teaching teams in the lower, middle and upper sections of the school. He contended that the teams provided a safe environment in which the teachers could work and learn together, supported by their peers. Robert explained: "The team has been a very powerful unit – has given them confidence through safety in numbers." He argued that principals are unnecessary, that the teams should run the school, with a business manager being responsible for the administrative work. Robert asserted: "We have created a profession to run the profession, to run the school, and it's wrong."

Robert realised that establishing teams would be only part of the answer to redressing the perceived lack of progress at Hillview. His assessment of the situation was that the teachers did not have the pedagogical foundations to interpret what should be happening in response to a rapidly changing world, and to change their teaching strategies accordingly: "They [teachers] think that we need to make structural changes. No, structures support what you want to do. The changes are in terms of the pedagogy and that's a big job." Milton and Sean confirmed that the teams had been working well, but that the teachers had felt that there was a lack of direction when Robert left the school.

Regarding curriculum improvement, Robert declared that there had not been a review of curriculum for a number of years. In his opinion, this was due to the conflict between the teaching staff and the previous principal: "That [conflict] was what was occupying the committees that were in existence. The Principal was trying to exert his autonomy, and they were trying to exert their authority, and that's where I entered the scene." Robert decided that the most appropriate course of action would be to attempt to establish a positive attitude towards learning across the school before attempting a process of curriculum renewal. Despite his spoken commitment to teacher leadership, Robert exhibited some reluctance to nurture an environment of shared leadership: "One of the learnings that I have had is that a big school is so consuming that I really don't have the time to lead everything and I have to lead through others."

Robert described his strategy for sharing his commitment to learning:

I have deliberately chosen or encouraged key people into key positions who are similar to me so that they can relate to me. I pass on a lot of readings. That has been very powerful because I can have an understanding about them. He acknowledged that this strategy had unexpected repercussions:

I have spent a lot of time with the team leaders, and what I realised was that I spent too much time with [them] and now the other teachers think that I don't value them. I became a stranger to them.

Given Robert's perception that relationships within the school community were poor, that pedagogy was out-dated, and curriculum development had been neglected, why did he agree to participate in the cluster trial of New Basics? He explained that his motivation for wanting to participate in the trial was the prospect of extra financial support for the school. When the opportunity arose for principals to prepare submissions for school renewal projects, Robert, together with 11 other district principals, wrote a submission to participate in the trial. His offered the following reason for submitting a joint proposal: "In order to do things differently, we have to work together with the school across the road." Robert shared his perception of the background to making the submission for funding:

We didn't know what it meant, but we said we can make it be what we want it to be. We put in some submissions. We didn't know what we were submitting for, but we made enough noise that we were asked to submit something. We thought there would be dollars attached. What it ended up being was New Basics.

From the outset, the commitment to New Basics as a means of improving teaching and learning was tenuous, being aligned to an acquisition of funds rather than school improvement.

On a personal note, Robert indicated that he believed his knowledge and skills, and motivation to learn, were not used well at Hillview. As principal of his previous smaller schools, Robert reported that he had been able to make changes quickly and effectively. At Hillview, he claimed that he felt powerless to quickly make the changes he felt were necessary, but he appeared to be reluctant to adopt leadership strategies that met the needs of the school. He was frustrated by having to use his time unproductively, in his opinion, to work through the problems he perceived were impeding the growth of a learning community:

I am positioned wrongly. I am not doing the things I am good at. I don't learn from the school. I haven't had to learn anything to work at my school. It is elementary. We need to get the relationships right. It has no challenges, sorting out squabbles. We need to reconceptualise what we are doing. What's important is not so much what we are going to do but how we are going to do it.

Robert indicated that he believed that one barrier to the establishment of the school as a learning organisation was the number of people on staff who needed personal support for social and emotional issues.

When the opportunity arose, Robert left the school to work in a university where he felt he could use his progressive ideas and love of learning more productively. After Robert left, Milton said: "The school is in limbo at the moment - we set up the teams and eventually they were all working well, but then Robert left. We haven't done anything about New Basics." Robert acknowledged that the teachers were unhappy about his secondment to the university. He perceived that the teachers saw in him an opportunity to do things differently, and that his departure could mean that the momentum behind the changes would wane if the next principal did not want to continue with them.

David's advice to other principals wanting to develop a learning community is to form relationships with the teachers and become aware of their strengths, understand intraschool relationships, and be selective about using influential teachers to persuade their colleagues to engage in professional learning:

Get to know those people because those people will have varying strengths. You've got to learn and observe the politics of that group. If you're going to make some changes there will be key people in amongst those that you've got to work on. As you identify those, you will sow seeds with those people, and you may, in fact, take some of those people out and form a management group and you'll be using those people.

David acknowledged the power of teacher leaders in influencing the rest of the staff, and that their support is crucial to the implementation of change in curriculum.

To summarise, Robert recognised the value of the school being a learning organisation. With this in mind, he endeavoured to establish a vision for Hillview, with the learning focus being outcomes for students. To this end, he developed a new management structure, and consulted with staff about the proposed structure. Three teaching teams were established, and the teams were given the responsibility for managing their own sections of the school. By establishing the teams, Robert envisaged that the teachers would work collaboratively, and learn from one another.

4.3.4 Leadership for Professional Learning

Robert attempted to change the relationships within the school by changing the structure of the organisation. He understood that he would not change the attitudes held by teachers unless he could change the existing relationships. He believed that one issue was a lack of trust between the principal and teachers. Robert was not at the school long enough to embed his vision for a learning organisation, and to establish trusting relationships across the staff. When Robert arrived at the school, he determined that the school environment needed to be "right" before a process of reforming the curriculum could be undertaken. Therefore, he created seven teams of teachers, three of which were based on lower, middle and upper school groupings. He stated: "The team has been a very powerful unit – has given them confidence through safety in numbers." Robert perceived the establishment of teams to be a means of creating a professional learning organisation. The teams were a structure to generate professional learning through conversations with peers, as well as to make decisions that directly affect the way each team operates. In supporting his objective for the team structure, Robert contended: "Professional collaboration through the teams runs the school."

The need for a change in teachers' attitudes to success was evident from the description, offered by Paul and Milton, of a situation that had arisen when the upper school team had been working well. Robert publicly praised their accomplishments, but the other teachers were unhappy about the accolades received by their peers. Paul explained that he had asked Robert and Milton to "go quietly on their successes." Rather than learn from the achievements of one team, the other teachers chose to adopt a negative attitude, and continue to struggle to make their own teams work effectively. In the short term, this propensity of Robert's to draw attention to the successes of some contributed to a "tall poppy" syndrome that did not contribute to the successful implementation of New Basics. In the longer term, Milton reported that the lower school team had worked through a long period of intense negotiation in order to develop a common philosophy of early childhood teaching, but the team members had finally established a good working relationship and were engaged in learning in a collaborative manner.

Robert found that it was harder to influence an older staff in a big school than it had been for him to make a difference in the thinking of a younger staff in a smaller school: "In a big school with older staff, I can't influence the staff in the same way as I did when I had a younger staff in a small school." To start influencing the staff, he deliberately encouraged key people to accept significant positions in the school. These people were supportive of his endeavours to establish a learning organisation. Robert reported that he had passed on many readings to these people, and he contended that sharing the readings had created a common understanding about what he hoped to achieve. Milton confirmed that Robert had shared interesting journal articles, but expressed his belief that only half of the teachers had read them.

David appeared to be more accepting than Robert of the notion of the principal as leader, and demonstrated a greater willingness to find strategies to work with the current situation than to be frustrated by it. David contended that a principal has to be wellinformed, to have an opinion on a particular issue, but be willing to be flexible enough to consider the input of others. While this may seem to indicate a lack of firm conviction or direction, David indicted a willingness to acknowledge the perspectives of others, while steering the decision making unobtrusively in a direction that he considered would meet the needs of the school and benefit all students.

You have certainly got to have a good knowledge base, you have had to have thought through a position, a vision if you like, but you have got to be willing to have that vision changed or altered according to the input that you get from others as you share that. When you operate the way that I do, sort of democratically, I find it enormously frustrating at times to see the agenda pushed to the side or pushed in a different direction that you don't want it to go, but if you are going to get it moved back, you've got to be careful that you bring it back democratically and you don't lose the people, or you could lose the ones you are trying to turn into believers.

David and Milton both articulated a belief that the way a principal operates is determined, in part, by the context of the school. David appeared confident that his breadth of experience, combined with the skills he had developed over many years as a principal, had furnished him with a repertoire of useful strategies for working effectively in his new school.

The way I ran my previous school is totally different to the way I am running here. It will change because I tend to play the field. I haven't brought a lot of preconceived ideas. I would rather work on the strengths that are here, and work with those to get to a general educational goal at the end, which is a better deal for kids educationally. The leadership skills of a principal, as outlined by David, focus particularly on people, rather than on issues related to management or curriculum. "I think it's the skills that you learn by experience over the years, going through various types of schools, sizes of schools, learning how to deal with people, learning what to look for, learning how different people can be motivated." Milton explained this further by stating that the one aspect of curriculum development that the curriculum writers cannot control is the way in which curricula will be implemented in each school. He claimed that the variable is the range of skills and experiences that each teacher brings to the implementation process. Milton declared that, as well as nurturing technical knowledge and skills, a commitment to supporting the workforce and lifting morale is very important. Milton and David both contended that the leadership skills that a principal requires are dependent on the context of the school, a key aspect of which is the morale, skills and knowledge of the teachers.

Robert articulated firm ideas about what action he believed was needed to move the school forward. However, he was not prepared to accept the current situation with staff, their expertise and morale, and to be patient in working with them to move towards what he considered to be a better future. In other words, a gap existed between his ideas and his preparedness to take appropriate action to establish a learning organisation. While Robert remained unprepared to close that gap, his actions would not match his rhetoric, and, if he stayed at the school, progress at the school may have continued as it had done previously, despite his professed desire for change in the skills, attitudes and beliefs held by the teachers.

4.3.5 Learning, Curriculum and Change

During the data collection period, it appeared that little changed in the way curriculum was implemented in the school. There seemed to be an acceptance of teachers' reliance on the principal's leadership of curriculum innovation, despite frustration expressed by Robert and Milton about this situation. Milton spoke at length about theoretical underpinnings for creating teacher competence, but he did not elaborate on how he used his knowledge to change the attitudes of teachers to adopting new curricula. The difficulties associated with implementation of worthwhile changes in the school were among the key issues to arise from this case study. Robert spoke of his frustration with teachers not wanting to take on new ideas, and of his perception that the teachers were not excited about professional learning. Robert argued that the teachers are trying to reconceptualise curriculum, but inferred that they would not be successful while "they are still using the same knowledge base." When asked if the teachers actively seek out new ideas, Milton replied that some teachers do this, but this attitude would not be uniform across the whole staff. In support of the teachers, he added: "If they're exposed to ideas that they think are good, they will use them."

Milton expressed concern that some teachers were unable to come to terms with the need to change their practice to reflect the impact of information communication technologies (ICTs) as well as changes in societal expectations: "Probably half of the people at the school are prepared to gain new knowledge but the other half want to play ostrich." He claimed that, in his view, many teachers had not come to grips with future-oriented learning, and the need to educate students for a changing world:

I think that teachers are having trouble coming to terms with the fact that the big, on-show teacher putting on a series of activities is outdated, and that to engage learners in a variety of ways we need to use a lot more resources, and computers is one of those.

I suppose that it is a form of protectionism and some people are hoping to go back to what they were originally trained for. So, they go into a form of siege mentality and hope that generally what they are good at will become a departmental standard again.

From Milton's perspective, tension exists between a dynamic leader making worthwhile changes that will enhance student learning, and being so integral to the change process that the changes dissipate as soon as the leader leaves the school. Milton declared that a leader has to think long term and ensure that teachers have ownership of the learning process so that the initiatives, once started, are progressively owned and adopted by the whole school community.

At Hillview, the interviewees expressed a belief that the teachers regarded change as something which is imposed on them, is led by the principal, and that change equates to teacher burnout, rather than being an ongoing learning process, a journey without end. Milton explained:

Robert was very open in espousing his vision of education and what the school needed to evolve to as an educational campus going into the next 10 years, and everyone was well aware of that here, and most people agreed with that and were prepared to go along. Where things came unstuck was that rate of change.

Everyone was very supportive at some point in time, but when things took Robert out of the school then I think people felt a little bit let down: "If Robert's not going to be here, then I'm not prepared to go that distance either." The biggest hindrance is still they are worried they are going to get burnt because they have seen the change upon change upon change that has happened in education. If New Basics was suddenly going to be adopted statewide for at least 10 years, I think they would run with it.

David attributed this attitude to the mature age of the staff, while Milton assumed that the attitude stemmed from teachers putting in a good effort during previous changes and not seeing any real benefit for students emanating from those changes.

During the second interview, Milton referred to a discussion paper (Appendix F) centred on a model for building competency based on an assumption that everyone has some knowledge that can be used as a framework for further learning. Milton explained his belief that, when a core set of skills is combined with the knowledge, competence ensues; when a positive attitude is added to the equation, performance is the outcome.

The more knowledge and skills the greater the competence. That is a two dimensional structure. If you tie in the attitude, then you get a cross over of the three circles then you get performance. Knowledge and skills alone provide competence; combined with attitude, then you get performance. Many teachers here have the knowledge and the skills but at times people can be jaded; attitude is an important one.

Milton did not elaborate on how he used the concept of competency building to improve the competency of teachers at Hillview. With reference to the school situation, Robert expressed concern about the knowledge and skills of the teachers, and David and Milton spoke about the negative attitude of some teachers. If Milton's Venn Diagram (Appendix F) is a true reflection of how performance is effected, then David has a challenging future ahead in setting up a learning organisation where all three aspects of performance, as described by Milton, can be drawn together to produce excellent performance from all teachers. If he is going to establish a learning organisation, he will need to work with the teachers to establish an atmosphere of trust, and to change their mental models about the role of the principal and the value of change.

4.3.6 The Principal as Leader Learner

Robert claimed that he was an avid learner, and expressed the view that principals and teachers should be committed to upgrading their own professional knowledge and skills. Robert expected that the teachers would be lifelong learners, but seemed unwilling to use his position as leader to work with them to address their unwillingness to engage in professional learning. David, a more experienced principal, acknowledged that the context of the school impacts on the change strategies adopted by a leader.

Robert shared his passion for learning: "What motivates me as a learner is I get off on studying, researching and learning. You give me a good article, a good book. I love it." Robert's motivation to learn comes from his belief that "power comes through knowledge" and not through position. He declared: "It gives me strength as a leader to have knowledge. I believe that strong leadership comes through knowledge." He also considered his capacity to engage in critical reflection as a means of learning to be a valuable personal asset.

When asked about the responsibility of the principal in relation to setting up a community of learners, Robert declared that, in the current paradigm, the principal plays a critical role in promoting positive attitudes towards professional learning. He was adamant that principals should embed themselves in some form of professional learning, and expressed concern about principals who do not make a conscious effort to expand their knowledge by formal or informal learning:

Very few principals that I know embed themselves in any sort of formal study. It doesn't have to be university, just expanding their minds. Some people do it by reading. Some people do it by watching television. Some people do it by interacting with other people. Some people have a closed shop mentality. They do not reflect.

Robert suggested that the allocation of mentors to all principals would be a suitable strategy for overcoming the problem of principals not being prepared to engage in the acquisition of new knowledge. He perceived that the mentors' role would be to actively encourage the principals in self-reflection and critique of readings in educational leadership, management and related spheres of knowledge. The mentors would also be instrumental in assisting the principals in determining the areas of research and knowledge that they should explore to enhance their ability to provide effective school leadership.

Just as Robert asserted that principals should be responsible for their own learning, he also contended that it is the responsibility of the teachers, as professionals, to be responsible for individual learning.

It should be the teachers' responsibility. I am not responsible for their learning. That's a professional responsibility. That is why I refer to my teachers as tradespeople. They know their trade but they are not professionals. One of the key components of professionalism is critical reflection and lifelong learning. Milton supported the view that teachers need to be learners when he declared that other professionals are required to undertake training and development to maintain registration with their relevant professional association.

You wouldn't go to a doctor who hasn't had any further training for the last 20 years. I think it is pretty hypocritical for teachers to think they can rely on the same bank of skills and think it is appropriate.

When reflecting on the time he had spent at the school, Robert offered some suggestions about where he would begin, if he had another opportunity to do so: "If I could start again, I would start by embedding a learning process as part of a journey." He offered the notion of establishing partnerships with a tertiary institution: "I would look at getting some strategic links with some sort of university or provider, because when you are learning with your staff, it's not something that they do and I do in isolation – we've got to learn together." Robert also shared his realisation that establishing good relationships was an essential part of the journey:

When I got there, there was no trust. The teachers didn't trust me. The team coordinators didn't trust me. My secondment [to the university] hasn't been received at all well. They see me as the opportunity to do things they want to and now that I've gone, they surmise someone else will come in and stop it.

While Robert contended that he did not need to learn anything new to run the school, it is apparent from the last quotation that he could have put energy into developing leadership strategies for establishing trusting relationships. He could also have attempted to embed professional learning as part of accepted practice at the school so that progress did not falter when there was a change in principal.

4.3.7 Learning from the Hillview Case Study

Robert was passionate about professional learning, but this was not sufficient to create a learning organisation. His effectiveness as a leader of a learning organisation was negated by his unwillingness to work with the teachers to forge a common vision based on the needs of students. As acting principal, Milton did not take the opportunity to put his theories of school capacity building to practical use. David was prepared to work with the teachers to achieve what Robert set out to do.

This section summarises the findings derived by the researcher from the Hillview Case Study. The conclusions drawn, particularly in relation to what the principal learnt, are those of the researcher, based on data collected during interviews, as well as personal observations made during visits to the school.

Despite the commitment of the principals to learning per se, the disruptions to the principalship at Hillview State School precluded the school from implementing New Basics. Robert articulated his personal commitment to learning, and expressed his desire to engage staff in challenging their mental models about curriculum and pedagogy. However, he did not demonstrate a capacity to use his learning and his leadership skills

to bring about the changes he desired in the relatively short period of time he spent at the school. Milton, as acting principal, did not feel that he was in a position to make significant changes despite his personal commitment to learning. He adopted a caretaker role, managing the operations of the school, but not engaging in strategic leadership. David demonstrated a different leadership style, indicating his willingness to work with the teachers in a collaborative manner while they made shared decisions about future curriculum developments.

In the short time that Robert was at Hillview, he learnt that human resource management is crucial to creating sustainable changes across the school. He learnt that establishment of trusting relationships, and valuing the contribution of all participants are essential elements of creating a learning organisation. Robert learnt that learning has to be embedded in change processes, so that teachers see the changes as being relevant, and of benefit to them and their students. He also learnt that establishing partnerships with other educational institutions could be used to support organisational learning.

A range of principles about professional learning are evident in this case study, despite the situation being one of disrupted leadership and apparent lack of progress in implementing innovative curriculum. The implementation of New Basics was put on hold from the time Robert left the school, and no decision had been made about its implementation at the conclusion of the data collection period. Hence, an assumption has been made that the period of disrupted leadership resulted in little progress in improving pedagogy and implementing innovative curriculum. Therefore, the principles listed below are a result of negative and positive experiences affecting the principals' capacity to engage the school community in professional learning.

On the basis of the Hillview case study, it is suggested that principals' professional learning is inseparable from successful innovation. Factors that may have inhibited professional learning included:

- 1. difficulty in managing the teachers' social/emotional issues;
- dependence on the stability and continuity of the principalship for school improvement;

- concomitant personal belief in knowledge as the basis for power, and reluctance to give up positional power;
- 4. limited sharing of knowledge with teaching staff; and
- 5. acquisition of knowledge that may have been unrelated to the needs of students, teachers or the system.

At Hillview the principles adopted by the principal that resulted in positive outcomes included:

- 1. use of formal structures, for example, teaching teams, as a strategy for promoting teacher engagement in professional learning; and
- 2. engagement in personal learning.

The key principles were raised independent of the literature review and the other two case studies. In the final section of this chapter, the Hillview principles will be compared to those from Highgrove and Riverbend to determine the similarities and differences between the professional learning processes used at each of the schools.

Feedback:

Milton wrote:

I have read through your report which is a very good summary. Your interpretations are valid for the amount of time you spent at the school. New Basics has been implemented at Hillview with considerable success due to efforts of three Year 3 and three Year 6 teachers. The school is still implementing New Basics with a large range on the scale of enthusiasm.

4.4 Case Study: Riverbend State School

4.4.1 Case Study Synopsis

During the period of data collection for this study, significant progress in implementing New Basics was achieved by an exuberant principal and a team of teacher leaders. For a period the teachers believed that they were state leaders in their implementation of New Basics. From the outset, Margo attempted to enhance the school's capacity to deliver positive learning experiences for students through carefully planned developmental activities for the teachers.

However, after Margo was temporarily relocated to another school for 2001, the excitement about curriculum implementation at Riverbend dissipated. The teachers, who had been very enthusiastic about the professional learning in which they had been engaged while Margo was principal, expressed disillusionment with the curriculum implementation process. They were no longer willing to overcome the issues associated with implementing New Basics, and retreated from the role of teacher leaders.

Margo learnt that the teachers were reliant on her for leadership, but that they were motivated by the challenges associated with developing the school as a learning organisation. Margo learnt strategies for developing teacher leadership, and enhancing teachers' attitudes, skills and practices. She learnt that changing organisational culture and ensuring sustainability take time and patience. Margo learnt that good relationships and alignment of key functions are necessary foundations for a successful organisation.

4.4.2 Setting: Riverbend State School

Riverbend State School is situated in a small rural town within easy driving distance of a provincial city and vibrant coastal communities. The school is closely involved in the local community, and in recent years has become respected for its innovative approaches to curriculum and pedagogy.

Riverbend State School, with a student enrolment of approximately 320 students and a staff of 12 teachers, has modern low-set buildings set in spacious, well-developed

grounds. It is located in a small, rural town in the hinterland of one of the major coastal developments in Queensland. School support services are located in a nearby provincial city. Riverbend belongs to a cluster of schools working together to share innovative practices.

Margo, the principal, had been at Riverbend for eighteen months when the data collection for this study began. She nominated Ken and Kate, both classroom teachers, as participants in the study because she regarded them as leaders in the curriculum development that was occurring as the study commenced. Rose, the school's learning support teacher, acted as principal during 2001 while Margo was seconded to another school. Rose was interviewed in her capacity as acting principal in 2001.

Margo described the school as having a wonderful physical setting, but said that when she took up duty the staff were generally unhappy. During the period between the previous principal's departure from the school and Margo's appointment, there had been two acting principals, so the school community had been through a period of disrupted leadership prior to Margo's appointment.

When speaking of the community attitudes towards the school, Margo said that she had encountered a situation where "there was quite a growing perception that this school was not a good school in terms of, not only relationships with the community, but in terms of the regard for the curriculum and student outcomes." Before taking up duty at Riverbend, Margo was briefed by local District Office personnel about the challenges facing her regarding the need to address the situation where Riverbend parents regularly complained to District Office staff about the teachers and school happenings. Margo described the relationships and the level of understanding between the community and the teachers as being very poor:

... a culture of complaint and a culture of it being someone else's job. The teachers were into "if only the community didn't do that we would be able to get on and do our job" and the community was thinking, "if only the school would get on and answer our problems." There was a stand off.

Early in her tenure at the school, Margo adopted a firm stance with two or three parents whose aim seemed to have been to disrupt school-community relationships, and from whom many complaints had stemmed. Margo met with the people concerned, and emphasised to them that it was in the best interests of the school and their children's education for their disruptive actions to cease. Kate spoke warmly of the actions Margo undertook in order to establish positive relations with people in the community:

The parent issues is something she got right on top of. She was very firm. She had to come in and lead the change with the community. She handled that very well, finding out the regulations. It was firm and quiet.

Margo perceived that the antagonism between the parents and staff had affected the health and well-being of the teachers: "Their organisational health was not good. They needed a lot of emotional support." For the first 12 months, Margo noted the amount of leave taken, health problems, and inability of some teachers to develop relationships with new staff members. Ken and Kate described a situation where several teachers had been working in the school together for 10 years or more, were "a good, cohesive staff" and good friends, and supported one another. While Ken and Kate did not focus on the issues that Margo had identified, they did acknowledge that relationships were strained between the school and some people within the local community. In the first six months at the school, Margo reinforced the need to move forward: "It's over. Let's get on with it. Stop telling me about the blood on the carpet. Let's get on with what we are going to do to make this a different place."

4.4.3 Riverbend as a Learning Organisation

On arrival at the school, Margo encountered an environment of distrusting relationships between the school and the community. The challenges included refocusing the energy of teachers and parents on improving outcomes for students, rather than perpetuating a situation where making complaints rather than finding solutions was the norm. Margo changed the school environment by developing positive relationships, and focusing the attention of teachers and parents on the future, rather than on the past. The challenge for Margo was to establish a school-wide focus on effective teaching and learning, producing enhanced learning outcomes for students and developing positive relationships with the community. The challenge included refocusing the energy of some members of the school community from being disparaging and unhelpful to being constructive, and contributing to the development of a productive learning environment.

Soon after her appointment to the school, Margo led a process of school renewal, during which the participants identified what was working well in the school, as well as the challenges facing the school community (see Appendix G). The teachers explored new ways of implementing curricula to meet the needs of students in a rapidly changing society. When the opportunity arose to be involved in the trial of New Basics, the teachers felt that they were ready for the challenge. Riverbend State School quickly became one of the state leaders in the trial because Margo ensured that resources were available to support the release of teachers for training in all aspects of New Basics. Margo supported, as well as challenged, the teachers during the implementation phase, and she successfully engaged teachers who had previously been reluctant to change their pedagogy. However, the synergy that was evident at the beginning of the study waned after Margo's temporary relocation to another school.

After two years at the school, during the data collection period for this study, Margo moved to a larger school for 2001 to replace a principal who was on leave. When Margo left the school, the teachers were involved in the trial of New Basics, and the District Director gave careful consideration to selecting the most appropriate person to act as principal in Margo's absence. The staff expressed a preference for one of their colleagues to do the job rather than an external person who would not be familiar with the innovative curriculum development that had taken place in the school. Acceding to the wishes of the staff, the District Director appointed Rose, a specialist teacher who had undertaken leadership roles on previous occasions, to replace Margo during 2001. Despite careful planning, the resulting change in staff dynamics negatively affected the rate of progress of the implementation of New Basics at the school.

4.4.4 Leadership for Professional Learning

Through her own love of learning, Margo engendered renewed commitment to professional learning among the teachers. She taught them that learning is a journey; that all learning is important. Through her synergistic leadership, Margo created an environment where the teachers were excited about adopting new curricula and pedagogy.

Margo exuded a love of learning and demonstrated her willingness to be a leaderlearner. She said sharing her learning with others, who in turn become excited about sharing their knowledge and skills, stimulates her. Margo's excitement about the learning and development that had transpired since her arrival at the school was reflected in the following statements from Margo and the teachers:

It's the synergy or momentum of all the stuff that is happening, feeding off one another, and whilst you might not have a lot of things finished, it is in the state of chaos that things happen, because they are all feeding together and the learnings that are happening in all of the different related aspects are far more significant than if they were just happening in relation to curriculum per se, or relationships, or the embeddedness of community into the school or global aspects of change. (Margo)

I can remember that where we were in 1999, and that has changed completely. I think you have to be fairly flexible to be able to go down one track and if that doesn't work, to start again. (Ken)

At the time we were planning the KLAs [Key Learning Areas], we didn't know the Rich Tasks were coming round the corner. I think the turning point might have been the Rich Tasks. When we were getting down the track with our planning it gave us a focus and great enthusiasm. We could see the benefits of that type of learning and we said: "Oh, beauty, this is so different from anything we've ever done. We want to trial it." (Kate)

Margo's description of herself as a leader is aligned with her actions as a principal. She said that she is reflective, examines and tests frameworks, pushes the boundaries, is a

change agent and risk taker, and has the capacity to challenge the status quo. The enthusiasm with which the teachers spoke about the learning and development that had taken place under Margo's leadership indicated that her actions reflect her self-analysis.

Margo described learning as being a journey. She demonstrated a capacity to reflect on the situation and plan ahead, using her knowledge and experience to develop a framework for direction, but not imposing this on the teachers. She said that she had worked with the teachers to encourage them to understand the importance of the journey, and the learning that takes place along the way. Ken expressed some frustration about having to undertake the journey, but also demonstrated an understanding of the value of his learning about New Basics when he said:

We'd become so bloody-minded over the last 10 or 15 years about all these changes that come in, and then it's changed 12 months later. We'd become very sceptical often, but we can see the use for this – it's useable and we can see the benefits for the kids and us, and that is why we are going for it.

Ken and Kate described a situation where they knew that Margo was ahead of them in their thinking. Ken explained that he understood Margo's strategy for developing teacher knowledge and understanding:

Margo could have told us three weeks ahead of time but she knows that the journey is important. It's valuable to get to that point, to have all that learning. We have to go through this rather than be spoon fed, which is pretty frustrating.

The size of the school and the number of teachers influence how the principal will operate as a leader, and how the principal sets up relationships with staff. Being a medium-sized school, Margo was able to espouse her philosophy of teaching in a way that directly influenced all teachers. She offered the following example:

The other deliberate thing I did on the first couple of days I was here was to talk to teachers about my other view about teaching which is about my PIE – Prevention, Intervention and Extension. It occurred to me that you could intervene [provide extra learning support] all you like but unless you were going to prevent [failures] you were going to go nowhere. The "prevention" and "intervention" things were very clear to me, but it worried me and troubled me that in terms of the curriculum

activities that the gifted kids never got anything. They were the forgotten ones. It was talking through those strategies that we thought what about these extension kids. So the three things "prevention", "intervention" and "extension" [evolved].

To begin the process of credentialing the teachers for their technology competencies, Margo proposed a "buddy" system for everyone. This was a deliberate attempt to achieve two outcomes. The first was to enhance the confidence of teachers in using computers. The second aim was to initiate conversation between the teachers to progress an agenda of developing innovative curriculum. Margo's stated leadership style involved encouraging teachers to be actively engaged in learning to be leaders in their own right.

On the subject of the style of leadership needed for successful curriculum implementation, Margo espoused a view that a principal has to develop a repertoire of leadership styles, to be accessed as the situation requires. She also recognised the need for what she calls vertical and horizontal models of leadership, which are described in the literature as density of leadership and parallel leadership.

There's the transformational, and the transactional and the authoritarian and the parallel leadership and educative leadership. Each one of these is just to me a face. They can't stand alone, nor should they be recognised as very powerful and important because it comes back to what is needed at a point in time to do the job. So it's not being true to the kind of person that you are, but that you have got a repertoire of practice to call upon, and they might be your pedagogy if you like, that we call upon when we engage as leaders.

Margo portrayed her own leadership style as being "parallel, not visible." She said that she does not need to be at the forefront, the person in view, preferring "to walk beside or support behind the scenes." She articulated a belief that a principal's leadership is a reflection of the capacity and attitudes of that person as a leader. Margo considered that one of her strengths as a leader was to "sow seeds of thought in peoples' minds so that they can connect the dots." She declared that it is important for teachers to address the curriculum in an interrelated way, so that students understand why they are learning something and how this relates to other learning experiences. In contrast, Rose described herself as being able to take an analytical, rather than subjective, approach to leadership at the school. She also described herself as a good facilitator, but admitted that she was "stumbling a bit" in her attempts to keep up the level of activity that Margo had generated in association with the implementation of New Basics. She said that she would willingly access the services of an external facilitator to continue the learning process at the school.

One of the reasons for Rose's feelings of uncertainty in her role may have stemmed from the teachers' desire to have a school-based person act as principal, with the associated expectation that the high level of activity associated with New Basics implementation would continue uninterrupted. Her appointment to the principalship automatically affected the relationships that Rose had previously held with the rest of the staff. Rose and Ken had not previously enjoyed an harmonious working relationship. Rose shared her belief that her promotion to the principalship may have exacerbated the situation. Ken, a teacher leader in curriculum development under Margo's leadership, took the opportunity to retreat from his curriculum leadership role. "I've basically dropped out because we have done what we could do easily and now it is harder. I feel a bit down on myself because I took it on."

Rose regarded Ken as being a hindrance to professional learning in the school community because she believed that he wanted to manage the implementation of New Basics his preferred way, and would not listen to the opinions of others. By Ken's own admission, this could have been the case. He provided the following description of the progress with New Basics at the conclusion of the study:

We are having to push it on other people who don't want to have it pushed onto them, and other people coming up with ideas which aren't necessarily what we feel are the correct ones. We have taken a backward step. It was getting too hard.

Ken's behaviour described above was in direct contrast to the excitement exhibited by Kate and Ken during the interviews conducted in 2000. Kate then described herself as being, prior to Margo's arrival at the school, over 50 years old and happy to coast into retirement. Under Margo's leadership, she found herself being excited about teaching, and her curriculum leadership role in the school: "From my point of view, I am not far away from retirement. It's just given me that change. I'm excited about what I am doing now. It's just enthusiasm. Otherwise I would have gone almost into reverse."

Similarly, Ken described himself, before Margo's appointment, as lacking in confidence and feeling inferior, wondering if he should be working elsewhere. Ken indicated that he valued the opportunities for personal growth associated with New Basics and his interactions with Margo as principal.

The last couple of years I've felt that I've been learning. I actually feel like I'm doing a good job. I've never had that feeling before. Now I am confident I can do all these things. All this training has helped me. My professional attitude has gone through the roof. I can see the value in what I'm doing now.

In their teacher leadership roles, both Kate and Ken agreed that they had been well supported. They had been given time off class to write units of work and to attend training and development activities. They were motivated by being supported professionally while trialing different approaches to teaching and learning. It was obvious from their enthusiasm that they valued their interactions with Margo, and enjoyed the culture of collaboration and professional learning. Kate described Margo's leadership style as follows:

It's just the way Margo talks to you and treats you. Everyone is just as important as the next person. She just has that power to have everyone staying after school in a very exciting way. It has meant we are so energised and keen to work. She is out there and up front.

When asked if they thought the pace of learning would persist if Margo left the school, both Ken and Kate expressed a hope that the changes would persist, and that the work in curriculum development would continue. During the last interviews at Riverbend, it became obvious that the teachers had become reliant on Margo as leader and were swept along by the strength of her leadership. They were teacher leaders while Margo was principal, but the practices associated with parallel leadership were not sufficiently wellestablished to be sustainable in her absence. Margo's energising presence promoted a view of leadership symbolised by frequent communication, lively debate and enthusiasm for learning. This style of leadership could not be sustained by the acting principal. Ken described the few months after Margo left the school in 2001. "We have been treading water since the beginning of the year. The principal makes a difference. They are 99% of the issue."

When asked about barriers to professional learning, Margo explained her perception that learning from her colleagues is limited because some principals engage only in a superficial level of principalship. She described these principals as skating over the surface of many things, including curriculum, and not dealing with any of them in a focussed manner. Margo shared her concern that minimal opportunities exist for her to learn from her colleagues by engaging in deep, challenging conversations about curriculum.

When speaking about principals and their own learning, Rose expressed the opinion that principals should be proactive in their acquisition of knowledge, and need to develop processes for the school-wide sharing of knowledge. As well as needing professional development, Rose stated that principals need the support of their colleagues. She contended that they should actively seek out, acquire and share good ideas and resources from a variety of sources including their colleagues, academics and other people with relevant expertise.

4.4.5 Learning, Curriculum and Change

Margo established a culture of shared commitment to innovative curriculum implementation by encouraging and supporting teacher learning and leadership. Margo expected that the teachers would explore how new curricula could be implemented once they had a clear understanding of the philosophy and structure of the curricula. She modelled and encouraged double-loop learning.

Margo described herself as being global, rather than miniscule, in her thinking. From the outset, as part of her change management strategy, Margo articulated a clear focus on the interrelatedness of pedagogy, curriculum and relationships within the school and its community. She presented a framework of her expectations to the teachers to guide the change process, but stressed that a team effort is required to determine how new

curriculum is implemented: "It's the whole exploration of the whole gamut of, not only what the curriculum is going to be, but how the pedagogy is working and what the relationships are, all the different aspects" Margo explained that she relies on the teachers to explore how the framework will be implemented. She declared that she does not have a prescribed way to ensure strength of coherency in the curriculum, depth of engagement of the students in their learning, positive relationships with the community, and wider engagement with global educational agendas. "I see my capacity as a leader is to work with staff and keep them believing in what we are doing – provocateur, asking questions, not giving the answers." Ken and Kate were confident that Margo understood the appropriate direction for curriculum development. They were confident that Margo would guide and support their learning, without being directive while doing so.

Margo's commitment to the concept of teachers' learning being an investment was evidenced by the high level of funding set aside for professional development. Margo believed that the team would understand, and be really committed to the curriculum innovation, if they gained a clear and thorough understanding of the philosophical underpinnings of New Basics. She did not support a situation where the teachers had limited understanding, and thought that they were "just taking on a step and thinking that this is where we have to go, and someone has told me to do this and I don't understand why." She shared a firm conviction that change is journey, and it is about developing a shared vision:

The emerging thought is that it doesn't matter what we do, we might not get it right the first time, the journey is important – building a solid foundation about what is right for this school. To a degree, we have to be able to come to decisions – not necessarily about all doing the same thing – but about all moving in the same direction. People see change as beginning and ending. I see it about making change along the way – double-loop learning – building on our knowledge as we go.

Margo described herself as having "a passion about higher order thinking and developing deeper understanding of all of the essential elements [of curriculum and pedagogy] as well as being able to deliver less in terms of concept but more in terms of depth." She offered the example of her desire for teachers to be confident about higher-order literacy:

To me literacy has been still viewed as code breaking and all of those other things that are quite low level, but it is being the text analyst; it is about all the silences of text; what are the audiences; how it affects the audience; what is the literacy design about. That is in the area of critical analysis, and critical thinking, and higher order thinking.

During the second interview, Ken and Kate used documents (Appendix G) they had collected during all of their staff planning sessions to demonstrate, and to remind themselves of, the recent activities they had engaged in and the progress they had made. They reflected on their journey of learning and development, articulating an understanding of the value of their learning. They shared the view that, even when they had spent time learning about and using Key Learning Areas as curriculum organisers, then changing direction to move into New Basics which use Rich Tasks as organisers, their time had not been wasted. Kate described the change in direction: We started on the New Basics and we wondered if we were doing the right thing, and the New Basics consultants came into the school and said we needed to do something differently. We realise now that it wasn't wasted time because what we did when we went off that way has been useful learning for where we are now.

The result of taking steps to meet the challenges, and deliver curriculum in more complex and challenging ways, was professional recognition in the wider educational community. This was evidenced by, for example, the winning of a special funding grant to develop a unit of work to be placed on the Internet for all schools to access. Margo believed that the grant was a result of persuasion, influence and framing organisational learning in a provocative manner that attracted the interest of other educators who were also keen to improve on their own practice.

4.4.6 Principal as Leader Learner

As a leader, Margo directed the energy of teachers and parents towards ensuring the curriculum met the current and future needs of students. As a leader of learning, Margo encouraged the teachers to engage in professional learning. She set up structures to facilitate professional conversations. She modelled reflective learning, and encouraged the teachers to do the same. Margo's philosophy of professional learning, and her understanding of the impact of ongoing learning and resulting change, was embodied in these words:

We as principals need to be seen as learners ourselves. We need to talk about our own experiences about how we have had to change direction as a result of learnings. I hope that I can reflect on the result of our learnings. We need to consider that people are fragile and be conscious of the impact of change on our teachers.

Having previously been in situations where relationships between the school and its community were strained, Margo was able to reflect on knowledge she had acquired in those settings, and retrieve a range of useful strategies, tailoring them to meet the needs of her current school. She said that she had found previously that focusing on curriculum was a positive means of directing the energy of the teachers and the parents, rather than allowing individuals to remain focused on perceived injustices of the past.

The previous settings have had difficulties with the community, perceptions about the school quality, and behaviour management so rather than just focus on the behaviour management aspect, I've focused very much on the curriculum aspect of teaching and learning process and the actual pedagogy itself. So coming into that, my personal philosophy is very much about taking opportunities, looking forward, rather than backwards, trying to work together to come up with solutions rather than attributing blame.

By focusing on the curriculum, Margo found that the teachers would work with her. She asked, "How can we make it better for you in the classroom?" In doing this, she demonstrated a commitment to supporting the teachers as well as supporting the students, so that everyone could focus on the school's core business of quality teaching and learning.

When faced with a new situation and particularly one where there was obvious unhappiness amongst the school staff, and poor relationships with the community, Margo had to make decisions about what to address first to deal with the negative issues. She began by scanning various aspects of the school and its operations, looking for areas of strength, as well as opportunities to build on what was already in existence. To draw the teachers together, Margo chose compulsory systemic training for all teachers - Level One Competency in Technology – as the framework for their activity:

I tease out what are the strong features of this school so that you can start getting some accolades, and this we praise and encourage. It is very easy for people to focus on the negatives, and positives are my way of operating. The second thing I negotiated with the teachers during the pupil free days was the focus on all teachers having their technology level one competencies.

Ken and Kate described how, in an attempt to gain an accurate view of the status of the school from a range of perspectives, the whole staff engaged in a process, facilitated by personnel from the local District Office, of analysing the state of various aspects of the school. As they spoke about the process, they referred to the documents in Appendix G, explaining, that through this process, the teachers determined that the school was ready for a change in curriculum focus. While Kate and Ken said that they initially thought the process was a waste of time, they admitted that it had prompted them to accept the need to change their pedagogy. The school renewal process also provided a foundation for the teachers and Margo to work collaboratively with a common focus. During interviews, Ken and Kate demonstrated that their enjoyment of working and learning together, and with other staff members, with a focus on New Basics that they believed provided the solution to meeting the needs of students in a future-oriented way.

Evaluation of the effectiveness of leadership strategies provides a basis for formulating plans for moving forward. Evaluation can be as informal as self-reflection, or more formal, for example, as using an external consultant to collect qualitative or quantitative data and analysing it. Margo said that she analyses various areas of her leadership, but expressed a concern that she should use data more effectively:

Evaluation is something that comes from my own reflection and feedback from other people. Generally, it is qualitative. How do you measure the significance of the change that happens in schools, apart from the stories that I tell which is my perception and is coloured by my own ego, and not necessarily tied to true hard data, quantitative rather than qualitative? I analyse areas of learning separately. I see it as a cycle. If I am analysing stuff, I ask what is happening with relationships because that impacts on people's health and well-being, and their ability to accept change, move forward, be excited and do a good job.

While Margo expressed concern about not evaluating progress at the school, the planning documentation provided a benchmark against which the progress being made could be measured. The School Opinion Survey, showing the results of a survey undertaken annually by all Queensland state schools, also provided positive feedback for the school community. The District Director congratulated Margo on the improvements in community relations and staff morale, significant decrease in parent complaints, and enhanced student outcomes at the school.

4.4.7 Learning from the Riverbend Case Study

Margo considered that she had a range of skills that she could use to meet the challenges presented by difficult school communities. However, she continued her own personal learning journey to meet the challenges presented by Riverbend, turning around the negative culture and creating a vibrant learning community for students, teachers and parents.

This section summarises the findings derived by the researcher from the Riverbend Case Study. The conclusions drawn, particularly in relation to what the principal learnt, are those of the researcher, based on data collected during interviews, personal observations made during school visits, and while perusing school documents.

Riverbend State School presented as an organisation where the principal and teachers were initially excited about developing new curricula and new pedagogies. They viewed their learning as a shared journey with some straight stretches, but also with twists and turns that were challenging, but not insurmountable. Margo was instrumental in creating an environment in which teachers engaged in learning processes to ensure that their pedagogy was appropriate to meet the needs of students in the twenty-first century. Margo described herself as having had a responsibility to be a learner "no matter where I have been or what I've done." She asserted that, as a teacher and as a principal, she has always been a learner because she is committed to "making a difference for students and the community." Therefore she demonstrated the capacity to, not only develop personal knowledge, competence and skills to meet the needs of her current context, but also to engage the teachers in activities to enhance their own learning. Highly skilled teachers are more likely to produce high levels of student understanding and application of their learning, than teachers who do not engage in ongoing learning.

In bringing about the changes at Riverbend, Margo was challenged by teachers who, initially, would rather have been directed in their work than be engaged in the decision making in the school. Margo used her leadership skills to generate an environment in which the teachers were engaged in professional learning, where they understood the future direction of the school, and were developing a shared vision for the school community. The decrease in activity during Margo's absence from the school indicated that teacher leadership was not sufficiently embedded in the school to ensure that the teachers would continue to lead the learning processes without the influence of an energetic principal. Professional learning needs to be separated from the principal for sustained innovation.

Having encountered a situation in which relationships between the school and the local community were at low ebb, Margo learnt to analyse the prevailing attitudes, and to challenge the conduct of the protagonists. She presented a steadfast approach to challenging behaviour exhibited by parents and teachers that was not conducive to improving outcomes for students. Margo also learnt strategies for establishing school-based processes that promoted harmonious working relationships between teachers and parents.

Margo learnt that feeling valued and supported motivates teachers. She learnt that teachers feel supported when school resources are committed to professional learning, and development of curricula. They are motivated by engagement in professional learning, especially when they believe that the learning will produce positive outcomes for students. Margo also learnt that teachers are motivated to change their practices when they believe that change is sustainable and worthwhile.

Global change influences the work of teachers. Teachers need to be responsive to changes in society, industry and technology through their curriculum and pedagogy. Positive relationships between principals, teachers, parents and students are a foundation for a learning organisation in which collaboration, cooperation and professional learning are the norm. Margo learnt that success in schools depends on alignment between relationships, curriculum and pedagogy.

At Riverbend, the professional learning processes adopted by the principal were characterised by the following key principles:

- 1. close association between the principal's and teachers' professional learning;
- clear linkages to the principal's style, energy and love of learning, and teacher commitment to personal and professional learning;
- use of regular substantive conversations to improve teachers' capacity to undertake curriculum challenges;
- 4. responsibility for personal learning;
- 5. recognition of collaborative learning as a complex process that is more challenging for some teachers than for others;
- analysis of prevailing attitudes of teachers and parents as a basis for choosing leadership strategies;
- creation of synergy by application of ideas, knowledge, and skills drawn from a variety of sources;
- 8. alignment between professional learning and the shared vision for the school;
- 9. practical support for teacher leadership and learning as a motivator for teachers;
- 10. promotion of teacher commitment to innovation through deep learning;
- 11. future-oriented focus on curriculum development promotes commitment to quality education for all students;
- 12. reflection on achievements as a means of evaluating progress;
- emphasis on relevance of learning to engender teacher commitment to change and innovation; and
- 14. promotion of learning and change as ongoing processes that support a culture of collaboration and innovation.

In the following section, the key principles from the Riverbend case study will be compared with those from the other two case studies to determine the similarities and differences between the processes of professional learning used by the principals.

Feedback:

Margo read this case study report, and confirmed that it was an accurate reflection of the situation at Riverbend during the data collection period. She said that she had used the data when presenting a paper about New Basics at an interstate conference. She used it to evaluate how much progress the school community had made since 2000-2001.

4.5 Key Principles from the Case Studies

Research Question 2 asked: "What are the essential features of the learning processes in which principals are engaged while leading their schools through significant curriculum change?" The response to this Research Question is to be found in the findings drawn from the case studies. The findings were written as three lists of key principles that describe the essential features of the principals' professional learning processes found in the three schools. The key principles are reiterated below:

Highgrove

Principles that supported professional learning included:

- employment of a significant, systemic innovation as a stimulus for professional enhancement;
- 2. access to networks outside the school for professional learning;
- recognition of the school's professionals as mutualistic learners and potential leaders;
- 4. establishment of formal processes and structures to promote teacher engagement in decision making;
- employment of informal processes to focus attention on ways to achieve quality student learning outcomes;
- 6. alignment between the principal's leadership style and the context of the school;
- linkages between professional learning and processes of organisational development, for example, development of a shared vision;
- 8. linkages between principal learning and teacher learning;
- 9. focus on personal mastery;
- 10. inter-relatedness between principal frustration and teacher dependency;
- adoption of an evolutionary approach to problem solving and school improvement to promote sustainability; and
- 12. recognition of relationship-kindling as inseparable from change processes.

Hillview

Principles that may have inhibited innovation included:

1. reluctance to manage the teachers' social/emotional issues associated with curriculum change;

- 2. dependence on the stability and continuity of the principalship for school improvement;
- concomitant personal belief in knowledge as the basis for power, and reluctance to give up positional power;
- 4. limited sharing of knowledge with teaching staff; and
- acquisition of knowledge that may have been unrelated to the needs of students, teachers or the system.

Principles that supported professional learning included:

- 1. establishment of formal structures, for example, teaching teams as a strategy for promoting teacher engagement in professional learning; and
- 2. commitment to personal learning.

Riverbend

Principles that supported professional learning included:

- 1. close association between the principal's and teachers' professional learning;
- clear linkages to the principal's style, energy and love of learning, and teacher commitment to personal and professional learning;
- use of regular substantive conversations to improve teachers' capacity to undertake curriculum challenges;
- 4. responsibility for personal learning;
- 5. recognition of collaborative learning as a complex process that is more challenging for some teachers than for others;
- analysis of prevailing attitudes of teachers and parents as a basis for choosing leadership strategies;
- creation of synergy by application of ideas, knowledge, and skills drawn from a variety of sources;
- 8. alignment between professional learning and the shared vision for the school;
- 9. practical support for teacher leadership and learning as a motivator for teachers;
- 10. promotion of teacher commitment to innovation through deep learning;
- future-oriented focus on curriculum development promotes commitment to quality education for all students;
- 12. reflection on achievements as a means of evaluating progress;
- emphasis on relevance of learning to engender teacher commitment to change and innovation; and

14. promotion of learning and change as ongoing processes that support a culture of collaboration and innovation.

On the basis of the key principles listed above, it is possible to identify four themes related to the principals' processes of professional learning:

- 1. learning related to principals' personal development;
- 2. learning related to leadership;
- 3. learning related to successful innovation; and
- 4. learning related to processes of professional collaboration.

4.5.1 Collation of Key Principles from the Case Studies.

The key principles evident in the three case studies are collated in Table 4.1, grouped according to the four themes listed above. The principles could be located within multiple themes. However, the principles will be associated with the themes where the major emphasis appears to lie. The principles that could be considered to hinder, rather than support, professional learning are enclosed within parentheses.

Theme	Highgrove	Hillview	Riverbend
Learning related to principals' personal development	Focus on personal mastery. Access to networks outside	Commitment to personal learning.	Responsibility for personal learning.
	Access to hetworks outside the school for professional learning. Linkages between principal learning and teacher learning.	(Concomitant personal belief in knowledge as the basis for power, and reluctance to give up positional power.)	Clear linkages between the principal's style, energy and love of learning, and teacher commitment to personal and professional learning.
		(Limited sharing of knowledge with teaching staff.)	Reflection on achievements as a means of evaluating progress.
		(Acquisition of knowledge possibly unrelated to the needs of students, teachers or the system.)	Emphasis on relevance of learning to engender teacher commitment to change and innovation.
		(Reluctance to manage the teachers' social/emotional issues associated with curriculum change.)	

Table 4.1: Summary of Key Principles Evident in the Case Studies.

table continues

Theme	Highgrove	Hillview	Riverbend
Learning related to leadership	Inter-relatedness between principal frustration and teacher dependency. Linkages between	(Dependence on the stability and continuity of the principalship for school improvement.)	Close association between the principal's and teachers' professional learning. Analysis of prevailing
	professional learning and processes of organisational development.		attitudes of teachers and parents as a basis for choosing leadership strategies.
	Alignment between the principal's leadership style and the context of the school.		Alignment between professional learning and the shared vision for the school.
Learning related to successful innovation	Employment of a significant, systemic innovation as a stimulus for professional enhancement.		Use of regular substantive conversations to improve teachers' capacity to undertake curriculum challenges.
	Evolutionary approach to problem solving and school improvement to promote sustainability.		Future-oriented focus on curriculum development promotes commitment to quality education for all students.
			Promotion of teacher commitment to innovation through deep learning.
Learning related to processes of professional collaboration	Establishment of formal processes and structures to promote teacher engagement in decision making.	Establishment of formal structures as a strategy for promoting teacher engagement in professional learning.	Creation of synergy from application of ideas, knowledge and skills drawn from a variety of sources.
	Recognition of school's professionals as mutualistic learners and potential leaders.		Practical support for teacher leadership and teacher learning as a motivator for teachers.
	Employment of informal processes to focus attention on ways to achieve quality student learning outcomes.		Recognition of collaborative learning as a complex process that is more challenging for some teachers than for others.
	Recognition of relationship- kindling as being inseparable from change processes.		Promotion of learning and change as ongoing processes that support a culture of collaboration and innovation.

4.5.2 Principals' Processes of Professional Learning: Discussion

The following discussion highlights the similarities and differences between the key principles from the three case studies, and is organised according to the four themes used in Table 4.1.

First, learning related to principals' personal development can be defined as an individual's acceptance of responsibility for their own learning. To describe commitment to learning, Senge (1990a, p. 141) used the term "personal mastery": "Personal mastery' is the phrase my colleagues and I use for the discipline of personal growth and learning. People with high levels of personal mastery are continually expanding their ability to create the results in life they truly seek." All of the principals who were interviewed for this study accepted their responsibility for personal learning. William and Margo both articulated a commitment to learning from a range of sources, and sharing their learning with the teachers whom they regarded as mutualistic learners. When they acquired knowledge, Margo and William reflected on whether what they had learned could be applied to the school situation. William spoke of his reliance on networks outside the school for personal learning, and, like Margo, appeared disappointed with the quality of professional learning that had taken place with their colleagues from within the local education district. The data indicated that Margo's enthusiasm for sharing learning had created a vibrant professional learning community at Riverbend.

On the other hand, Robert appeared to acquire knowledge for personal satisfaction, rather than because he had identified a problem to be solved in the school or in the wider education system. He declared: "I haven't had to learn anything to work at my school: It is elementary." Robert, unlike William and Margo, did not articulate a commitment to aligning his personal learning with the needs of the students, teachers, the school or the education system in which he was employed. Robert found that he had difficulty in responding to personal issues raised by some of the teachers.

Second, learning related to leadership refers to learning associated with the development of the principal's capacity to work with a team or several teams to achieve intended outcomes. Caldwell & Spinks (1998, p. 225) confirmed the purpose of principals' learning related to leadership: "In all of these matters, the driving force, the raison d'etre will be the provision of a quality education for every student, and every strategy and every intention will be weighted against this criterion." In all three case studies, the principal's leadership style had a direct influence on the professional learning processes observed at the school. While all principals used different approaches to leadership, each

demonstrated a commitment to professional learning. At Highgrove, William adapted his leadership style to meet the needs of the teachers and students. All three participants from Highgrove spoke of the reluctance of the majority of teachers to be involved in decision making that would affect the organisation of the school. However, William held the view that many of the staff were potential leaders, and that all staff should be mutualistic learners. He expressed frustration with the culture of teacher dependency upon himself as principal to be the key decision maker in the school. In an attempt to encourage teacher leadership and involvement in decision making, William set up structures to encourage parallel leadership, and he accessed research findings that he shared with staff in the hope that the articles would prompt professional discussion around issues pertinent to the school situation. Evidence of the success of William's strategies lie in the example of Brian who, supported by the administration team, led the implementation of New Basics, and became more confident as his leadership strategies achieved success. At Highgrove, the processes of professional learning, together with the principal's support for parallel leadership, resulted in sustainable curriculum development.

Robert expressed his frustration with teachers' dependency on him to lead all processes in the school. However, his choice not to take time to work with all of the teachers, and to build an atmosphere of trust, was in direct contrast to his expressed opinion about the value of relationships: "We need to get the relationships right." Robert shared his knowledge with some of the teachers, but was uncomplimentary about teachers who did not demonstrate an enthusiasm for acquiring new skills and knowledge. If his attitude to the teachers had been more encouraging, he may have found that the teachers were more responsive to his ideas for cultural change.

Margo's energetic leadership style, her capacity to analyse the prevailing attitudes of teachers and parents, and her ability to implement effective strategies for developing positive relationships, ensured that the teachers at Riverbend quickly became engaged in professional learning aligned to the needs of the students. Her commitment to learning was reflected in the positive attitudes of the teachers who were interviewed for this study. However, in the short term, the close association between Margo's leadership style and teachers' commitment to professional learning proved to be detrimental to the

sustainability of curriculum changes. When Margo was seconded to another school for a year, the teachers' commitment to the implementation of New Basics waned because they were reliant on her enthusiasm to keep them motivated.

Third, learning related to successful innovation focuses on deep learning and deep understanding of how innovative practices can be used to realize the vision of the organisation. Senge (1999, p. 65) described innovation as "a continual learning process. You must experiment, assess, reflect on mission, identify results, experiment some more." The trial of innovative curricula in the form of New Basics stimulated professional learning at both Highgrove and Riverbend. In the researcher's opinion, Riverbend presented as a vibrant learning community, with the teachers sharing their enthusiasm about their involvement in trialing an innovative curriculum initiative. They were engaged in deep learning, and were energized by the challenge of offering students an educational program that they anticipated would meet the students' future needs. Through frequent discussions with groups of teachers, Margo ensured alignment between their professional learning and the vision for the school. During regular substantive conversations with individual teachers, she challenged them to think creatively. She ensured that the teachers had access to a variety of learning and development opportunities. Synergy was created by Margo's dynamic approach to curriculum innovation, and her capacity to draw on the ideas, knowledge and experiences of a range of people.

At Highgrove, Brian's leadership of the New Basics trial demonstrated that teacherbased concern for quality curriculum in one part of the school could drive whole school change. If a supportive learning environment exists, partial school reform can influence school-wide change, providing opportunities for teacher leaders to emerge and demonstrate their capacity as leaders. At Highgrove, the decision was made to start New Basics in a limited number of classes. However, the opportunity to be involved in curriculum reform created an unanticipated level of interest from a large group of teachers from across the key learning areas. Some teachers who had exchanged few words in the past were working together, engaging in professional learning. Three of the principals adopted an evolutionary approach to problem solving. At Highgrove, William addressed the need for curriculum renewal with the teachers, and accepted the influence of the size and culture of the school on how the process would be implemented. He articulated a need for changes to be made slowly and with teacher involvement in the decision making to ensure sustainability of any initiatives. David also articulated a need for teacher understanding and involvement in decision making regarding curriculum renewal. He was prepared to work with the teachers while they gained the knowledge required to support reasoned decision making about their involvement in New Basics. Margo and the teachers at Riverbend spoke about learning being a journey. They had been down a path of deep learning about teaching effectively through the key learning areas, and then used their learning when they changed direction and became involved with trial of New Basics. The teachers shared their commitment to deep understanding of New Basics, and its impact on their teaching strategies.

Margo emphasised the importance of professional learning as being ongoing and futureoriented. She emphasised the need for all teachers to understand the relevance of their learning as part of wider view of education. Margo ensured that the teachers had access to learning opportunities that would enhance their capacity to continue school improvement initiatives. She recognised that the teachers were at different stages of development, and worked with those who were challenged by expectations that they would work collaboratively and engage in innovative practices.

Fourth, learning related to establishing processes of professional collaboration is considered to be important because, as Hargreaves (1994, p. 186) explained: "collaboration and collegiality are seen as forming vital bridges between school improvement and teacher development." Collaboration was described by Stoll and Fink (1996, p. 88) as "teachers choos[ing], spontaneously and voluntarily, to work together, without an external control agenda." The value of collaborative cultures was described by Hargreaves (p. 195): "In their most rigorous, robust (and sometimes rarer) forms, collaborative cultures can extend into joint work, mutual observation, and focused reflective inquiry in ways that extend practice critically, searching for better alternatives in the continuous quest for improvement." When this study commenced, Margo had already created an environment in which the leadership skills of several of the Riverbend teachers were being utilized, and she continued to nurture them as leaders. William expressed his confidence in the capacity of the teachers at Highgrove to become teacher leaders, and he set up structures designed to encourage teacher leadership. Although Robert set up teams to run discrete areas of the school, he did not articulate a desire to nurture teachers as potential leaders.

At all three schools, the context of the school community impacted on the principals' decisions related to professional learning. The principals used their knowledge of the structure of the school, the skills and abilities of the teachers, the culture of the school, and inter-personal relationships to establish processes that they believed would promote professional dialogue, and enhance teachers' learning. At Highgrove and Hillview, understanding the culture of dependence on the principal as the key decision maker, the principals set up formal structures to promote teacher engagement in school decision making. William used informal processes to challenge the teachers to focus on ways to achieve quality student learning outcomes. Margo established informal structures to support collegiality and collaboration.

All of the principals articulated an understanding of the value of positive relationships in school renewal processes. Soon after her arrival at Riverbend, Margo used the 'buddy' system to establish mutual support for the teachers as they began a learning journey. At the beginning of the study, William declared he was satisfied that the quality of relationships at Highgrove would withstand the challenges of working together to develop innovative curricula. At Hillview, Robert initially concentrated on lifting the quality of curriculum and pedagogy, then realised that his first step should have been to nurture positive working relationships.

4.5.3 Conclusion

In summary, in the three schools involved in the case study, the processes of professional learning that led to successful outcomes can be collated using four themes. First, all of the principals were committed to personal learning, and shared their learning with the teachers. Two of the principals accessed networks outside the school and held a view of the school's professionals as mutualistic learners and potential leaders. Their personal learning reflected the vision for the school, and was relevant to the needs of students and teachers.

Second, the principals used their learning about leadership to create an environment that challenged teacher dependency on the principal as key decision maker. In the long term, professional learning is unsustainable where the teachers' professional learning is dependent on the principal's dynamic leadership style. In the schools where the principal demonstrated a personal commitment to professional learning, encouraged the teachers to be learners, and ensured practical support for teachers' learning, a culture of learning was evident.

Third, in the schools where innovative curriculum was being implemented, professional learning was focused on anticipating the varying needs of students in a rapidly changing world. Evolutionary approaches to school improvement were adopted, with an acceptance that learning and change are interrelated and ongoing. At Highgrove, the trial of New Basics, a significant systemic innovation, provided the stimulus for professional dialogue, and enhancement of curriculum and pedagogy. At Riverbend, the principal articulated a commitment to deep learning for teachers and students, believing that if teachers acquired a deep understanding of innovative curricula, they would be more likely to commit energy to their development and implementation. She concentrated on ensuring alignment between the vision for the school and professional learning that would support the achievement of that vision.

Fourth, two of the principals articulated commitment to collaborative learning, and tailored the strategies they used to challenge and support teachers accordingly. These principals emphasised the need for alignment between professional learning and the vision for the school. Formal and informal processes to support teacher learning and leadership were adopted according to the context of the school. Active support for the development of positive relationships resulted in teachers collaborating and cooperating in the implementation of innovative curricula. Where the principal viewed the school's professionals as mutualistic learners, and adopted practical strategies to support professional learning, the teachers responded positively. Where the principal failed to

engage with the teachers, not accepting their current level of knowledge, skills and ability as a starting point for ongoing learning, frustration ensued.

In Chapter 5, the key principles listed in Table 4.1 above will be aligned with the propositions from the review of the literature to determine the congruence between the theoretical findings and the findings from the case studies. The synthesis of the findings from the two sources will be used to provide a response to Research Question 3.

CHAPTER 5: FINDINGS AND IMPLICATIONS

5.1 Introduction to Findings

The aim of Chapter 5 is to summarise the findings of the study, to outline implications for principals and Education Queensland, and to make recommendations for further research. A response will be provided for Research Question 3: "What forms of professional development and training are proposed for the development of skills that will enable principals to successfully implement innovative curriculum programs?" A collation of the findings derived from Chapter 2 and Chapter 4 will be used to ascertain the key principles of professional learning recommended for adoption by principals involved in implementing significant curriculum change. Recommendations related to professional learning processes, based on the findings from the literature and the experience of the principals will also be offered.

5.2 Responses to the Research Questions

5.2.1 Findings Related to Research Question 1

Research Question 1 asked: "What are the essential concepts and processes of professional learning which emerge from a review of the literature relevant to successful school innovation?" In order to address this question, a review of the relevant literature was conducted, and propositions related to principals' professional learning were developed. A set of three criteria, delineated in Chapter 2, was used to guide the selection of the propositions that cover a range of characteristics of professional learning that can be reasonably be adapted to school settings. The list of propositions related to Research Question 1 is reiterated below:

- Professional learning of principals can be viewed as an organisation-wide process that engages principals and teachers (Bell & Harrison, 1998; Johnston & Caldwell, 2001; Crowther et al., 2002; Helgesen, 1996);
- School context affects the dynamics of professional learning (Fullan, 2000; Gronn & Ribbins, 1996; Schein, 1996);
- Professional learning of principals should be future oriented (Hargreaves, 1997; Lewis, 2001; Schein, 1996);
- Professional learning can be linked to a range of leadership styles (Handy, 1996; Schein, 1996; Senge, 1990b);

- Systemic imperatives can act as a stimulus for professional learning (O'Sullivan, 1997; Stevenson, 2001);
- Professional learning can be either deep or superficial (Argyris, 1992; Fryer, 1997; O'Sullivan, 1997);
- Professional learning can be either adaptive or generative (Senge, 1990b; Sergiovanni, 2001); and
- 8. Professional learning has a double-loop quality (Argyris, 1992; Senge, 1990b).

5.2.2 Findings Related to Research Question 2

Research Question 2 asked: "What are the essential features of the professional learning processes in which principals engage while leading their schools through significant curriculum change." The response to this question is to be found in the final section of Chapter 4 in which the three sets of key principles developed from the case studies were collated to highlight the features of principals' professional learning evident in three Queensland state schools. The key principles were collated in Table 4.1 using four themes as the organisers:

- 1. learning related to personal development;
- 2. learning related to leadership;
- 3. learning related to successful innovation; and
- 4. learning related to processes of professional collaboration.

The discussion at the end of Chapter 4 compared the key principles from each of the schools, and identified common practices, as well as differences, between the schools.

5.2.3 Response to Research Question 3

Research Question 3 asked: "What forms of professional development and training are proposed for the development of skills that will enable principals to successfully implement innovative curriculum programs?" The aim of this section is to compare the findings related to Research Question 1 with the findings related to Research Question 2 to provide a response to Research Question 3. Table 5.1 provides a collation of the propositions and principles using the same themes as used in Table 4.1. The theoretical propositions could be aligned with multiple themes. However, the propositions will be aligned with the theme where the major emphasis appears to lie. Similarly, the principles from the case studies could be aligned with multiple themes, and with multiple propositions, but will be placed where the major emphasis lies.

Table 5.1: Collation of Propositions and Key Principles: Points of Major Emphasis

Propositions from Literature Review	Associated Key Principles from Case Studies
Professional learning of principals should be	Responsibility for personal learning;Linkages between principal learning and teacher
future-oriented (Hargreaves, 1997; Lewis, 2001; Schein, 1996).	learning;Access to networks outside the school;
Professional learning can be either deep or superficial (Argyris, 1992; Fryer, 1997; O'Sullivan, 1997).	 Reflection on achievements as a means of evaluating progress; and Emphasis on relevance of learning to engender teacher commitment to change and innovation.

Theme: Learning Related to Personal Learning

Theme: Learning Related to Leadership

Propositions from Literature Review	Associated Key Principles from Case Studies
Professional learning can be linked to a range of leadership styles (Handy, 1996; Schein, 1996; Senge, 1990b).	• Inter-relatedness between principal frustration and dependency;
	• Linkages between professional learning and processes of organisational development;
	• Alignment between the principal's leadership style and the context of the school;
	• Creation of teaching teams as a strategy for engendering teacher leadership;
	• Dependence on continuity and stability of the principalship for school improvement;
	• Close association between the principal and professional learning;
	• Analysis of prevailing attitudes of teachers and parents as a basis for choosing leadership strategies; and
	• Alignment between professional learning and shared vision.

Theme: Learning Related to Successful Innovation

Associated Key Principles from Case Studies
• Employment of a significant, systemic innovation as a stimulus for professional enhancement;
• Evolutionary approach to problem solving and school improvement to promote sustainability;
• Use of regular substantive conversations to improve teachers' capacity to undertake curriculum challenges;
• Future-oriented focus on curriculum development promotes commitment to quality education for all students; and
Promotion of teacher commitment to innovation through deep learning.

Propositions from Literature Review As	ssociated Key Principles from Case Studies
 Professional learning of principals can be viewed as an organisation-wide process that engages principals and teachers (Bell & Harrison, 1998; Johnston &Caldwell, 2001; Crowther et al., 2002; Helgesen, 1996). School context affects the dynamics of professional learning (Fullan, 2000; Gronn & Ribbins, 1996; Schein, 1996). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting (Fullan, 2000; Gronn & Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn & Fe de Barting). Fe de Barting (Fullan, 2000; Gronn). Fe de Barting, Fe de B	Establishment of formal processes and structures to romote teacher engagement in decision making; Recognition of school's professionals as mutualistic earners and potential leaders; Employment of informal processes to focus attention on ways to achieve quality student learning outcomes; Recognition of relationship-kindling as being inseparable from change processes; Creation of synergy from application of ideas, nowledge and skills drawn from a variety of sources; Practical support for teacher leadership and teacher earning as a motivator for teachers; Recognition of collaborative learning as a complex process that is more challenging for some teachers han for others; and Promotion of learning and change as ongoing processes that support a culture of collaboration and nnovation.

Theme: Learning Related to Processes of Professional Collaboration

The first theme to be discussed is learning related to personal development, that is, the learning processes through which principals uncover understanding of themselves, their talents, and their needs. Through personal learning, principals enhance their own capacity to work with others to create an environment that supports innovative practices. As the focus of teachers' work is to ensure that their students learn, the outcome of enhanced teacher learning is expected to be improved learning outcomes for students.

The first proposition from the literature review that appears to be most related to this theme is: "The professional learning of principals should be future-oriented." Support for this proposition came from several researchers including Hargreaves (1997), Lewis (2001) and Schein (1996). Evidence from the case studies supports this proposition. At Highgrove and Riverbend, the principals adopted a future-oriented approach to curriculum development. Margo used her synergistic leadership style to create a dynamic, challenging professional learning environment. Her commitment to deep learning, together with her approach to engaging teachers in a change agenda, ensured that the teachers had the opportunity to engage in innovative responses to the factors influencing education for students growing up during a period of rapid global change.

In brief, principals need to have a future-oriented approach to their personal learning. They need to access networks outside the school to assist them in acquiring a deep understanding of professional learning processes in the school, and the part they play in engendering teacher commitment to change and innovation.

The second proposition from the literature review that appears to be most related to personal learning is: "Professional learning can be either deep or superficial." Support for this proposition came from several researchers including Argyris (1992), Fryer (1997) and O'Sullivan (1997). At Riverbend, the level of engagement of the teachers in professional learning could be attributed to Margo's commitment to deep learning. Margo's desire to ensure the teachers acquired a thorough understanding of the interrelatedness of their pedagogy, curricula, and the needs of students was reflected in O'Sullivan's (1997) description of deep learning: "...looking for patterns, relating knowledge, skills and concepts to specific contexts and seeking to understand and apply, rather than merely recall or demonstrate" (para. 30). Thus, the proposition that professional learning can be deep or superficial is reflected in one of the case studies.

The second theme to be discussed is learning related to leadership, that is, the learning processes through which principals acquire knowledge of a range of strategies for influencing other people to be responsible for expanding their own learning through collaboration and innovation, and how to apply their knowledge to achieve successful outcomes.

The proposition from the literature review that appears to be most related to this theme is: "Professional learning can be linked to a range of leadership styles." Support for this proposition came from several researchers including Handy (1996), Schein (1996) and Senge (1990b). Evidence from the case studies supported this proposition. William and Margo, in their own way, actively supported professional learning in their schools. Both principals, by ensuring that their personal learning was associated with school improvement, created alignment between professional learning processes and organisational development.

To address his frustration with the teachers' dependence on himself as leader, William established formal structures in an endeavour to change the prevailing culture. He persisted in challenging the teachers' attitudes and existing practices with the aim of creating an environment that supported parallel leadership. By aligning his leadership strategies with the context of the school, he demonstrated a capacity to create an environment in which teacher leaders would feel valued and supported, and in which a culture of collaborative learning would emerge.

Margo found that, prior to her leaving the school for a year, the teachers at Riverbend, while achieving success with implementing New Basics, were closely associated with her, and dependent on her to lead their learning. For change to be successful, a principal's learning and teachers' learning should be closely aligned, but not so close as to render the teachers incapable of continuing the change process if the principal moves away from the school.

Robert, a proponent of professional learning, articulated a vision of creating a learning organisation, but did not successfully generate a school-wide commitment to the vision because he was unwilling to work with the teachers, to listen to their personal issues, and to accept them at their level of knowledge and skill development. At Hillview, processes of school improvement were dependent on stability and continuity in the principalship. It appeared that the regular changes in principal over a two-year period contributed to the lack of sustainability of the change processes implemented by Robert.

In brief, principals need to acquire a range of leadership strategies that allow them to align their leadership with the context of the school. They need to be able to reflect on the needs of the school, the teachers and the students, and to adopt leadership strategies to increase the capacity of the teachers to successfully implement innovative curricula aligned with the shared vision of the school.

The third theme to be discussed is learning related to successful innovation, that is, the learning processes associated with analysing the status quo, uncovering problems, and designing and implementing innovative, future-oriented ways to address the problems.

Processes focused on providing innovative solutions to identified problems must lead to an ongoing cycle of implementation, action and review.

The first proposition that appears to be most related to successful innovation is: "Systemic imperatives can act as a stimulus for professional learning." Support for this proposition was provided by O'Sullivan (1997) and Stevenson (2001). Evidence from the schools that agreed to participate in the trial of New Basics supported this proposition. At Highgrove and Riverbend, the principals adopted an evolutionary approach to school improvement, reflecting on the culture of the school, and adopting strategies that were successful in building the foundations for curriculum renewal. At both schools, New Basics provided the catalyst for addressing the curriculum changes that were identified as being necessary for the schools to meet the needs of students in a rapidly changing world.

Within the theme of innovation, the second and third propositions from the literature review were reflected in the Riverbend case study: "Professional learning can be either adaptive or generative," and "Professional learning has a double loop quality." Evidence of generative learning was found in the Riverbend case study. Margo regularly engaged the teachers in substantive conversations about curriculum and pedagogy. These conversations, together with access to learning and development activities, increased the teachers' capacity to undertake the challenges associated with implementing an innovative curriculum. Margo and the teachers sought to understand the impact of existing curricula on outcomes for students, and used this knowledge to explore new ways of presenting curricula to achieve improved student learning outcomes at Riverbend. Similarly, Margo and the teachers engaged in double-loop learning, questioning their own assumptions about education and challenging negative behaviours, so that they engaged in rigorous reasoning rather than defensive reasoning (Argyris, 1999). Ken and Kate provided evidence to suggest that their values had changed as a result of their involvement in innovative curriculum development.

In brief, principals need to be prepared to embrace the opportunities for professional learning associated with implementing innovative curricula. They need strategies for ensuring that the learning has a double loop quality, and for promoting generative learning through substantive conversations. Principals need to be able to create a culture which questions assumptions and challenges negative behaviours in order to promote successful innovation.

The fourth theme to be discussed is learning that appears to be most related to processes of professional collaboration, that is, the learning processes that initiate and support a culture of learning from each other, sharing and developing expertise that will expand the capacity of the participants to shape a better future for themselves and the organisation.

The first proposition from the literature review relevant to processes of professional learning is "Professional learning of principals can be viewed as an organisation-wide process that engages principals and teachers." Support for this proposition came from several researchers including Bell and Harrison (1998), Johnston and Caldwell (2001), Crowther et al. (2002) and Helgesen (1996). Evidence from the case studies also supported this proposition, as well as providing data that can be used to extend it. William, Robert and Margo, who actively engaged in professional learning and encouraged collaborative learning, supported the view that professional learning is the personal responsibility of all principals and teachers. Data from the Riverbend case study indicated that there are clear linkages between the principal's leadership style, energy and love of learning, and a high level of professional learning among the teachers. Conversely, evidence from Hillview suggests that, where the principal is committed to personal learning, but does not engage with teachers in sharing learning, professional learning that is effective in supporting and promoting change will be minimal. Evidence from the case studies indicated that the principals who focused their learning on school-related issues were more successful in establishing a learning organisation than the principal whose learning appeared to be unrelated to the school context.

The second proposition from the literature review relevant to this theme is "School context affects the dynamics of professional learning." Support from this proposition came from several researchers including Fullan (2000), Gronn and Ribbins (1996), and Schein (1996). Evidence from all three case studies confirms that the principals reflected

on the context of the school when setting up structures to support collaboration. William and Robert established formal structures to encourage collaboration through involvement in the decision making processes of the school, and achieved some success as a result. William also used informal processes to challenge teachers to question accepted practices at Highgrove, and to look for effective strategies for improving the quality of student learning. His actions were underpinned by a belief in the ability of the teachers to be leaders, and a desire for the teachers to be mutualistic learners. As an integral part of the process of establishing the school as a learning organization, William focused on building intraschool relationships as a precursor to collaborative learning.

Margo worked with the teachers and parents to establish a shared vision for the school, and provided opportunities for the teachers to align their learning with that vision. She established an environment at Riverbend where the teachers accepted that ongoing learning was part of being a school focused on providing innovative curricula for its students. Margo provided practical support for teacher leadership and learning. She recognised that some teachers were more ready than others to adopt a culture of collaborative learning, and accepted the challenges presented by the teachers as they worked to establish a professional learning community. In turn, the teachers accepted Margo's challenges, and contributed to the synergy that she created as she drew together knowledge, skills and ideas from a range of sources.

In brief, to support processes of professional collaboration, principals need to promote professional learning as an on-going, school-wide process. To do this, they need to understand the context of the school, and the relationships between individuals and groups. They need to provide practical support for collaborative learning, and to recognise that some teachers are better prepared than others to engage in collaborative processes.

To summarise the discussion above, the key principles associated with processes of the principals' learning evident in the case studies, together with the propositions from the review of the literature, were combined to provide a framework that illustrates points of emphasis for principal's learning. In response to Research Question 3, and the stated aim of the researcher, Table 5.1 provides a framework that could be used to inform the

development of professional learning plans for principals who are engaged in implementing innovative curricula.

5.3 Implications for Principals' Professional Learning

Table 5.1 provides a list of key principles to support the implementation of innovative curricula. Principals who are implementing innovative curricula may wish to consider the propositions and associated key principles when reflecting on their learning and development needs. This section supports the use of the propositions and associated principles, and raises some issues that principles may wish to consider when planning professional learning programs.

To engage in a process of personal learning focused on acquiring the knowledge and skills to implement innovative curricula, principals will need to start by identifying the elements they may wish to enhance, refresh or develop, and then seek appropriate professional development opportunities to achieve their goals. A review of the propositions and principles in the framework indicates that principals may need to access more than one source of learning to acquire the knowledge, skills and attitudes they have identified as being beneficial in addressing the needs of the schools they lead. As identified in Chapter 2, and as articulated by the principals, a variety of formal and informal opportunities is available for professional development.

To undertake professional learning based on the propositions and key principles listed in Table 5.1, principals would need to be leader learners. They need to be aware of the impact of their leadership style on other members of the organisation, to understand the range of personality types in order to develop strategies for cooperation, collaboration and commitment among staff. Principals would need to establish a culture of learning, and engender a commitment to deep learning, generative learning, and double-loop learning. Principals need to be able to work with a team, but promote teacher leadership. They need to be able to establish processes for developing a shared vision, and to ensure sustainability of innovative practices.

Queensland state school principals and aspiring leaders have access to leadership development courses that focus on providing opportunities for the participants to acquire a range of strategies to understand themselves, their own behaviour, and the behaviour of people with whom they interact. The "Leadership and Culture Toolkit" offered by Education Queensland personnel is a three-day workshop useful for principals who have identified a need to further understand their own leadership style, to understand different personality types, and how and why people react in various situations. Participants practice responses that will result in effective outcomes from difficult interactions. Postworkshop network groups (Network Resource Groups) allow participants to practice newly acquired skills, and to provide mutual support for their colleagues.

Evans and Mohr (1999) and O'Mahony (1999) identified that, principals' learning is personal, but it is most effective when carried out collaboratively. Learning circles provide formal opportunities for raising issues for discussion, and learning from colleagues. However, the leader of a learning circle must have the capacity to encourage the participants to value their beliefs and practices, yet to challenge them to reflect critically on their work and the results they achieve. Support for challenging principals to engage in critical reflection came from Evans and Mohr: "While we honor principals' thinking and voices, we want to push principals to move beyond their assumptions" (p. 532). One activity for a learning circle could be to use each case study in Chapter 4 as the basis for an in-depth discussion, with the facilitator posing questions that challenge the participants to question why actions were taken, and to present alternate strategies that could have been used to achieve what the participants believe to be more effective outcomes.

Networking with colleagues provides opportunities for principals to engage in learning as a member of group, as recommended by Evans and Mohr (1999). However, unless the participants trust one another and are prepared to engage in deep learning, conversation will remain at a superficial level, with minimal change in school practices. Margo and William found that networking with colleagues from nearby schools did not result in deep conversation that would lead to professional learning. Margo said: "They [principals] are skating over the surface of so many things, and they are not actually tackling things in a focused way. The curriculum is a perfect example." For principals who prefer not to work in groups, the use of a mentor may be an appropriate means of engaging in professional learning. During the interview, Robert contended that all principals should have mentors. William declared that his experience of meeting regularly with a mentor was valuable for his personal learning. A mentor could be a trusted colleague, or someone external to the school system, who has the ability to be supportive, but to encourage the principal to take a risk, to challenge personal beliefs and behaviours, and to plan actions that will make a demonstrable difference in the school. William expressed his satisfaction with the quality of learning that he enjoys when he meets occasionally with a trusted colleague. He expressed disappointment that he does not enjoy similar in-depth conversations with colleagues from his local area (with whom he does not have a similar relationship.)

If principals and teachers do not already engage in vigorous debate that leads to professional learning, they may need to establish protocols for communication and critical reflection. Teachers from Riverbend and Highgrove found that the protocols for discussion and sharing learnt during *Student Protocols Training* offered by the Australian National Schools Network were useful in establishing formal processes to support collaboration and cooperation. During the training, the teachers learnt processes for engaging in robust debate in a supportive environment, with participants accepting constructive criticism of their work, and learning from the feedback given by their peers.

Courses such as that organised by the Australian Principals Centre (O'Mahony, 1999) provide opportunities for principals to learn in a focused way. O'Mahony declared: "What is clear is that principals need to have access to, and be involved in, high quality effective professional learning that is then transferred back to the school" (p. 1). The Australian Principals Centre offered a year-long project-based course, with principals identifying school issues, and developing projects to address the issues. In a supportive environment, action plans were developed, and implemented in consultation with the school community. The principals met monthly to access collegial support for implementation of their plans, and their projects were reviewed at the end of the year.

In conclusion, the discussion above provides a general description of the opportunities available to principals who choose to enhance their knowledge, skills and abilities when presented with the challenge of leading significant curriculum change. One key message from Evans and Mohr (1999) and O'Mahony (1999) is that the principals' professional learning should result in effective changes to some aspect of the school. Therefore, before engaging in professional development, principals should consider whether the knowledge they are likely to acquire could be transferable to the school situation. Evidence from the case studies indicated that, if professional learning was not shared, it would not generate constructive change. For effective change, principals' learning cannot be separated from teacher learning.

5.4 Implications for Theory

As there is no single conceptual area related to processes of professional learning for principals, this study drew on the current literature related to a range of areas of research, including organisational learning, learning organisations, leadership, educational leadership and curriculum implementation. The study adds to the body of knowledge by synthesising those aspects of existing research that relate to the study of principals' processes of learning, and key principles from the experiences of principals in three Queensland state schools, to provide a framework for professional learning. Table 5.1 encompasses the four dimensions of professional learning related to the implementation of innovative curricula, and is relevant to principals focused on leading significant curriculum change in school communities.

Based on the literature reviewed for the purposes of this study, no one theorist appears to have addressed all four themes related to principals' learning outlined in Table 5.1. The theory does not appear to be sufficiently holistic to encompass all aspects of learning related to the engagement of principals and teachers in professional collaboration to support successful innovation. Nowhere in the literature has the researcher found references to synergistic collaboration such as that found to be successful at Riverbend State School. This study focuses on the reality of establishing schools as learning organisations, and endeavours to provide practical recommendations for principals' learning not available elsewhere in the literature.

The findings from the study indicated that the recommendations for the establishment of learning organisations offered by Argyris are observable to some extent in the schools

that participated in this study. Argyris (1999) promoted the concept of defensive reasoning, based on his experience of individuals who set up self-protective barriers to shield themselves and the organisation from change, even when change would benefit the organisation. He also promoted critical self- reflection, individual accountability, and double-loop learning. Argyris (1992) proposed that organisations are able to create an environment that supports learning. However, individuals may limit their engagement in problem solving that promotes learning. Argyris and Schon (1992) identified the need to link individual action with organisational processes to promote organisational learning, but did not provide details of processes that would enable leaders to analyse their own situation, and to engage in learning designed to overcome barriers to creating a learning organisation.

Fullan (2000) declared that reculturing, not restructuring, is what makes a difference in schools: "What does make a difference is reculturing: the process of developing professional learning communities in the school. . . . Structures can block or facilitate this process, but the development of a professional community must become the key driver of improvement" (para. 11). While Fullan and other researchers advocated for the development of schools as professional learning communities, they did not provide the principals with a detailed list of principles related to the leadership of processes of professional learning such as that provided in Table 5.1.

In brief, based on the advice of Evans and Mohr (1999), professional development programs for principals should be designed so that the principals are supported over a negotiated period to learn and implement effective processes to lead substantive curriculum change. The framework provided in Table 5.1 synthesises the findings from a range of areas of research, as well as the findings from the case studies, to provide a comprehensive list of key principles for professional learning for principals.

5.5 Implications for Policy and Practice

From a practical perspective, the proposed framework for principals' professional learning presented in Table 5.1 offers a range of propositions and principles to be considered by principals who are leading, or planning to lead, significant curriculum change. The implications are that all principals should engage in critical personal

reflection about their capacity to lead the implementation of innovative curricula. When working with principals, Executive Directors Schools might use Table 5.1 as a basis for discussion about the principals' professional learning priorities. Principals might use Table 5.1 to assist in self-reflection about their own knowledge, skills and circumstances, and to determine whether they should engage in learning in any of the four dimensions. If, after surveying the framework in Table 5.1, principals decide that further personal learning is desirable, they should avail themselves of the myriad of opportunities for professional development, keeping in mind the advice of Evans and Mohr (1999) that the outcome should be positive change at the school level.

The first implication arising from this research is pertinent not only to principals, but to Education Queensland as an education system. Data collected from the Margo and William indicated that they were concerned about the quality of professional learning that takes place between principals. If the purpose of principals' meetings is to engage in professional development that will lead to changes in the way they work in the school setting, the organisers need to be aware that a superficial level of learning is the likely outcome. Therefore, rather than assuming that all principals have the capacity to generate and sustain a learning community, senior officers of Education Queensland should consider the provision of opportunities for principals to engage in processes of learning about professional learning. The characteristics listed in the "Personal learning" section of the framework in Table 5.1 provides the basis for development of a series of activities designed to enhance principals' capacity to, not only demonstrate a personal commitment to learning, but also to develop processes to support and sustain school-wide professional learning.

The second implication for Education Queensland relates to learning related to leadership. Courses such as the "Leadership and Culture Toolkit" being organised by Education Queensland personnel may provide opportunities for participants to understand themselves as leaders, to understand different personality types, and practice strategies for achieving desired outcomes when interacting with people. However, to engage principals in deep learning about leadership, and to enhance their leadership capacity, a more extensive process such as that described by Evans and Mohr (1999) may need to be implemented. Evans and Mohr (1999, para. 2) contended: "Programs in school leadership abound." However, they argued that workshops, which principals often attend, are ineffective because the participants return to school, inspired and enthusiastic, but fail to build on their learning. "Too often . . . the workshop experience seems to fade surprisingly quickly. The principal returns to school with little more than a few insights that have already begun to dim" (para. 2). With the advice of Evans and Mohr in mind, professional development programs should be structured so that the principals are supported to make positive changes at the school level. Such programs could focus on strategies for creating powerful schools, which Hopkins (1997, p. 20) described as being characterised by "high expectations, collaboration and innovation."

The third implication for principals employed by Education Queensland relates to the capacity to lead innovative practices in schools. Senge (1999, p. 63) offered the following advice about innovation: "By nature, innovation is a continual learning process. You must experiment, assess, reflect on mission, identify results, experiment some more." Senge also advised that learning organisations should be prepared to be open about what is not working, to be prepared to abandon outmoded practices to clear the way for innovation. Therefore, the implication for principals, while including the need to develop the capacity to lead innovative practices, also goes beyond that. Senge argued that there is a need to recognise that "innovation is a process of failure" (p. 65). If the organisation has the capacity to recognise and accept that systems or processes are no longer appropriate, it has the opportunity to be innovative in its response to finding alternative solutions. Thus, the role of the principal is to change the culture of the organisation to accept that learning emerges from the capacity to recognise failure, and to welcome innovative solutions to problems facing the school. Similarly, if Education Queensland, as a statewide organisation, has the capacity to engage in double-loop learning, systemic problems will be recognized, the cause of the problems will be identified, and innovative solutions will be found to rectify the problems.

The fourth implication for principals is associated with learning about collaboration. (Hargreaves, 1994) contended that collaboration is one feature of an emerging teacher subculture, described as "the moving mosaic," that meets the needs of schools in a postindustrial, postmodern world:

Flexible organizational structures which resemble the metaphor of the moving mosaic are urgently needed in our schools, . . . to enable schools and teachers to be more responsive to the changing educational needs of students who live in a complex, fast-paced and technologically sophisticated society. (p. 69)

In its Strategic Plan (2003-2007) (State of Queensland (Department of Education), 2003), Education Queensland presented key challenges for schools, including community engagement, supporting lifelong learning, and meeting the diverse needs of students in Queensland. These challenges are similar to those identified by Hargreaves (1994) in his description of the teacher subculture, "a moving mosaic." One implication is that principals will need to understand the school context and to establish a vision for the school that is shared with the school community. A second implication for principals is that teachers and students will benefit from a culture, described by Hargreaves as being "... characterised by flexibility, adaptability, creativity, opportunism, collaboration, continuous improvement, a positive orientation towards problem-solving and commitment to maximizing their capacity to learn about their environment and themselves" (p. 63). School communities will benefit from productive partnerships with external groups and agencies. Alliances with such groups will shift over time, according to school and students' needs. A third implication is that, as a group, principals will need to engage in processes designed to develop a culture of collegiality and collaboration. In an environment characterised by respect, trust and commitment to lifelong learning, professional learning of a quality not experienced by the participants in this study is likely to be the result.

5.6 Response to the Research Problem

The Research Problem that prompted this study was outlined in Chapter 1: "What are the learning processes in which principals are engaged while leading significant curriculum change in school communities." The components of Chapter 5 provide a response to this problem through the responses the three Research Questions. The collation of responses to Research Questions 1 and 2 provided the information needed to develop a list of propositions and associated key principles for professional learning, while the discussion that followed outlined some of the opportunities available to principals to facilitate engagement in professional learning.

5.7 Further Studies

Three of the propositions raised from the review of the literature highlighted the developmental nature of effective learning:

- Professional learning can be either deep or superficial (Argyris, 1992; Fryer, 1997; O'Sullivan, 1997);
- Professional learning can be either adaptive or generative (Senge, 1990b; Sergiovanni, 2001); and
- 3. Professional learning has a double-loop quality (Argyris, 1992; Senge, 1990b).

As reported in Section 5.2.3, evidence of teachers engaging in deep learning, generative learning and double-loop learning was found at only one of the three schools participating in this study. Through a process of school renewal, Margo challenged the teachers to reflect on what was happening at Riverbend, to identify the underlying values of the school, and the strengths and weakness of current processes. She and the teachers then identified the challenges for the future (see Appendix G – School Renewal Project brochure). Following this process, Margo engaged in regular substantive conversations with individual teachers, inviting their input and challenging them to think about their practices, and how they could solve problems. Opportunity exists for research to be conducted into why deep, generative or double loop learning does not generally occur when school communities are planning processes related to school renewal.

Bolman and Deal (1997, p. 140) highlighted the need for alignment between the needs of individuals and the human resource needs of the organisation:

When the fit is good, both benefit: individuals find satisfaction and meaning in work; the organization makes effective use of individual talent and energy. Poor fit underutilizes human energy and talent, frustrates individuals, and encourages people to withdraw, resist, or rebel.

From a school perspective, further research could be conducted to acquire a better understanding of those aspects of school culture associated with professional learning, and the extent to which schools make effective use of the talents and energies of individual teachers. Such research could also investigate the factors that inspire teachers to use their talents and energies for the good of the school. The influence of different personality types on teacher subcultures could also be investigated, as well as the factors affecting the willingness of teachers to collaborate with their peers as members of a learning organisation.

Purcell (2003) explained that an organisational phenomenon termed "organisation citizenship behaviour" has been used to define employees' "willingness to go the extra mile" (p. 13). In the same field of research, the term, "psychological contract" refers to the unwritten expectations that employees have of organisations in return for their commitment and loyalty, and "discretionary behaviour" refers to the choices employees make regarding "the way the job is done, the speed, care, innovation and style of job delivery" (p. 14). Further research into principals' processes of professional learning could encompass understanding of organisation citizenship behaviour in schools, and the psychological contracts that teachers form with the organisation during their career. Joint research could also explore what factors impact positively and negatively on teachers' discretionary behaviour.

State schools are significantly influenced by government policies, parent, community and corporate expectations, and technological innovation (Fullan, 2000). Milton declared that the Hillview teachers would probably commit their energy to learning about New Basics if they could be assured that the project had ongoing state government support. This assertion prompted the following question: What processes do principals use to ensure continued teacher commitment to professional learning when state schools have to be responsive to government initiated changes that affect curriculum implementation, while ensuring sustainability of curriculum programs that teachers have determined will meet the future needs of students?

In brief, further research into the field of professional learning needs to focus on developing programs to support principals' processes of learning. Principals may benefit from further research into the impact on teacher subcultures of the psychological aspects of teachers' commitment to the organisation, their discretionary behaviour and the psychological contracts they form with the organisation. Such understanding may be a key to the choice of processes that principals develop when attempting to create a learning organisation.

5.8 Final Thoughts: Views of the Researcher

The motivation for undertaking this study came from working with principals on a daily basis, and either admiring the manner in which they worked, or questioning the wisdom of some of their decisions. Fifteen years ago, as inexperienced small school principals, my colleagues and I worked with a district inspector who inducted us into the principalship. Currently this level of induction is not available to Education Queensland principals. I wondered how principals, with limited induction, acquired the knowledge and skills that they need to be effective school leaders. There was no question about the commitment to professional learning demonstrated by the principals interviewed for this study. One of the many challenges for them was to have the capacity to positively influence teachers, individually and in teams, who have different levels of experience, skills and knowledge about curriculum and pedagogy.

After interviewing the principals, I was left with several lasting impressions. One was their capacity to understand the context and culture of the school, and to be able to analyse the prevailing attitudes of parents and teachers. This was crucial in their decision making regarding what leadership strategies may be effective in achieving the goals of the school community. I was also impressed with Margo's capacity to create an environment of synergistic collaboration. Listening to her stories about taking a school community from an environment of complaint to one of collaborative learning focused on innovative curricula was personally inspiring, and allowed me to understand more clearly the complexities of working with teachers holding a wide range of attitudes, knowledge, skills and experiences.

Undertaking this study has been both stimulating and challenging. Writing this dissertation was an experience in theory building as opposed to the creation of generalisations about how principals work. During the interviews, I was privileged to experience the personal dimension of the working lives of eleven committed school administrators and teachers. Reflecting on their conversations has provided me with the challenge of faithfully reporting their thoughts and feelings about the professional learning processes in their schools. In trying to establish a synoptic view of professional

learning processes in the schools, I had to synthesise the research from a range of areas, as well as the experiences of school-based people, to provide a coherent view of principals' professional learning processes. On a personal note, my satisfaction is derived from achieving what I set out to do, that is, to produce something practical, something that principals may find useful as they reflect on the learning associated with the complex processes related to implementing innovative curricula that address the needs of our students in a rapidly changing world.

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APPENDICES

Appendix A: Permission from principals

From: Robert@hillviewss.qld.edu.aul Sent: Thursday, 27 July 2000 9:12 To: 'CLARKE, Jenny' Subject: RE: research proposal

Jenny,

More than happy to be a part. The sites I will send ASAP. Sorry about the delayed response. You know what it is like. Regards Robert

----- original Message ----From: CLARKE, Jenny [SMTP:Jenny.Clarke@qed.qld.gov.aul
Sent: Thursday, 20 July 2000 08:27
To: PRINCIPAL, Hillview State School
Subject: research proposal

Robert

Further to our telephone conversation this morning, thank you for agreeing to be a participant in my studies into the learning processes undertaken by principals. Would you please indicate, by return email, your willingness to participate in my research. I need to attach this to my "Ethical Approval Form". Thanks a lot. I am looking forward to working with you, Margo and William. Jenny

From: Margo@Riverbendss.qld.edu.aul Sent: Thursday, 20 July 2000 1:20 TO: CLARKE, Jenny Subject: Re: research proposal Dear Jenny,

We are very pleased to be able to participate, in your research and will happily negotiate the necessary commitments closer to the time. Regards Margo

----- Original Message -----From: CLARKE, Jenny <Jenny.Clarke@qed.qld.gov.au> To: PRINCIPAL, Riverbend State School <The.Principal@riverbendss.qld.edu.au> Date: Wednesday, 19 July 2000 11:27 Subject: research proposal

>Dear Margo

>Thank you for offering to be a participant in my research.
>I am currently doing the "Ethical Approval Form" and need to attach confirmation of your willingness to participate in the research. Would you, please, (by return email) indicate your positive response to my request?
>Thank you,
Jenny

Appendix B1: Interview Protocols

- 1. First interview: Researcher to introduce herself, and outline the purpose of the interviews.
- 2. Inform the respondents about how the data will be used, that is, to prepare case studies as part of the study into principals' processes of professional learning.
- 3. Advise respondents about confidentiality and anonymity.
- 4. Advise respondents about length of interview, and timelines for further interviews.
- 5. Seek permission to record interviews.
- 6. Advise the respondents about the structure of the interviews use of the interview guide as well as prompts and clarifying questions.

Appendix B2: Interview Guide

Principals

Interview 1: Context of school; Principal's professional learning

- 1. Describe the context of the school e.g. school, staff, curriculum, culture.
- 2. Describe the culture of the school re innovative approaches to curriculum.
- 3. What motivates you to learn, to seek new ideas? (Is the school context a motivator for professional learning?)
- 4. Talk about your personal enjoyment of learning.
- 5. How does your role as principal impact on your motivation to learn? Has this changed from when you were a classroom teacher to being a principal?
- 6. Describe your perception of the role and responsibility of the principal as a learner. Do you feel you have a responsibility to be a learner because you are a principal?
- 7. What process do you use to acquire professional knowledge?
- 8. What are the sources of information that you access?
- 9. What do you see as the barriers to professional learning for you?
- 10. How do you use/share your knowledge in the school? (How do you put your learning into action? Is your learning influenced by interactions with staff?)
- 11. Can a principal's learning take place external to the work site? How effective is a principal's learning if it occurs external to the worksite?
- 12. How do you evaluate the impact of your learning on the school?

Interview 2: Professional learning; Curriculum development

- Funnelling statement: "Where once power was legitimately located at the top, it is now distributed throughout the organisation" (Wildy & Punch, 1997 p. 96). How do you feel about this statement? Is it true for your school?
- 2. How do principals cope with changing power relations in schools? (Expectations of teachers as leaders.)
- 3. Talk about your leadership style.
- 4. Talk about the attitude of staff at the school towards gaining new knowledge.
- 5. What is the focus of professional development for teachers at this school?
- 6. What are the processes for professional development for teachers acquisition of knowledge and skills, training, evaluation?

- How does professional development link to school programs and budgets? (Review school documents.)
- 8. What are the expectations of teachers in relation to accountability for their roles, rights and responsibilities?

Interview 3: The school as a learning organisation; Change management

- 1. What personal traits or attributes do you as an individual bring to your school, particularly as a leader/learner.
- 2. What skills (different to personal traits) do principals need in implementing innovative curricula?
- 3. What advice would you give to other principals who endeavour to establish their schools as learning organisations?
- 4. What is the role of the principal/deputy principal in the learning and development of teachers? (facilitator, provider, etc?)
- 5. What are the positives and negatives impacting on the development of a learning community at this school?
- 6. What is your assessment of what is happening in relation to the school as a learning organisation? (Where are your staff on a continuum as a community of learners?)
- 7. How does the school community see itself in relation to being a learning organisation?
- 8. What is the level of shared understanding between you as principal and the staff regarding the vision for the school as a learning community?
- 9. Is there an agreed view of good teaching at this school?
- 10. Change management: Describe the processes that you use. Are they overt or covert? Why?
- 11. Describe the changes in the school culture that you can attribute to your leadership.
- 12. How has the implementation of New Basics progressed since our last interview?

Teachers

Interview 1:

- 1. Describe the context of the school in relation to professional learning
- 2. Describe the culture of the school in relation to innovative curriculum.
- 3. How does the principal influence your learning?
- 4. What is your attitude to personal learning?
- 5. What is your motivation for engaging in professional learning?
- 6. How do your promote your own ideas about innovative curriculum?
- 7. Describe the learning journey you have been on in the last couple of years.
- 8. Would the changes which have occurred continue to be implemented if the principal left the school? Why?

Interview 2:

- 1. What is your role in curriculum development in the school?
- 2. Describe the processes for teacher learning in the school.
- 3. Talk about the attitude of teachers at this school towards gaining new knowledge.
- 4. What is the focus of professional development for teachers at this school.
- 5. What are the processes for professional development for teachers?

Interview 3:

- 1. What skills/knowledge do principals need in implementing new curricula?
- 2. What the positives and negatives impacting on the development of this school as a learning community?
- 3. What level of shared understanding is there between the principal and staff about where the school is headed?
- 4. What is your perception of what is happening in relation to the school as a learning community?
- 5. Change management: is it overt or covert?
- 6. How has the implementation of New Basics progressed since our last interview?

Appendix C: Sample of Interviews

Interviews: Teachers, Riverbend State School

06-12-2000

Ken: I can remember that where we were in 1999 and that has changed completely. I think you have to be fairly flexible to be able to go down one track and if that doesn't work, to start again.

Interviewer: Was that a challenge at the time?

Kate: We've looked on each change a s not a hassle. OK we can use that in this. I think that was our attitude. We weren't perturbed.

Ken: I wonder why Kate. Why have we had that attitude, when in the past it's been 'Oh, shit! I don't want to do this anymore. And yet we've done a U-turn and said start again.

Kate: At the time we were planning the KLAs we didn't know the rich tasks were coming round the corner. I think the turning point might have been the rich tasks. When we were getting down the track with our planning it gave us a focus and great enthusiasm. We could see the benefits of that type of learning and we said "Oh, beauty, this is so different from anything we've ever done: we want to trial it. And that's another thing: we've done a fair bit of trialing. We find it exciting..

Ken: We could see the benefits of it.

Interviewer: And you've been supported....

Ken: Oh, very much so. Absolutely. Supported with time out of class. Margo said to me the other day that we've spent upwards of \$20 000 and upwards of TRS (Teacher relief scheme) so we could be out of class. And when she mentioned that figure to a group of principals in Gladstone, they nearly fell over backwards and asked where she got the money. She said it just had to be reprioritised. If I would have known it was that much

I asked Margo what were we getting out of this and she it's going to come in the form of students enrolling in the school. We got a grant recently for a cyber classroom. \$17 000 and that's incredible and that's because of the things that we are doing here are soundly thought of in the District Office. So we are getting benefits from that sort of money being spent.

Kate: We started last year on the computer competencies and we've done thinking hats and the thinking skills. We've just been through the journey and the IDEAS project plus behaviour management. and all those things we have been able to link up and they all help us to focus on our planning techniques.

Ken: That all came from Margo. We wouldn't have been in this journey if she hadn't gently guided us and pushed us and the IDEAS project at the time I thought it was the biggest waste of time, but we've got some good things out of it.

Kate: Like the community links and all those sort of things.

Interviewer: That wasn't always there?

Ken: Oh - we've always generally had a good relationship with the community but there have been elements in the community we didn't get on with. That's a bit of Mooloolah history unfortunately. (more)

Kate showed me a document put together by Jack and a number of people on staff, and said., "It's been a shared effort."

Ken: It's got to be a shared thing.

Interviewer: If Margo were to leave it is hoped that a lot of this would stay because there is enough ownership of it. Do you think the learning is embedded sufficiently for you to carry on?

Kate: I think the focus that Margo gives is going to be very hard to follow because she is so dedicated. She has the next step in her head but won't tell us. We go and do things and she says you could do this or you could do this. We've done a lot of this.

Ken: Margo could have told us three weeks ahead of time but she knows that the journey is important, it's valuable to get to that point, to have all that learning. We have to go through this rather than be spoon fed, which is pretty frustrating.

Interviewer: The whole thing is about "You tell us and we'll do it' – and what learning is there for you in that?

Kate: Yeah We've had a lot of inservice on productive pedagogies. We meet other teachers and they aren't as enthusiastic about the changes as we are, but they haven't been through what we've been through.

Ken: Do you think we would keep going with it.

Kate: I think we would but not at the pace we've been going.

Ken: I don't know if it would keep going or not. I get despondent when I talk to other teachers and they tell me they don't really understand. I would like to have time to sit with them and enhance their understanding. ...

Appendix D: Sample of Coding

Coding of Interview: Teachers, Riverview SS

Codes: PERS: Perspectives; ACTS: Activities; STRAT: Strategies; REL & SS: Relationships and Social Structure

	06-12-2000
PERS KK2, 1.1	Ken: I can remember that where we were in 1999 and that has changed completely. I think you have to be fairly flexible to be able to go down one track and if that doesn't work, to start again.
PERS KK2, 1.2	Interviewer: Was that a challenge at the time? Kate We've looked on each change as not a hassle. OK we can see that in this. I think that was our attitude. We weren't perturbed. Ken: I wonder why, Kate? Why have we had that attitude, when in
	the past it's been 'Oh, shit! I don't want to do this anymore. And yet we've done a U-turn and said start again.
ACTS KK2, 1.3	Kate; At the time we were planning the KLAs we didn't know the rich tasks were coming round the corner. I think the turning point might have been the rich tasks. When we were getting down the track with our planning it gave us a focus and great enthusiasm. We could see the benefits of that type of learning and we said "Oh, beauty, this is so different from anything we've ever done: we want to trial it. And that's another thing: we've done a fair bit of trialing. We find it exciting
	Ken: We could see the benefits of it.
ACTS KK2, 1.4	Interviewer: And you've been supported
	Ken: Oh, very much so. Absolutely. Supported with time out of class. Margo said to me the other day that we've spent upwards of \$20 000 and upwards of TRS (Teacher relief scheme) so we could be out of class. And when she mentioned that figure to a group of principals in Gladstone, they nearly fell over backwards and asked where she got the money. She said it just had to be reprioritised. If I would have known it was that much
STRAT KK2, 1.5	Ken: I asked Margo what were we getting out of this and she said it's going to come in the form of students enrolling in the school. We got a grant recently for a cyber classroom. \$17 000 and that's incredible and that's because of the things that we are doing here are soundly thought of in the District Office. So we are getting benefits from that sort of money being spent.

STRAT	Kate: We started last year on the computer competencies and we've
KK2, 1.6	done thinking hats and the thinking skills. We've just been through
	the journey and the IDEAS project plus behaviour management. and
	all those things we have been able to link up and they all help us to
	focus on our planning techniques.
STRAT	Ken: That all came from Margo. We wouldn't have been in this
KK2, 1.7	journey if she hadn't gently guided us and pushed us and the IDEAS
	project at the time I thought it was the biggest waste of time, but
	we've got some good things out of it.
PERS	Kate: Like the community links and all those sort of things.
KK2, 2.1	
REL&SS	Interviewer: That wasn't always there?
KK2, 2.2	
,	Ken: Oh – we've always generally had a good relationship with the
	community but there have been elements in the community we didn't
	get on with. That's a bit of Mooloolah history unfortunately. (more)
PERS	Ken: It's got to be a shared thing.
KK2, 2.3	
KK2 2.4	Interviewer: If Margo were to leave it is hoped that a lot of this would
PERS	stay because there is enough ownership of it. Do you think the
	learning is embedded sufficiently for you to carry on?
	Kate: I think the focus that Margo gives is going to be very hard to
	follow because she is so dedicated. She has the next step in her head
	but won't tell us. We go and do things and she says you could do this
	or you could do this. We've done a lot of this.
STRAT	Ken: Margo could have told us three weeks ahead of time but she
KK2 2.5	knows that the journey is important, it's valuable to get to that point,
	to have all that learning. We have to go through this rather than be
	spoon fed, which is pretty frustrating.

Appendix E1: Highgrove: New Basics Meeting Agenda

Year Eight Cross Curricula Project

Monday 11th December, 2000

<u>Agenda</u>

Session One 9.00am – 10.30 am

1. Orientation (45 mins) What are we hoping to achieve? What can be achieved?

Introduction and group discussion

2. Tuning Protocol (45 minutes)

Session Two 11.00am – 12.30pm

1. Refining Tasks (45minutess)

- Presenters report tuning protocol inputs to their task group.
- Group considers modifications, improvements and fine tunes.

Timing and management of tasks in 2001 (45 minutes)

- Where in the year will each task take place?
- Consider art/music split
- Devixe an overview for 8A, 8B, 8C and 8 D.
- Who is responsible for refining each task?
- How will they be managed as assessment items?
- Should we use a common format for presenting the task?

Session Three

1.20pm-2.50pm

1. Task Management Continued (if required)

2. Authentic Assessment (45 minutes for longer)

- Subject area teachers discuss learning outcomes specific to each task they are involved in and the place of the task/s in the totality of the learning outcomes in the subject area.
- Some considerations:
 - What does the student have to do to show they understand and they have the skills?
 - What are the criteria for these judgments?
 - How can students use these criteria?
 - How will learning be celebrated/acknowledged?

3. Task development in 2001

- Regular meetings required and in which groups? Task groups/Class groups.
- Professional development requirements.
- Recognising successes, refining problems.
- Implications for 2002.

Appendix E2: Highgrove: New Basics Meeting Minutes

Background: The group of approx 25 teachers (volunteers) met for four days, broken into groups of 6/7 teachers who worked on the rich tasks.

Today's meeting: The groups presented ideas after four days of planning. Led by Brian (HOD)

Brian reminded the group that the aims of the day were to:

- Find measurable ways to evaluate the planning exercise
- Use of protocols to analyse work

He reminded the group that they were looking at different approach to pedagogy, contextual learning and reinforcing quality.

Brian introduced the aim of the first session: To arrive at 5 goals to measure outcomes (pose as questions.)

Brian asked the teachers to break into four groups of 5 and discussion ensured around the following points:

- Real life experience?
- Does it allow all students from a range of backgrounds to achieve an outcome?
- Are the skills required transferable?
- Does it meet syllabus requirements?
- Is it a meaningful tasks?

Work in groups: (I sat with one group and observed their interactions. Teresa scribed and led the group. Input from Angel & Paul. At 9.15 am Wayne arrived, sat and observed and then left at 9.20. Linda asked clarifying questions. Ron was quiet. Linda questioned links with New Basics.)

Anne posed the question: How does this rich task relate to all students? Rob responded. Rob asked how they would measure the achievement for lower level students. All of group engaged in the discussion.

Mac (HOD) asked how they could measure whether the task is meaningful. Mac asked the group to discuss the top priority.

Rob and Angel reminded the group that the focus should be on students, and asked about the students' point of view in relation to the rich tasks being proposed. Paul and Norm raised the issue of formative and summative tasks.

9.35am Shred group input – 3 questions from each group were listed on the whiteboard.

Paul asked whether higher order thinking should be added to the list. Other issues raised across the room included:

- Does the rich task encourage positive, increased engagement?
- Was the task manageable/comfortable?
- Was there excellence in learning outcomes?
- Were learning outcomes maximised?
- Could the outcomes be compared between 200 and 2001?

- Time and resources physical and human technology?
- Change in teacher team culture.

Anne asked a clarifying question re change in team culture.

9.40 am In groups, discuss the priority order for the questions, and separate them as teacher and student questions.

The group I observed tried to clarify what was required. Anne and Rob discussed the issue while the rest of the group listened. Linda spoke. Anne sorted the questions into teacher and student categories. Rob asked whether these needed prioritising. Leanne joined the group during the discussion.

Student:

Teacher:

1. Student outcomes?

mes?

- 2. Comfortable/manageable
- 3. Syllabus requirements?

Meaningful?
 Outcomes?

3. Transferable skills?

I observed sharing between groups – sorting out of major concerns e.g. resources, manageable tasks. Similar ideas from other groups were noted.

9.55 am Organise who and how to present draft rich tasks.

10 am Feedback sessions (2-3 mins per group) re each rich task.

Key issues:

- Need to work out timelines across the year.
- Will the tasks covered in the rich tasks be the same as the old curriculum. Yes but covered in a different way.

11am Organising the Tuning Protocol to present and discuss rich task "Me, Myself and I"

- Presenters for each group rotate
- Use the process as per the Tuning Protocol sheet

(Question: How should we organise the timetable? Ans: No answer or determination at this stage.)

11.40 Whole group discussion re timelines to achieve rich tasks. Timetable also discussed.

Feedback from Paul re group dynamics: Some groups worked better than others did.

Appendix E3: Highgrove State High School: Rich Tasks

Personal Time Capsule

Student Name :

integrated approach to learning

an

ENG

Class : Lote Teacher : HPE Teacher : English Teacher: Home Economics Teacher :

Description

Imagine it's your twenty-first birthday and your family and friends have gathered together to celebrate this occasion. As part of this celebration a display of your life's progress has been organised to be on show at your birthday. You have been asked to contribute to this display. A time capsule created by you which contains personal information about you in Year 8 would be a perfect inclusion at the party.

As a real life bonus you will be able to use your time capsule when you are in Year 12. As a final piece of assessment in Year 12 you are required to produce an Identity booklet. Your personal time capsule will be kept at school and when you are working on your final high school English Assessment you will be able to refer to it.

Your task:

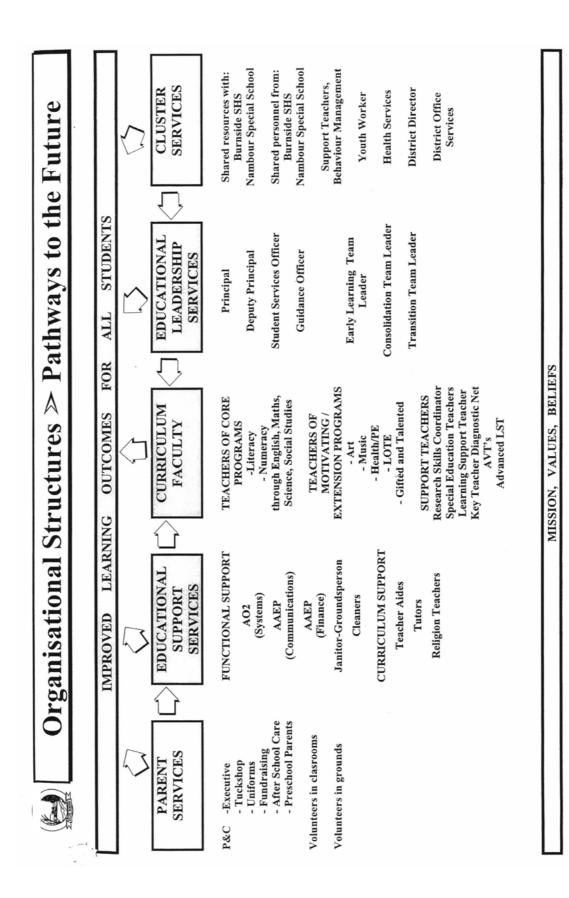
You are to provide a time capsule of personal information which documents your life past, present and future. This capsule must include:

- An Introductory letter to a penpal in your LOTE.
- Your physical profile and future sport prediction.
- A Personal Identity Booklet.
- A Health plan and current body profile.
- An Autobiography written from the perspective of you at age 21.

You will also have the opportunity to include other items that will help document your life. These could be:

- An artistic piece (eg painting, song, self portrait)
- Poetry written by you
- Photographic pieces of significance eg special events, sporting awards, friends.
- Personal coat of arms.

Your timecapsule will be placed in a Post pak box Size BM 310mm x 225mm x 102mm. You are required to purchase this box from the Post Office or similar, and they will be sealed and stored at school until you reach Year 12.



Appendix F1: Hillview Strategic Planning

		Barriers to change	anidane italian anna farailar
1		$\left \right $	1

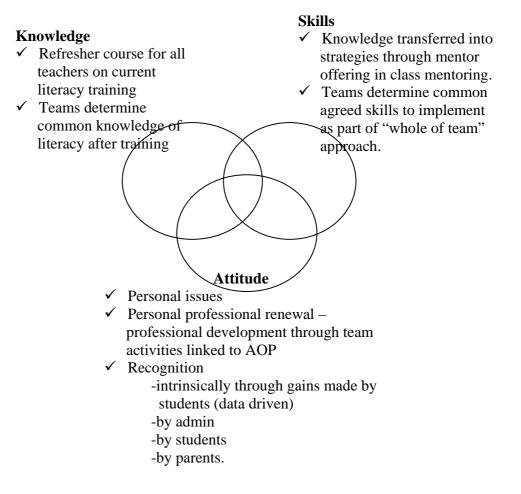
Gap Analysis

	ll strategies	Student learning outcomes
	e school:	
		Vigorous shared leadership with curriculum
		focus. Setting learning outcome targets.
		Student centred model - working with
		teachers to meet student resource needs
	ssing with Iqbal the	Flexibility to put resources into classrooms.
	{	Teacher focus on curriculum without
		distractions. Organisational support is a key
	7	part of Perfomance Improvement.
		Greater Principal and DP focus on student
		outcomes, less on management
		Student focus through shared accountability.
		High expectations about student
		achievement.
		Authentic pedagogy being the culture of
	edge to enable professional	conversation throughout the school.
	mission.	
	(Year level orientations) so authentic	
	rt of the cultural conversations in the	
	or the purposes of decision making	
	rather than one of informing.	
	in power to 'gatekeep' information	
	result is one based on secrets and	
	ssionals cannot operate in this mode	
	i is a professional activity) become	
		Focus on quality curriculum and outcomes.
- personal ownership rather than	- IDEAS project focus with Andrew	
collective ownership. and Ed.		

<u>Appendix F2: Venn Diagram</u> (Used by Milton during interview)

Hillview State School

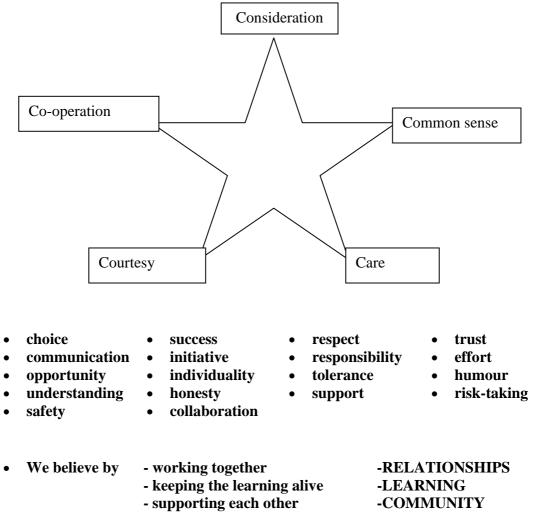
Strategies to optimise improved learning outcomes



Appendix G: Riverbend State School: School Renewal Process

INTRODUCTION

- At Riverbend State School our purpose is to "Make the Most of People"
- To enable us to achieve this purpose all our actions are based on our agreed set of values:



- LEARNING TO BE, DO, KNOW & LIVE TOGETHER
- These principles have guided us in developing our Behaviour Management Plan for Riverbend State School students, staff and parents.

Notes from whole group discussion: Riverbend school renewal process

Curriculum Concept Map

- 1. All teaching staff achieve Level One technology competency.
- 2. Lead teacher (Anthony and Gai) explores new science KLA material.
- 3. All teachers explored thinking skills and RSS adopted 6 Thinking Hat thinking.
- 4. Pupil free day science inservice!!!
- 5. Lead teacher (Ken) explores H & PE KLA material
- 6. School decision to network all primary classrooms.
- 7. 2010 the Future of Schooling consultation starts.
- 8. Cyberschools are born.
- 9. Allan Luke is appointed as an Education Queensland Deputy Director General.
- 10. Exploration RSS existing teaching excellence.
- 11. Capturing excursions links to effective teaching.
- 12. New Basics are born:
 - Life Pathways and Social Futures
 - Environments and Technologies
 - Active Citizenship
 - Communications Media
- *13.* Formation of a representative team to explore the Riverbend curriculum identity.
- 14. Jack produces some Concept Maps.
- *15. Two days of team mapping a sequence of integrated outcomes driven curriculum in the areas of Water and Life.*
- 16. We are an official NEW BASICS Trial School.
- 17. Year 2000 and our team members to Highgrove to share with Cyberschools.
- 18. Ken and Kate map KLA outcomes against Rich Tasks to develop a DRAFT for Trial.
- 19. Hazel works on a planning format.
 - a. Today.
 - *b. Team members plan the year level support process and matching appropriate learning experience of work.*
- 20. Year level support with team members starts 29/03.
- 21. Trial

Brochure: Summary of Riverbend School Renewal Process

Challenges: For the Future! Technology Vision (2010) * Ensure equity in student access to Riverbend computers Develop and share a future's focussed vision with the school Environment State community Teaching Develop litter awareness and School management strategies * Develop agreed definitions and (In progress) standards of excellence Discuss, share and develop best Communication teaching and learning practice * Develop and promote the school as Enhance school / community an important centre for Pride in communication links (In progress) learning Achievement * Promote excellence in the broader Relationships community Develop teacher leadership and responsibility roles * Build links with community Develop curriculum relevant to real groups Improve conflict resolution life situations (In progress) strategies Continued development of computer skills Increase parent involvement in dawes Behaviour Social Skills School Renewal * Address Bullying in the school (In progress) Develop programs to develop Project social skills for students Reporting * Review assessment and reporting * Provide focus on caring for individual students procedures (In progress) Strengths: Let's Our school energy is directed Technology towards "Modelling the New Celebrate! Information Technology Millennium". Vision (2010) infrastructure Because of this we are under- Internet Web Page taking a plan for "School Re-Freedom to innovate new Environment newal". This has given us lots ideas of information about: Teaching School uniform **Rainforest Project** * Professionalism of staff Opportunities for student 1) The excellent features of Communication our school that we will learning Utilisation of community expertise Excellent communication proudly continue to de-Excellent ancillary staff * between staff velop. * Ongoing staff development * Willingness to share ideas High expectations for student 2) The future directions achievement Relationships which will make our Staff freedom to create an effective learning environment Staff morale is high school an even better * Use of technology to enrich * Pride in the uniqueness of the place. learning experiences school * Highly valued school experiences: Good parent / teacher This brochure is to give you a Gala Night, Sporting achieverelationships ments, Sports Day, School snapshot of things to celebrate Welcoming staff **Camps and Excursions** and let you know where our Staff flexibility and teamwork Behaviour school is heading. Social Skills Thank you to the students, Positive reinforcement of parents, and staff who have Students are happy and students contributed to this project. cooperative * Lunchtime activities for students Student manners are working well

Appendix H: Ethics Clearance





TOOWOOMBA QUEENSLAND 4350 AUSTRALIA The Office of Research and Higher Degrees

Postgraduate and Ethics Officer Telephone: 0746 312956 Facsimile: 0746 312955 Email: bartletc@usq.edu.au

9 October 2000

Ms Jennifer Clarke 64 Alderley Street TOOWOOMBA Q 4350

Dear Jenny

Re: Ethics Clearance for Project, What is the principal's process of professional learning in relation to the implementation of significant curriculum change?

The USQ Human Research Ethics Committee recently reviewed your application for ethics clearance. Your project has been endorsed and full ethics approval is now confirmed. Reference number **H00STU118** has been assigned to this approval.

The Committee is required to monitor research projects that have received ethics clearance to ensure their conduct is not jeopardising the rights and interests of those who agreed to participate. Accordingly, you are asked to forward a written report to this office after twelve months from the date of this approval or upon completion of the project.

A questionnaire will be sent to you requesting details that will include: the status of the project; a statement from you, as principal investigator, that the project is in compliance with any special conditions stated as a condition of ethical approval; and, confirming the security of the data collected and the conditions governing access to the data.

Please note that you are responsible for notifying the Committee immediately of any matter that might affect the continued ethical acceptability of the proposed procedure.

Yours sincerely

C Bautees

Christine Bartlett Postgraduate & Ethics Officer Office of Research and Higher Degrees



Appendix I: Application to Conduct Research



APPLICATION TO CONDUCT RESEARCH IN EDUCATION QUEENSLAND STATE SCHOOLS AND OTHER UNITS

The information presented on the form should stand alone in conveying the salient features of the research proposal. Supporting information can be attached as required.

1. Name of principal researcher:		Designation:	
1. Name of principal research		Designation	
Last: CLARKE		Principal Personnel Officer	
Last. CLARKE			
First: JENNIFER A.		Organisation: Education Queensland (Toowoomba	
FRSC. SLAVALER IN		District Office)	
Title: Mr/Miss/Mrs/Ms/Prof/Dr/other Ms			
11110. 1411/141155/1411 5/1415/1			
Contact Address:		Other Details:	
Toowoomba District Office		Telephone: 07 46884431	
PO Box 38,			
Suburb: TOOWOOMBA		Fax: 07 46884439	
State: Qld	Postcode: 4350	E-Mail: jenny.clarke@qed.qld.gov.au	
-			
2. Title of research:	What is the principal's process of	of professional learning in relation to the implementation of	
	significant curriculum change?		

3. Research aim & purpose:

The study is designed to investigate the preferred learning processes undertaken by principals within a framework of implementing new curricula. The study will consist of three parts. 1. Case studies of three principals. 2. Review of the current literature associated with adult learning, learning organizations and professional learning & development. 3. The development of a framework for learning and development for Education Queensland principals.

Research questions:

- 1. What are the essential concepts an dprcesses of professional learning which emerge from a review of the literature relvant to successful school innovation?
- 2. What learning processes are used by principals who are undertaking significant curriculum change?
- 3. What forms of professional development and training are proposed for the development of skills which will enable prncipals to successfully implement innovtive curriculum programs?

Participants involvement:

The principals will be asked, at interview, to share their attitudes to and motivation for, learning, the processes they undertake to acquire knowledge and skills, their souces of knowledge and information, how they use their learning and how they evaluate the effects of their learning. They will also be asked about barriers to learning and implementation of their learning, as well as the impact of their role as principal on the learning of their school communities.

The District Directors will be asked to comment on the preparedness of principals, in general, to implement innovative curriculua.

4. Schools and/or	State High School –
organisational	State School – J
units to be	State School -
approached:	(All three principals have indicated, in writing, their willingness to participate in this
(include names)	study.
	•
	n · • ·

school per mon	n.
	ich school over a period of two school terms - term 4, 2000 and term 1, 2001. One visit to each
 Time re 	quired for the research (e.g. terms, months, stages of research, expected timeline)
The interviews	tration (How will research be administered, by whom? e.g. interview, survey form distributed by researcher) with principals will be semi-structured, allowing the participants to bring in information which they the and allowing the researcher to provide some direction to the interviews.
Interviews with	principals, focus groups with teachers, document perusal.
 Instrum 	ents (e.g. Survey form, interview)
	sizes (e.g. 10 students) us groups will consist of 6-10 techers, depending on their willingness to participate.
Three Principa	(e.g. Teachers, students, parents) is and three District Directors as listed in (4.) . A group of teachers from each school - on a - to form a focus group.
5. Summary of t	feld activity:
their cooperation principals or othe	he principal researcher named above to approach schools and other units within Education Queensland to seek to participate in the research. Although approval may be granted, there is no obligation on the part of school r Education Queensland personnel to participate. Hed approval should be provided to school principals, districts and others when cooperation is requested.
Telephone: 54 Approval allows their cooperation principals or othe	708910 Fax: St 208909 he principal researcher named above to approach schools and other units within Education Queensland to seek to participate in the research. Although approval may be granted, there is no obligation on the part of school r Education Queensland personnel to participate.
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• 6. Summary of the research approach, design, methodology and strategies employed to ensure validity and reliability. (Please attach data collection instruments)
 Research Design: (Two parts) - qualitative research 1. Conceptualisation of the professional learning of principals from a theoretical perspective (literature review) 2. Multiple case studies: The case study approach will enable to researcher to gain a thorough understanding of the learning processes engaged in by each principal in a context of implementing innovative curriculua, as determined by his/her school's inclusion in the New Basics Project.
Methodology:
Work on the literature review and the school visits will be undertaken concurrently, that is, each round of school visits will followed by collation of the data and work on the literature review. (see attachment 1: Phases of Study). Data collected from the literature review (between school visits) may provide direction, not yet anticipted, for the subsequent school visits. During the final visit to the schools the principals will be presented with the data collected to date and given the opportunity to validate the researcher's findings.
Data collection will consist of interviews with the Principals and District Directors, observation of the implementation of new curriucla from each principal's perspective, focus group with teachers, perusal of supporting documentation and a final interview with the principals.
Ethical clearance: Ethical clearance is currently being sought from USQ through the Office of Research and Higher Degrees.
7. Principal Researcher
Signature: <u>Allaske</u>
Date: 22.09.2000
8. Statement of verification and support. Should we need verification of details contained in this approval or of the ethical considerations that have been taken into account, please complete contact details below for the authorising officer:
(PLEASE PRINT ALL DETAILS)
Name: Associate Professor Frank Crowther
Designation: Director, School Leadership Institute
Dept/Organisation: University of Southern Queensland
Telephone: (07) 46312 828 Fax: (07) 46312326
Email: crowthef@usq.edu.au
Signature: Date: /