REFORMING THE MIDDLE YEARS CURRICULUM IN AN INTERNATIONAL SCHOOL: A NATURALISTIC INQUIRY

A Dissertation submitted by

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Abstract

This dissertation reports on the experiences of a small group of teachers and administrators as they endeavoured to reform the middle years curriculum of an international school in Japan. This single case study is based primarily upon the observations of the researcher, a middle school teacher at the school and a key participant in the reform process. This study is positioned in the naturalistic paradigm which allows for the accumulation of sufficient knowledge to lead to a holistic understanding of middle years curriculum reform within this context.

Reforming the middle years of schooling has received renewed attention in recent years. A new paradigm is emerging about the nature of schooling in this significant stage of life that is now recognised as crucial to the formation of attitudes, values, and habits of mind that shape the individual's identity and development as an adult. Despite the growth and status of international schools, very little is known about the nature and processes of middle years curriculum reform in this context. The central aim of this study was to provide a detailed and authentic account of the process of curriculum reform that can validate, guide and extend the current body of knowledge on middle years curriculum reform and is meaningful and useful to educators in the international school context.

Three dimensions of reform emerged in this study: the process of reform, identified as a multidimensional and interconnected process that ventured through six identifiable phases; the product of the reform, the Humankind Curriculum, was found to have its core features grounded in shared understandings of effective middle schooling; and the dynamics of change, which revealed a professional learning community as the

catalyst for change, with the interplay of relational trust, leadership, interpersonal relationships and collaboration as empowering the capacity for reculturing the middle school. While the findings contribute to the current body of knowledge on middle school reform in the international school context, they also provide direction for further discussion, exploration and research.

CERTIFICATION OF DISSERTATION

I certify that the ideas, experimental work, results, analyses, software 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.

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Signature of Candidate   Date

ENDORSEMENT

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Signature of Supervisor/s   Date

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I would like to dedicate this study to my father, Policarpo Scagliarini, who passed away during the course of this study and whose enduring encouragement and support has endeared me to a lifetime love of learning.

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CHAPTER 1 INTRODUCTION

1.1 Introduction

This dissertation is a report of a qualitative study of the experiences of a small group of teachers and administrators as they endeavoured to reform the middle years curriculum of an international school in Japan. This single case study was based primarily upon the observations of this researcher, a middle school teacher at the school and a key participant in the reform process. This first chapter of the dissertation presents the background of the study, specifies the problem of the study and the aim that grew out of this problem, followed by the questions and research approach used to achieve this aim. The researcher's background is relevant to this study so is therefore explained and is followed by a concluding section. An overview of this report completes this chapter.

1.2 Background to the Study

For many years, researchers and commentators have pointed to the need for a different model of provision for the middle years of schooling. The term 'middle school' and 'middle years' refers to grades 6-8 (generally ages 11-14) in the K-12 continuum and these terms are articulated in later sections of this report. Recognition of the importance of this phase in schooling is apparent in major research undertakings such as the Carnegie Council on Adolescent Development *Turning Points* project (1989) in the United States, and *The National Middle Schooling Project* (Barratt 1998) in Australia. Numerous other initiatives have followed and the growing literature base and emergent theoretical perspectives on middle schooling, reviewed in Chapter 2, demonstrate the investment and commitment to this sector of schooling. Reforming the middle years of schooling continues to receive attention in

recent years, with a new paradigm emerging about the nature of schooling in this important period of life (Hill et al. 2001; Jackson & Davis 2000). The adolescent years, the transition from childhood to adulthood beginning with puberty, hold distinctive challenges for the individual and are characterized by rapid physical, social, emotional and cognitive development.

The concept of middle schooling is becoming more focused with the core purpose of this phase in schooling now centred on providing a program that caters for the intellectual, emotional, physical and social needs of early adolescents. This significant stage of life is now recognised as crucial to the formation of attitudes, values, and habits of mind that will largely shape the individual's identity and development as an adult. Greater understanding of the developmental processes of adolescence (Abbott 2005), deeper insights on how the brain learns (Sousa 2000), and the imperative to shift towards a more engaging approach to teaching and learning (Beare 2001), is furthering the call for a more congruent approach to the development and delivery of the middle years curriculum.

In this study curriculum is conceptualised in its broadest sense, embracing multiple interconnected dimensions that are contextualised and serve to guide the learner's pathway by focusing on and expanding connections and relationships in the learning experience. Beane's (1991) question, 'What should the middle school curriculum be?' (p. 10) remains a central and contentious pursuit in today's middle schools.

Effective reform of the middle years curriculum amounts to a 'second-order change' (Cuban, in Cuttance & Stokes 2001, p. 5) where the fundamental relationships of a school are altered by creating new objectives, reorganising

structures and building new cultures within the school. School reform is a multidimensional, complex, phasic, and lengthy process that, when successful, amounts to reculturing in a school. Fullan (2007) asserts that restructuring schools is relatively easy but does not penetrate deep enough to make a real difference and that reculturing, that is changing beliefs and habits that impact the way people think and act, is what is needed. Building a school's capacity for reculturing is by no means an easy task as the 'intrinsic dilemmas in the change process, the intractability of some factors, the uniqueness of individual settings, and variations in local capacity, make successful change a highly complex and subtle social process' (Fullan 2007, p. 86). As we gain deeper insights into the processes of school reform, it is becoming increasingly recognised that reform is a highly contextualised phenomenon that is dependent on a variety of human, social, technical and structural resources (King & Newmann 2001). The apparent gap between the theories of educational change and the actual changes in practice have led Andrews and Crowther (2002) to conclude that 'the contents of the metaphorical black box of educational reform have remained tantalisingly unclear' (p. 153). Prising open the black box of middle years curriculum reform will require the sustained and collaborative effort of school reform theorists, researchers and practitioners.

Despite the growth and status of the international school context (MacDonald 2008), the contention with how these schools are defined is unresolved (Hayden 2006) and may remain so until we find out more about them. With the reconceptualisation of middle schooling taking hold in national schools (i.e. schools that are embedded in the prevailing educational system of a nation) and middle schooling forming an integrated component of an international school's educational continuum, little is known about how international schools are placed in terms of the

provision of their middle years curriculum. Theoretical literature and empirical

research about school reform, and the dynamics of change that facilitate the long and

challenging process of reculturing, are predominantly based on insights drawn from

national schools (Fullan 2007; Newmann & Wehlage 1995), leaving the nature and

processes of school reform in international schools largely unknown. Blandford and

Shaw's (2001) call for 'more pieces to be added to the jigsaw' (p. 26) of the

international school experience; Felner and Jackson's (1997) appeal for research that

'directly addresses the process of middle-grades restructuring and its impact' (p.3);

and Silins, Zarins and Mulford's (2002) notion that change in schools can be seen as

'evolutionary and dynamic with an emphasis on continuous learning and adaptation'

(p. 24), signify the multiple dimensions of the context from which this study emerged.

1.3 The Research Problem

Erlandson et al. (1993) note that the problem statement in naturalistic

research is 'an expression of a dilemma or situation that needs to be addressed for the

purposes of understanding and direction' (p. 49). In this study, the situation that

requires understanding and direction is that the worldwide growth of international

schools is forming an increasingly prominent sector of education that is demanding

attention and that, despite this status, little is known about how international schools

are dealing with the reconceptualisation of the middle years curriculum and the

subsequent need to reform middle schools. Metaphorically, the problem is that the

'black box' of curriculum reform in the middle years is very dark and tightly closed

in the international school context.

1.4 The Research Aim

The aim of this study, arising from the research problem, is to get inside the

'black box' and to shed some light on what happens when an international school

engages in a reform initiative. By focusing on a phenomenon that has had little attention, this study aims to provide a detailed and authentic account of middle school reform that can validate, guide and extend the current body of knowledge on middle school reform and is meaningful and useful to educators in the international school context.

1.5 The Research Questions

To achieve the research aim, three questions form the framework for the conduct of this study:

1. What happens when an international school reforms its middle years curriculum?
2. What is the nature and significance of the reforms?
3. What are the emerging concepts that are illuminated during the reform process?

1.6 The Research Approach

A single case study adopting a naturalistic, or constructive, inquiry approach was found to be the most suitable method for achieving the research aim. In the context of this study, a naturalistic paradigm provides a stance that allows for the accumulation of sufficient knowledge to lead to a holistic understanding or explanation of middle years curriculum reform in the school under investigation. Sharing constructed realities with the participants in this context, and constructing new realities that enhance both the knowledge of the researcher and that of the participants, is the essence of this approach (Lincoln & Guba, 1985). Naturalistic inquiry relies on theory that emerges from the data and this subsequently shapes the design. With this researcher as participant observer, qualitative data collection methods (such as interviews, observations and analysis of documents), and quantitative surveys were used to track the reform process and investigate the

research questions. A cyclic process was followed over a two year period and consisted of purposive sampling, collecting and analysing data, developing theories and propositions, and allowing the design of the research to emerge and unfold. This process involved co-constructing outcomes with the participants and led to writing the case report, the vehicle of choice for reporting a naturalistic inquiry, which forms the basis of this thesis. The naturalistic approach provided the methodology to bring together the interrelated elements and processes that emerged during the study to gain some understanding of the whole (Lincoln & Guba, 1985).

This study adheres to the philosophical and mandatory requirements of naturalistic inquiry, as detailed in Chapter 3, and this process was used to achieve the aim of this study.

1.7 The Researcher's Background

This researcher was closely linked with the context of this study and was able to maximize his interactions with the context. He was not only able to get inside the culture of the school, he was part of it.

This researcher has been a teacher for over 20 years and started his career as a high school teacher in Victoria, Australia. The past 15 years have been spent in Japan and he has been employed at two other international schools where he taught English to students ranging from grades 1 to 9 at one school; and was a grade 5 teacher at a second school that was in the process of implementing a new curriculum, the International Baccalaureate Primary Years Program (IBPYP). He also substituted part-time at three other international schools during a sabbatical year. All schools were K-12 with pre-kindergarten programs. These experiences facilitated this researcher's pilot study that investigated school culture in international schools, this

researcher's passion, and involved collecting and analysing data from four international schools in Japan. This focus on school culture was sharpened after he gained employment at his present school (the site for this study) and the opportunity to study a reculturing process in action was eagerly taken.

This researcher was initially employed at this international school as a grade 6 classroom teacher. In the past 8 years the school had implemented the IBPYP in the elementary school, the International General Certificate of Secondary Education (IGCSE) for years 9 and 10, and the International Baccalaureate Diploma Program (IBDP) for years 11 and 12. With these programs firmly and successfully in place the school, led by an innovative and visionary headmaster, had come to the stage where its middle years curriculum was prioritized for reform. One of the first structural changes was to establish years 6 to 8 as a middle school and this occurred at the time that this researcher had joined the school. The story of curriculum reform presented in this study starts from around this point and is told in Chapter 4. The researcher's role as participant-observer is explained in Chapter 3. Insights into the researcher's personal and professional growth over the time of this study are also found in this report.

1.8 Conclusion

This chapter provides a context for the research, including the researcher's background, and demonstrates how the aim of the study emerged directly from the research problem. The research questions, while providing direction for the conduct of the study, were specifically phrased in order to allow the researcher to develop and explore theories that emerged from the context. Naturalistic inquiry relies on an emergent design and this research approach is outlined in this chapter. With the

foundations for this study in place, this chapter ends with an overview of the remaining report.

1.9 Overview of the Report

This report is divided into six chapters:

Chapter 1 includes the background of the study, the research problem, aim and the questions that frame this research as well as an outline of the research approach.

Chapter 2 comprises a review of the literature in three parts: First, the international school context is reviewed, with its distinguishing features of diversity, transience and host relations, revealing that little is known about curriculum development in this growing sector of education. The middle years of schooling is then reviewed, where a new paradigm for learning is emerging and being informed by growing understandings of how humans learn, the imperative to address adolescent needs and provide engaging approaches to learning, and the need to prepare students for the challenges of the new era of information, knowledge and intelligence. Finally, the complexities of school reform are tackled. This review of the literature uncovers the conceptualisation of reform as a capacity building process that impacts on the reculturing of schools. The interrelated roles of leadership, collaboration and trust have emerged in the literature as powerful factors in facilitating the necessary functioning of an effective learning community in the multidimensional, complex, phasic, and lengthy process of reforming schools.

The process of naturalistic inquiry that was followed in this study is explained in Chapter 3. This chapter explains the appropriateness of the naturalistic paradigm and how naturalistic techniques were successfully used to investigate the research questions and realise the aim of this study. The critical elements of

naturalistic inquiry provide the structure for this chapter and illustrative tables are used throughout to provide clear and concise representations of the methodological practices.

Chapter 4 reports the findings and results of the study using the metaphor of a growing tree as an overarching theme for retelling the story of the process of middle school reform in an international school. The data presented in this chapter documents the behaviour and experiences of multiple actors in a context that shaped and was being shaped by these actors.

Chapter 5 is a meta-analytical discussion of the three research questions. Each question acts as a window that sheds light on the black box of school reform. Three sections in this chapter focus on each of the three dimensions of reform that emerged in this study: the process of reform, the product of the reform, and the dynamics of change that were illuminated during the reform experience.

Chapter 6 is the final chapter and presents the conclusions of this study which summarise what happened when an international school engaged in reforming its middle years curriculum. Also included in this chapter are some recommendations for practice drawn from the conclusions, as are a number of propositions for future research.

The references and appendices follow this final chapter.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This study tracks the experiences of a small group of teachers as they engage in a process of reforming the middle years curriculum in an international school in Japan. The knowledge base on which this study is built is comprised of three major components and these form the sections of this chapter: *the international school context* with its distinct features of diversity, transience, and host relationships; curriculum issues relating to *the middle years of schooling*; and the interrelated and multidimensional processes of *school reform*. A large body of theoretical literature and empirical research form the basis of this study and each component is organised around relevant themes that have been identified in the process of establishing the context of this investigation. Clear links can be made between what exists in the current body of literature and the discoveries arising from this research. Gaps revealed in the literature on middle years curriculum reform in the international school context suggest that this study makes a significant contribution to this topic.

2.2 The International School Context

The number of schools worldwide that use the term 'international school' in their title has grown rapidly from 50 identified in 1964 to well over 1000 in the mid 1990's (Hayden & Thompson 1995a); recently one database reported a staggering 4731 schools catering to 1,804,742 students in April 2008 (www.iscresearch.com, April 2008). This database maps the growth of English medium international schools and reported 1,375 new schools opening over the last year with 50.4% of these new international schools in the Asia region. The increasing global mobility of

professionals, the 'internationalisation' policies of developing nations, and the desire of a growing number of families seeking an alternative education to that of their own national system, has fuelled this 'huge and rapidly rising demand for international education' (Greenlees 2006). This is likely to continue growing given the changing world of globalisation, the competitive advantage perceived by parents that an English education provides, and the emerging markets of developing nations such as China and India. The terms 'international', 'international education', and 'internationalisation' are becoming increasingly popular and sought after experiences by parents seeking schooling for their children. These terms themselves, even amongst this sector's participants, lack a shared understanding and interpretation despite the increasing growth of international schools worldwide.

Mary Hayden and Jeff Thompson, in conjunction with their colleagues and students at the Centre for the Study of Education in an International Context (CEIC), University of Bath, UK, have led the field in recent times in contributing to the research concerning international schools and international education. They are particularly concerned with examining the concept of what it means to be 'international' and its application to both the school as an institution and to education as a process (Hayden & Thompson, 1995a; 1995b; 1995c; 1997; 1998a; Hayden, Rancic & Thompson 2000). Hayden and Thompson have also edited several books, which have become essential reading on the topics of international schools and international education (1998b, 2000a; Hayden, Thompson & Walker 2002), and, most recently, Hayden (2006) and Hayden, Levy and Thompson (2007). The *Journal of Research in International Education* (first edition September, 2002), with Jeff Thompson as Founding Editor and Mary Hayden as Editor-in-Chief, is perhaps the

most useful periodical in the field of international education. These two individuals are highlighted here because of the significant contributions they are making to international education and the development of international schools across the globe. International schools and international education are clearly and closely linked, both historically and philosophically (Renaud 1991; Jonietz 1991; Hayden & Thompson 1995a; Walker 2002; and Peterson 2003). The complexity and disparity of what constitutes 'international education' goes beyond the scope of this literature review, however Hayden and Thompson continue to offer insightful views on this ongoing analysis.

Since the mid 1990s earnest attempts have been made to clarify the range of interpretations used to define and categorise the international school context (Hayden & Thompson 1995a, 1995b), yet a universally accepted definition of either 'international school' or 'international education' remains elusive. Sylvester's (2002, 2003) comprehensive mapping of the development of international education since 1893, and the subsequent rise of international schools, provides a rich history of this educational context.

The various attempts made over the years to define international schools include: (i) *categorization* of schools serving students from different nationalities, expatriate communities, or members of an organization such as the International Schools Association (Hayden 2006, p. 15-16); (ii) by *a set of prerequisites*, which could include significant enrolment of students who are not citizens of the host nation, staff experienced in cultural adaptation, or a curriculum drawing from various national systems (Terwilliger 1972, cited in Hayden 2006, p. 16); (iii) by *internationalizing the curriculum*, for example, a curriculum that remains independent of any national system such as the International Baccalaureate (Peterson

2003); (iv) listing *observable characteristics,* such as not-for-profit and non-sectarian, English as language of instruction, serve transitional, highly mobile families and high turnover of staff and board members (Blaney 1991, 2000); (v) *sharing universals,* including diversity in student cultures, teachers as exemplars of international mindedness, and exposure to different cultures (Hayden & Thompson, 1996); or (vi) by *program objectives*, for example, to celebrate diversity, to develop cultural understanding and respect, to appreciate the diversity of modes of learning (Walker 2002).

This culminated in Cambridge and Thompson's (2000) ongoing attempt to construct a framework for describing and classifying international schools. This is a very useful paper for the international school researcher as it reviews previous attempts at defining international schools and provides an unencumbered overview of the complexity of this issue. They propose that 'international schools should be viewed as one, or more like several, groupings within the wider framework of 'schools in an international context'' (p. 2).

Hayden (2006) continues to investigate the nature of this educational sector and, given the huge diversity of these schools and the absence of a central authorising body (p. 16), moves away from an attempt to categorise international schools. She concludes that the task is inherently problematic, depends on a diverse range of varying factors that prohibit a generic concept of an international school to form, and that 'in truth, there is no simple answer' (p.20). Part of the problem lies in the unrestricted use of the title 'international school' (Hayden 2006; Hayden & Thompson 1995a; Murphy 2000; and Walker 2002). Richards (2002) even proposes we do away with the term 'international' altogether as it only confuses the issue and perhaps other ways to define these schools should be sought.

Hayden (2006) suggests a departure from attempting to categorise

international schools and modifies Matthews (1989a, p. 12) dichotomy of what he

called 'ideology-driven' and 'market-driven' international schools. Ideology- driven

schools 'were founded for the express purpose of in some way furthering

international understanding and cooperation' (p. 12), such as the United Nations

International School (New York), the International School of Washington, and the

United World Colleges group. Market-driven schools would include 'all the other

international schools which have arisen from the needs of particular expatriate

communities. They may have been established, and may be operated, by individuals,

community groups, delegates of multinational companies or government agencies,

though most frequently support is canvassed from all of these sources' (p.12).

Hayden (2006) argues that while this dichotomy is helpful, it may be too simplistic

and that a more pragmatic approach may be to

> ... envisage the grouping of international schools as representing a spectrum,
> with the ideological at one end and the market-driven at the other. Schools
> such as the United World Colleges may be placed as close to the
> ideologically-driven end of the spectrum as it is possible to be, while at the
> other end of the same spectrum could be those schools that are entirely
> market-driven in their approach (and possibly exist as businesses). The
> majority of international schools, meanwhile, would be likely to fall
> somewhere in between the two extremes, demonstrating in different
> proportions according to their mission statement and context the influence of
> both ends of the spectrum (p. 17).

The international school in this study falls 'somewhere in between these two

extremes' as a non-profit, private school independent of the host nation's education

system, with a mix of expatriate and host country students and teachers, English as

the language of instruction, accredited by one of the leading accreditation agencies,

and with a mission of promoting international mindedness.

Regardless of this lack of clarity on what constitutes an 'international school',

this educational sector is now found in 187 countries (Bunnell 2007) and accounts

for a global multi-billion dollar industry (MacDonald 2006). International schools

are extremely diverse organisations and, as Hayden and her colleagues continue to

find, are 'heterogeneous in type and origin' (Welton 2001, p. 96). Diverse

educational traditions are reflected in these schools 'based on the traditions

established by their founders, which in turn are affected by their subsequent history,

and the legal and cultural context of their host nation' (Welton 2001, p. 97).

International schools are usually established to cater for students from a wide variety

of cultures with staff also representing a mixture of nationalities (Hill 2000). Some

international schools cater exclusively for the children of globally mobile expatriates,

some for a mix of expatriates and host country nationals, and some for host country

nationals only. The missions of these schools can vary enormously as Sylvester

(1998) depicts in his discussion of 'inclusive' and 'encapsulated' missions. This

heterogeneousness is also evident in core educational issues, including curriculum

and assessment (Brown 2002; Catling 2001; Drennen 2002; Lowe 2000; McClelland

2001; Stobie 2007; and Wylie 2008), pedagogical approaches (Dabbagh & Benson

2007; Johnson & Inoue 2003; Powell 2000; Shaw, 2001; and the *International

Baccalaureate Organization*), and organizational structures (Bunnell 2006; Caffyn

2007; Cambridge 2001; Haywood 2002; and Leggate & Thompson 1997).

2.2.1 Distinct Features of International Schools

Micro and macro diversity, student and teacher transience, and legal, cultural

and political relationships with the host nation, while not entirely unique to the

international school context, are distinct features of international schools.

2.2.1.1 Diversity

Diversity in the international school context is well documented (Cambridge

1998, 2000; Hayden, Levy & Thompson 2007; Hayden & Thompson 1995a, 2000b,

2000c; Hill 2000; Matthews 1989a, 1989b; Sylvester 1998; and Waterson & Hayden 1999). Hayden and Thompson (2000b) present two manifestations of diversity in international education: 'Macro diversity' encompasses the multiformity of international schools on a global level. They propose that, 'even taking into account groupings of international schools that share the same underlying philosophy, there are no two international schools that share precisely the same characteristics' (p.2). 'Micro diversity' is that which exists at the local level and 'characterises so many individual international schools in terms of the large numbers of different nationalities, different cultural backgrounds, different languages spoken and different religious beliefs to be found amongst the student, and perhaps teaching, body' (pp.2-3). Matthews (1989a) considers the diversity of student populations as one of the major distinctions that give international schools their unique identity. Cambridge (1998) examines the highly diverse backgrounds of the teaching staff as well as the students and parents.

The diverse backgrounds of students, parents and teachers create a plethora of different academic and professional skills, styles and knowledge, and educational traditions, experiences, values, expectations and outlooks. Illustrating the challenges and complexity of acculturation, intercultural learning, and multicultural environments, Allan's (2002, 2003) ethnographic case study examines the implications of cultural dissonance on high school students in the Netherlands and his findings would be familiar to many international school educators.

These multicultural, multinational and multilingual characteristics are distinguishing features of international schools and important factors influencing and shaping school identity and culture. The intentional interaction of students, staff and

parents from different cultural backgrounds is widely regarded as a cornerstone of international education.

2.2.1.2 Transience

Transience in international schools, manifesting as the high turnover of students, teachers and heads, is another distinct feature of international schools.

Matthews (1989b) reported that students remain at an international school for an average of less than three years, with an annual turnover of students of 30 per cent or more being regarded as normal. This figure is supported by this writer's own experience in teaching in international schools for over ten years. The emerging literature and research into these internationally mobile students, now more commonly known as 'Third Culture Kids' (TCKs) or 'Global Nomads' (Allen 2002; Ezra 2003; Fail 2007; Fail, Thompson & Walker 2004; and Langford 1998), adds testament to the uniqueness of the international school student body.

Teaching and support staff are generally grouped into three categories – host country nationals, locally hired expatriates, and expatriates hired from overseas – with the latter two groups indicating considerable turnover in most schools. Holderness (2002) even suggests the emergence of TCTs (Third Culture Teachers), which seems appropriate given the growth in this sector of professional educators. Matthews (2006, pp. 13-14) presents the case for a specific teacher appraisal system for international school teachers that considers four characteristics shared in the international school context: *high teacher turnover* that on the one hand benefits from the 'constant infusion of new ideas and fresh enthusiasms', but also presents 'a constant challenge in establishing and maintaining a consistent educational identity'; *diverse professional backgrounds*, while a strength of international schools, also impacts the coherence and consistency of the school's educational philosophy; *lack*

of systemic 'norms' caused by the lack of definition from outside agencies (e.g. governing bodies) of educational programmes that 'require continual re-affirmation or modification'; and the feeling of *professional isolation* and the need to 'remain in touch with the 'mainstream' of educational thought' thus requiring appropriate professional development. With two to three year posts being common to many international schools worldwide (Hayden 2006), the transience of teachers presents unique opportunities and challenges for all stakeholders in the international school context.

The turnover of heads of international schools is equally high and the reasons for such high turnover are complex with relatively little research undertaken in this area (Hayden 2006). Hawley's (1994) research into the employment duration of international school heads found that 50 per cent of the sample remained on the job for only 2.8 years and that as much as 15 per cent of heads left after only one year. Only 26 per cent remained for longer than 6 years, an alarming figure when considering Littleford's (1999) assertion that the head's long-term impact on the school only begins to occur after the first five years. Littleford (1999) and Hawley (1994, 1995) explore the positive impact that long-term heads can have on school outcomes and the consequent inability of heads with short tenure to have much impact on a school's performance.

Undoubtedly, the frequent changes in school head have an undesirable impact on school culture. Littleford (1999) proposes that a direct link exists between the length of service of the chairperson of the school's Board and the term and success of the head. Longer-serving trustees tend to have longer-serving board chairs and longer-serving heads. Hayden (2006) concludes her chapter on *Administrators* (pp. 93-112), in which she covers a number of issues concerning the turnover, recruitment

and challenges facing international school administrators, with the suggestion that heads 'have a delicate course to steer in sustaining effective relationships with the many different stakeholder groups with whom they interact, and in balancing the pragmatic and ideological demands placed upon them' (p. 112). With the stakeholder groups also featuring high degrees of diversity and transience, the head's task becomes even more formidable.

The challenges of transient staff do not exist only in the international school context. Teacher turnover is 'a significant phenomenon and a dominant factor' affecting staffing in certain areas of education in the United States (Ingersoll 2001, p. 5). Similarly, the geographic remoteness of some schools in Queensland presents challenges for staffing in the Queensland public school system (Bradley, Green, & Leeves 2006). Nevertheless, highly transient students and personnel are a distinct feature of international schools that impacts the operation of the school and the shaping of school culture. Shared learning and stability are key components of a healthy culture as Schein (1992) illustrates: ' . . . a group having either a great turnover of members and leaders or a history without any kind of challenging events may well lack any shared assumptions' (p.15).

Fullan (2007) cautions on the effect transience can have on the continuation of reform programs: 'one of the most powerful factors known to undermine continuation of reform initiatives is staff and administrative turnover ...[new members come] chipping away, however unintentionally, at what is already a fragile process' (p. 103). Alternatively, new staff can be used positively as 'they can help establish the critical mass to support new directions' (p. 104). He advises providing orientation and inservice support for new members after a reform program is started. Stoll and Louis (2007) discuss the very real concern administrators face, especially in

the international school, of how to create social connections and community when large numbers of new staff enter a school each year.

Mobile students, in particular, must be able to identify and understand their new school's values, assumptions, expectations and norms to be able to transition smoothly into a new school life. Langford (1998) and McKillop-Ostrom (2000) document effective transition strategies and programs for supporting transient students, parents and teachers and present practical and effective advice that supports Pearce's (1998) position on how these mobile children develop cultural identity and the implications of cultural diversity in international schools.

Teaching new members by those already in the group is a key element in both Schein's (1992) and Deal and Peterson's (1999) conceptualisations of school culture. Long-term teachers of international schools become the reservoirs of institutional memory and history (Littleford 1999), and become the guardians of the traditions, rituals and shared assumptions of the school's culture. They can play an important role in sharing, shaping and maintaining positive aspects of the culture, especially in the absence of long-term administrators. New teachers represent the future culture of the school, so those responsible for recruiting must have a keen awareness and understanding of the school's culture in order to facilitate a match between the school's needs and the teacher's potential. Connecting new employees to the beliefs, mission and vision of the school is vitally important.

While Hayden (2006, p. 83) discusses the impossibility of devising a 'one size fits all' induction program, Stirzaker (2004) offers practical advice as she tackles the issues of staff induction into international schools. Equally important is the celebration and appreciation of a new teacher's experience, views and input. Heads of international schools, such as Garton (2000), Richards (1998) and Hardman

(2001), recognise the challenges in identifying, hiring, transitioning and maintaining teachers in international schools. Professional development activities for all staff, including administrators, should also reinforce, nurture or transform the underlying philosophy of the school's curriculum programs and the norms, values, beliefs and assumptions of the school's culture. Powell (2000) suggests that such activities will only flourish when embedded in the daily collaborative interaction of colleagues and when teachers have taken the responsibility and leadership for professional learning themselves. Highlighting the role professional development plays in enhancing a positive school culture, Richards (2002) and Holderness (2002) warn of the difficulty presented by the compounding effect of diversity, staff turnover and frequent leadership changes.

Ingersoll's (2001) reference to educational sociologists who 'have long held that the presence of a sense of community and cohesion among families, teachers, and students is important for the success of schools' (p. 24), characterises the challenges of maintaining school community and effectiveness in a climate of high staff and student turnover. He calls for more research in the American context to address such questions as: How are schools coping with a recurring loss of staff and a recurring need to rehire? How does continual turnover affect the continuity of curricula and programs? How does the loss of teachers affect ties to parents, students, and the community? (p. 27) Answers to these questions are also needed in the international school context.

2.2.1.3 Host relationships

The international school's relationship with the host country is the final distinguishing factor of international schools to be reviewed. Not only is there

obvious diversity in the global cultures of the host nations where international

schools operate, there is also diversity in how each school interacts with the local

community (Hayden 2006). Hayden and Thompson's (2000b) concept of *macro* and

micro diversity described earlier is especially relevant to the influences the host

country has on the school. Allen (2000) explores the various links, connections,

attitudes, geographic locations, architecture, and networks of social relationships that

are prevalent in international schools: 'For international schools, there are economic,

educational and ethical issues associated with the range of relationships, their

intensity and their purpose' (p.127). He is not alone in calling for greater interaction

with local communities in order to enhance the quality of international schools and

engender cultural awareness and global thinking in international school students

(Cambridge & Thompson 2004; Hayden 2006; and Pearce 2007).

Cambridge (1998) presents the concept of the international school as an *open*

system that is influenced by the host country's environment, regardless of efforts to

embrace or be isolated from it. He identifies resource availability and cultural values

as two key factors that influence this environment. Cambridge stresses the

significance of relationships between international schools and host countries:

> International schools are organizations located within communities of
> stakeholders and others with diverse interests that may be in competition . . .
> there may be either intimate or distant relations with the host country
> community . . . whatever the degree of participation, the school will be
> profoundly influenced – either positively or negatively – by the host
> environment within which it operates (pp. 201-202).

The dynamic relationships that international schools enjoy with the host

country and the local host community present unique opportunities for a school's

operation and development. Cambridge (2000) also suggests the organisational

culture of an international school as representing 'the reconciliation of a dilemma

between the formation of a monoculture in terms of the educational values espoused by the organisation, and the cultural pluralism of its teachers and students' (p. 179). This didactic process takes time and is constantly changing as the change in the components affects a change in the nature of the reconciliation. Host nation families in the school are another component in this process as they bring with them the values and beliefs of the host culture, which can have a positive impact on these relationships (Schwindt, 2003). Furthermore, the influence of the host country's legal, political, economic, religious, ethical and educational values have an impact on the school's culture and identity as they affect all stakeholders in the way they think, act and feel about the school.

2.2.2 Summary

The explosive growth in the number of international schools is real and, by all accounts, this unprecedented demand for international school places around the world will continue to rise rapidly. The definition or categorization of these schools lacks consensus largely due to the divergent manifestations of schooling in this dimension of education. Hayden's (2006) notion of defining international schools on an ideologically/market-driven spectrum offers a pragmatic method of dealing with this dilemma. Diversity, transience, and relationships with the host nation appear as distinguishing features of the international school context and provide unique opportunities and challenges in the operation, administration, and curriculum development of these schools. International schools exist in a multicultural, multinational and multidimensional context providing a unique experience for all stakeholders. More research is needed in this field to gain better understanding of how these schools operate and, in particular, how they manage change.

2.3 The Middle Years of Schooling

2.3.1 The concept of middle schooling

The term 'middle school' refers to an organisational unit, separate from primary and secondary school, which provides education for students in the middle years (varying from ages 10-15) of the K-12 school continuum. The grade levels covered by middle schools vary across Australia (Chadbourne 2001) from one to four years (e.g. grades 6-10). Organisational structures also vary with some middle schools established as a separate institution, some as an attached or detached campus within a larger school structure, and some operating within a larger structure. These characteristics are similarly reflected in the international school context. Providing a program that caters for the intellectual, emotional, physical and social needs of early adolescents is the purpose of middle schooling.

> Let us be clear. The main purpose of middle grades education is to promote young adolescents' intellectual development. It is to enable every student to think creatively, to identify and solve meaningful problems, to communicate and work well with others, and to develop the base of factual knowledge and skills that is the essential foundation for these "higher order" capacities. As they develop these capacities, every young adolescent should be able to meet or exceed high academic standards. Closely related goals are to help all students develop the capacity to lead healthful lives, physically and mentally; to become caring, compassionate, and tolerant individuals; and to become active, contributing citizens of the United States and the world. But above all else, and to enable all these other goals to be realized, middle grades schools must be about helping all students to use their minds well (Jackson & Davis 2000, pp. 10-11).

Responding to the needs of young adolescents is the essence of middle schooling. This study adopts Chadbourne's (2001, p. 2) definition of middle schooling as 'formal education that is responsive and appropriate to the developmental needs of young adolescents'. A middle school structure in itself does not guarantee that this purpose of middle schooling will be realised. Rather, as Chadbourne (2001) notes, 'middle schooling refers more to a particular type of

pedagogy and curriculum than a particular type of school structure' (p. iii).

Pendergast (2005) elaborates

> Hence, generally speaking, middle years work has tended to focus on the convergence and transformation of curriculum, pedagogy and assessment, and to a lesser degree on organisational elements to meet the needs of adolescents. It is not about rearranging traditional structures, but is a new concept altogether (p. 5).

Beane's (1991) fundamental question, 'What should the middle school curriculum be?' (p.10) remains just as crucial today as it was over a decade ago. In fact, this question was the culmination of a previous two decades of middle school educators' serious efforts to reform their schools. Some thirty years have passed and it is only relatively recently that, across the globe, the middle years are once again receiving worthy attention and resources to address this vital question. Pendergast (2005) makes the case for the coming of age of middle schooling in Australia, an argument fuelled by Chadbourne (2001).

> The past decade has witnessed significant growth in official reports and inquiries on young adolescence, state and national middle schooling projects, the production of middle years curriculum materials, research on middle schooling by academics, middle schooling associations, middle years teacher education courses, middle schooling policies, and the implementation of middle schooling by educational institutions across the country. However, while middle schooling has become prominent, it is not yet dominant. On the other hand, if middle schooling is to be a passing fad, the literature suggests that the end is nowhere in sight (p. iii).

Remaining in the Australian context, Hill et al. (2001) conclude, 'it is clear that the middle-years represent a major preoccupation of schools across the nation ... [and that this research] suggested a remarkably high level of engagement in fundamental issues concerning the nature of educational provision for this stage of schooling' (p.101). By fitting all of the disparate pieces together, Hill et al. found the emerging outline 'of a paradigm shift in thinking about the nature of schooling in the middle-years and beyond' (p.102). Hill and Russell (1999, p. 22) conclude that, in an

atypical manner, the pressure for reform of the middle years is coming from internal pressures for change and largely from within the education sector itself, as distinct to the more common situation of external bodies pushing for change. Upon analysis of the reform process in Australia, Merifield (2007, p. 20) confirms that curriculum reform in middle schooling has evolved in a teacher driven, bottom-up framework and that 'the discourses that have arisen from this bottom-up model of reform are unique in education.' Senge et al. (2000) suggest that this facilitates teacher ownership of the reform process and is thus more empowering for teachers.

Pendergast (2005, pp. 6-13) constructed informative lists of selected reports from around Australia and North America, specific projects in Victoria, position statements from Queensland, and dedicated middle years teaching programs (in Australia) that have informed the pathway of middle schooling advancement in Australia and demonstrate refining understandings of the concept of middle schooling. She believes this selection, although not exhaustive, 'demonstrates a growing corpus of literature and emergent theoretical perspectives around middle schooling and hence a growing intellectual investment and commitment to the initiative' (p. 8). Her selection of middle schooling reports in Australia covers nine years of research from the 1996 Australian Curriculum Studies Association's *From Alienation to Engagement* project, to 2005's Pendergast et al.'s *Developing Lifelong Learners in the Middle Years of Schooling.*

Other initiatives within Australia, such as the *National Middle Years Schooling Project* (Barratt 1998), the *School Innovation: Pathway to the knowledge society* (Cuttance 2001), Chadbourne's (2001) report, and the *Victorian Middle Years Research and Development Project (MYRAD)* (Victorian Department of Education, Employment and Training 2002); as well as a number of conferences (such as *The*

4th Biennial International Conference of the Middle Years of Schooling Association Inc., 2005); research initiatives (such as the Australian Council for Educational Research, *Longitudinal Surveys of Australian Youth*); newly published literature (Pendergast 2006); and the commitment of the Middle Years of Schooling Association (http://www.mysa.org.au/), indicate that middle schooling is a significant issue with a growing presence in Australian education and deserving of continual attention by private and public entities. Burvill-Shaw (2004) shares this perspective:

> The redesign of middle years education has been a key component of educational reform, during the last twenty years of the twentieth century and is sure to remain a central focus of such reform into the twenty-first century (p. 17).

There are many indications that a dynamic learning community committed to middle schooling has emerged in Australia, and that a paradigm shift in thinking and practice is occurring. Creative solutions, such as those described by Cuttance (2001) and recommendations from the MYRAD Project (2002); and issues for discussion, such as those posed by Chadbourne (2001), continue to emerge and evolve to inform the challenging process of developing and delivering appropriate curriculum for the middle years of schooling. Chadbourne (2001, p.3) presents a framework for middle schooling that summarises the key goals for middle schooling in Australia:

- Young Australian adolescents have a need for: identity, relationships, purpose, empowerment, success, rigour, and safety.
- Middle schooling practices should be: learner-centred, collaboratively organised, outcome-based, flexibly constructed, ethnically aware, community-oriented, adequately resourced, strategically linked.
- Three important goals of middle schooling are: engaged, focused and achieving adolescents; effective curriculum, teaching and organisational practices; genuine partnerships and long-term support.

In North America, the scope of information relevant to the middle years of schooling is daunting. Rosenzweig (1997) presents the metaphor of the 'five foot

bookshelf' in her attempt to assemble a list of indispensable readings in middle-level

education and reform. Her list of some ten years ago, which attempted to identify

'the most valuable nuggets in this field' (p. 551), spans seven pages even after severe

paring. By applying the notion that information doubles every two years (Thornburg,

2002), and considering the recent growth of interest in the middle years, the

indication is that the size of this body of knowledge is massive. This not only

indicates the significance of this concept of schooling but also highlights the

illusiveness and complexity of the emerging challenges.

Although the contexts are obviously different, the nature of information being

disseminated in North America parallels that of the Australian experience in several

ways. Dickinson and Butler (2001) examine the conditions over the past forty years

that have led to the 'arrested development' (p. 8) for many middle schools in the

United States. They suggest that it is the conceptual understandings of the middle

school that need to be recreated, and that the 'reinvention of our thinking and

understanding is fundamental to moving forward' (p. 11). Mergendoller (1993) also

points to a number of factors that have impeded school change and suggests a

'significant reorientation in the ways teachers and administrators understand and

carry out their jobs' (p. 444).

Arguably the most influential project in the USA, the Carnegie Corporation's

landmark 1989 report, *Turning Points: Preparing American Youth for the 21st*

Century, focused national attention on the cause of middle school reform and

provided a vision for middle schooling. Jackson and Davis (2000) have more

recently refined the ideas contained in the original report and provide practical

insights on how to improve middle years education with seven core

recommendations, or 'design elements' (p. 25). These elements, forming a system of

interacting and interdependent group of practices that form a unified whole (p. 27), are focused on curriculum, pedagogy, staff expertise, relationships, democratic governance, safe and healthy learner-centred, and community partnerships. In a similar light to Hill et al. (2001) and Chadbourne (2001), they signal a shift in thinking and practice in middle schooling.

The landmark position paper of the National Middle School Association (USA) *This We Believe: Successful Schools for Young Adolescents* (2003) presents a similar vision for successful middle years schooling. This vision is defined by fourteen characteristics, with six as facets of the school culture: educators who value working with this age group and are prepared to do so; courageous, collaborative leadership; a shared vision that guides decisions; an inviting, supportive, and safe environment; high expectations for every member of the learning community; students and teachers engaged in active learning; an adult advocate for every student; and school-initiated family and community partnerships. The remaining six are programmatic characteristics: curriculum that is relevant, challenging, integrative, and exploratory; multiple learning and teaching approaches that respond to their diversity; assessment and evaluation programs that promote quality learning; organizational structures that support meaningful relationships and learning; school-wide efforts and policies that foster health, wellness, and safety; and multifaceted guidance and support services (pp. 6-7).

There is a clear focus on middle school reform in both the USA and Australia that is pushing for a reconceptualisation, a paradigm shift, of what middle schooling should be. While middle schooling does not have one generic meaning (Pendergast 2006), it is generally taken to mean the development and delivery of appropriate curriculum, pedagogy and assessment (and sometimes organizational) practices that

are responsive to the developmental needs of young adolescents. Building identity

and relationships in nurturing societal contexts while engaging the centrally placed

learners with relevant, challenging, integrative, and exploratory experiences that

develop their higher order thinking capacities is shaping this new concept of middle

schooling. At the core of reforming the middle years curriculum is the imperative to

respond to the developmental needs of the young adolescent, and this is reviewed in

the next section.

2.3.2 Adolescent needs

The resounding call in the literature for the reconceptualisation of the

practices and approaches to middle years education focuses on the need to provide

for the unique developmental needs of adolescence. The literature suggests that

adolescence is a significant stage of life with distinctive challenges characterized by

rapid physical, social, emotional and cognitive development. Development at this

critical and transitional stage in life is complex, variable and interactive.

> Adolescence itself, as it is understood and experienced in most advanced
> industrial societies, is the transition from childhood to adulthood, beginning
> with puberty. It is a period of development more rapid than any other phase
> of life except infancy. Adolescent development is neither singular nor simple,
> and aspects of growth during adolescence are seldom in step with each other,
> neither within individuals nor among peers. Early adolescents (aged 10-14)
> are complex, diverse and unpredictable. At this time in their lives, young
> people are no longer children, nor are they adults. For the first time many
> remarkable things begin to occur in adolescents' lives. They discover that
> their bodies are changing dramatically; they begin to use more advanced
> mental abilities; and they become extremely conscious of their relationships
> with others (Hargreaves & Earl 1990, p. 19).

Hill et al.'s (2001) review of middle years literature revealed 'an enormous

literature on the characteristics of early adolescence' (p. 104). This literature review

confirms the wide reporting in the educational field of the characteristics and needs

of early adolescence (Abbott 2005; Abbott & Ryan 1999; Barratt 1998; Beane 1991;

Burvill-Shaw 2004; Chadbourne 2001; Hargreaves & Earl 1990; Hill & Russell

1999; Jackson & Davis 2000; Lipsitz & Jackson 1997; Lipsitz et al. 1997; Mergendoller 1993; Merifield 2007; National Middle School Association 2003; and Reay & Arnot 2004). Hargreaves and Earl (1990) refer to the young adolescent's need for independence and security as 'the horns of the adolescent dilemma' (p 25), and provide a useful (and often cited) summary of some of the key characteristics and needs of early adolescence:

- adjust to profound physical, intellectual, social and emotional changes;
- develop a positive self concept;
- experience and grow towards independence;
- develop a sense of identity and of personal and social values;
- experience social acceptance, affiliation, and affection among peers of the same and opposite sex;
- increase their awareness of, ability to cope with, and capacity to respond constructively to the social and political world around them;
- establish relationships with particular adults within which these processes of growth can take place (p. 26).

Mergendoller (1993) refers to the disharmony that plagues schools and supports the correction of the 'volatile mismatch … between the organization and curriculum of middle grades school and the intellectual and emotional needs of young adolescents' (Carnegie Task Force on Education of Young Adolescents, 1989, pp.8-9; cited in Mergendoller, 1993). This is widely echoed by a number of writers including Lipsitz and Jackson (1997), Lipsitz et al. (1997), Abbott (1999), Jackson and Davis (2000), Dickinson and Butler (2001), Reay and Arnot (2004) and Pendergast (2005). Lipsitz and West (2006) identify 'developmental responsiveness' as one of the three priorities critical to excellence in middle schooling (the other two are academic excellence and social equity). Hill and Russell (1999) clearly articulate the challenge:

> The relationship between the developmental characteristics and needs of young adolescents within today's ever-changing social context and the educational provision made for them within the schooling system is of critical importance to the reform of the middle years of schooling.

For schools to achieve and sustain the engagement of young adolescents in learning, it is essential that they provide the approaches, opportunities and experiences that enable young people to accomplish the developmental tasks they face, within their own social context, as a result of their expanding physical, social, emotional and cognitive capacities (p. 5).

Merifield (2007) refers to the contemporary discourses that have focused on the disengagement of adolescent students, and 'ways of identifying their learning needs in order to re-engage and empower them as lifelong learners' (p. 22). She draws from the work of Barratt and Murdoch and Wilson to conceptualize the servicing of adolescent students' needs as:

- Opportunities to develop group and individual identity
- Opportunities for cooperative and negotiated learning
- Productive and affirming relationships
- Opportunities for sustained periods of investigation
- To be empowered to view their work critically
- Multiple opportunities for achieving success
- Recognition of their individual learning styles and strengths
- Rigorous learning challenges
- To have high expectations placed on them
- A stimulating and supportive learning environment where they feel it's safe to take risks (Merifield 2007, p. 22).

Educators' understandings of adolescents needs, how they learn best and what should be underpinning the middle school curriculum are becoming increasingly enriched by contemporary research on the neurological and biological mechanisms that impact on the workings of the adolescent brain. Within an evolving field of understanding, the domains of neurology, psychology and education have merged boundaries and are providing essential insights into the workings of the human brain, and in particular the adolescent brain, that middle year's educators should become familiar with (Nagel 2004). Strauch (2003) provides educators (and parents) with a useful guide to 'what's going on' with teenagers by shifting the focus from a psychological emphasis to exploring the physical nature of the transition from child to adult and the critical and dramatic changes the brain undertakes during

adolescence. Neuroscience is now explaining the striking transformation of the adolescent brain and its impact on behaviour:

> In unprecedented work, scientists are discovering exactly how the teenage brain works. Using powerful new brain-scanning machines, peering for the first time into living, working teenage brains, coordinating work across countries and across continents, drawing on pioneering work with adolescent primates and even rats, the neuroscientists are finding that the teenage brain, far from being an innocent bystander to hormonal hijinks, is undergoing a dramatic transformation. The teenage brain, it's now becoming clear, is still very much a work in progress, a giant construction project (Strauch 2003, pp. 7-8).

This recent explosion of neuroscientific research and the emerging insights into how the teenage brain works has led to an abundance of resources available to educators that can inform curriculum and pedagogy in the middle years (for example Caine & Caine 1997, 2001, 2006; D'Arcangelo 1998; Erlauer 2003; Hardiman 2003; Jensen 1998; Sousa 2000; Wolfe 2001; and Wolfe & Brandt 1998). Abbott (1997, 1999) proposes creating systems of learning that go more effectively with natural tendencies of the brain. He refers to adolescence as a critical evolutionary adaptation of great value, and provides a theoretical base for a complete restructuring of formal and informal systems of education.

Wolfe (2001) proposes that 'the more we understand the brain, the better we'll be able to design instruction to match how it learns best' (p. 1). Smilkstein (2003) and Gunn, Richburg and Smilkstein (2007) have developed an extensive research based approach to using the brain's learning processes to create curriculum within a new paradigm: 'The brain is born to learn, and when educators make it possible for students, young and old, to learn the way the brain naturally learns, they will be the eager, motivated, successful learners they were born to be' (Smilkstein 2003, p. 1). Similarly, Abbott and Ryan (1999) suggest educators draw from the

unfolding understandings of how humans learn in order to design approaches for young people that 'go with the grain of the brain' (p. 3).

Jensen (2006) affirms that the brain is a dynamic and changing organ and that the way we teach can and does dramatically change the brains of over 90 percent of all learners (p. x). In agreement with other brain specialists (Caine & Caine 1997; Erlauer 2003; Feinstein 2004; and Sousa 2000), Jensen asserts that experience does change brains and that educators (and parents) must grasp the significance of this paradigm shift and act on it. He calls for schools to shift from a 'deficit-based model' to an 'enrichment-based model' in which schools commit to the principles of nurturing, growing, and maximizing human potential: 'Enrichment is the lifeblood of every student; they crave novel, meaningful, challenging learning whether they realize it or not' (p. 239).

Nagel (2004) and Wilson and Horch (2002) provide useful summaries of recommended brain compatible practices for middle schooling. These include: engaging, relevant, cooperative learning activities that provide sensorimotor experiences, such as simulations and inquiry or problem-based learning, where students find their own answers to their own critical questions; a supportive environment that allows adolescents to take risks on various levels and contexts; and connecting the curriculum to the personal experiences and concerns of young adolescents.

This literature review is indicating that a new paradigm for learning is emerging where an understanding, or the very least an awareness, of how the brain learns is becoming an imperative for all educators. The advances in technology and the subsequent insights of how humans learn (both most likely to escalate) are informing our understanding of adolescent needs and how to best provide for them

and paving the way for the reconceptualisation of the middle school curriculum. Responding to the developmental needs of adolescents, and with the brain in mind, is informing the ways educators are approaching the challenges of middle schooling, as reviewed in the next section of this chapter.

2.3.3 Approaches to middle schooling

Integration, engagement, and constructivism are recurring themes in the field of literature on developing programs that provide for the needs of adolescents in the middle years of schooling. Beane (1991, p. 10), a pioneer of integrating the middle school, presents three critical concepts for envisioning an integrated middle school curriculum: (i) that the middle school curriculum focuses on widely shared concerns of early adolescents and the larger world rather than increasing specialization and differentiation among separate subjects; (ii) the primary and explicit purpose is to serve early adolescents; and (iii) that early adolescents are viewed as real human beings who are participants in the larger world and have serious questions and concerns about both (being human and the world around them).

> The emerging vision of a middle school curriculum, then, is one that is organized around rich and provocative themes from these two sources [questions and concerns from early adolescents and from the larger world] rather than abstract and artificial subject areas (Beane 1991, p. 11).

Dickinson and Butler (2001) present the original conceptualisation of the middle school as 'a totally integrated ecology of schooling. It is an organizational, curricular, instructional and relational environment that cannot be parsed or broken' (p. 8). As a total ecology, it is made up of 'both horizontal and vertical aspects, all interrelated ... that cannot exist without all its elements in place.'

> The middle school concept is like a Persian rug. Different threads are woven together into complicated patterns and colors until finally it is not discernable where a particular thread goes or where a particular color begins. It is the rug as a whole that we look at and admire. It is the overall integrated effort that is

the rug as well as the behind the scenes process of weaving all the threads together (Dickinson & Butler 2001, p. 10).

However, totally integrating the curriculum is not universally accepted as the answer to the middle school curriculum dilemma. Hill and Russell (1999), call for the need for a different model of provision for the middle years 'that provides a middle ground between teaching across the curriculum and subject specialisation' (p. 8). Other specialists agree:

> Beane and Hargreaves (cited in Stevens 2006, p. 25) argue that curriculum integration and subject specialisation are not mutually exclusive alternatives or at opposite ends of a continuum.

> Chadbourne (cited in Stevens 2006, p. 25) acknowledges that those designing an authentic and engaging curriculum for adolescents should consider the needs and expertise of the teachers, the interests of the students, the purpose of the curriculum and the setting in which it is implemented. This may include both discipline-based and integrated subjects.

A focus on networking, connections and relationships may offer a practical solution. Beare (2001) supports the concept of a networked curriculum: 'the network metaphor is becoming a more appropriate descriptor for the curriculum. People now think of a 'curriculum' not as a single running track but as 'pathways', of several alternative routes through a plurality of learning programmes' (p. 152). Similarly, William Doll (1993, 2002) views all curriculum in a broad sense and defines curriculum as a personal journey that moves through 'the five C's of curriculum' beginning with currere ('to run'), and moving to complexity, cosmology, conversation, through to community as the 'organizing glue' that holds the others together (2002, pp. 43-52). The wholeness and interrelatedness of his conceptualization of curriculum is in itself not a thing but a matrix or system of relationships where, 'all accept relationships as the ultimate reality in which we work, live and play' (2002, p. 42).

Hare (2006) is of particular interest in this literature review as his work on middle years education is placed in the international school context. In his exploration of holistic education as a model for the middle years, he cites Clark (1991) who articulates the theme of integration as follows:

> The ultimate purpose of holistic education is to transform the way that we look at ourselves and our relationship to the world from a fragmented perspective to an integrative perspective (cited in Hare 2006, p. 302).

Within this holistic perspective, Hare (2006) positions the student 'as an active, participatory and critical learner who perceives and understands him/herself in a changing world and in a variety of local and global scenarios' (p. 302). He presents a number of recurrent themes associated with holistic education: interconnectedness with all that is around us; development of relationships; a sense of shared community; genuine sense of caring; management of personal development and growth of the whole person; and the environment (pp. 304-306). His matrix of values and behaviours associated with these themes uncovers the interrelationships and interconnections between them and the collective contribution they make to the development of the whole student (p. 307). He notes that the school plays an important role in the formation of identity:

> Holistic education must provide a framework within which students in their middle years of education can question and understand their own values and behaviours and those they observe around them. The development of personal values is an outcome of the interactions between the student, parent and the school ... the influence of the school will be formative since this is where students spend much of their middle years, among influential friends and role models (Hare 2006, p. 306).

Peter Senge's (2006) opening paragraph of *The Fifth Discipline* articulates the significance of keeping learning connected, relational and holistic:

> From a very early age, we are taught to break apart problems, to fragment the world. This apparently makes complex tasks and subjects more manageable, but we pay a hidden, enormous price. We can no longer see the consequences of our actions; we lose our intrinsic sense of connection to a larger whole.

When we then try to "see the big picture," we try to reassemble the fragments in our minds, to list and organize the pieces. But, as physicist David Bohm says, the task is futile – similar to trying to reassemble the fragments of a broken mirror to see a true reflection. Thus, after a while we give up trying to see the whole altogether (p. 3).

A curriculum that is holistic, integrative and oriented towards the big picture raises the issue of the breadth of the middle school curriculum as an area for closer consideration and scrutiny. Hill and Russell (1999) advocate identifying a manageable and appropriate core of knowledge for middle school learners and explain their proposition for securing curriculum essentials:

Any serious reform of the middle years involves a more student-focused approach to teaching and one less driven by the imperative to cover curriculum content. This does not mean abandoning curriculum content nor under-valuing specialist subject knowledge. Rather, it means being explicit about the aims of education in the middle years, ensuring that there is a clear specification of core knowledge that all students acquire, and making time for in-depth learning and having a curriculum that emphasises thinking and autonomous learning (p. 7).

Howard Gardner, as quoted by Abbott (1999) supports the freeing of curriculum content and building deep, useful understanding that can be applied:

One obvious implication, one that very few people have begun to take seriously, is that we have to do a lot fewer things in school. The greatest enemy of understanding is coverage. As long as you're determined to cover everything, you actually ensure that most kids are not going to understand. You've got to take enough time to get kids deeply involved in something so that they can think about it in lots of different ways and apply it – not just in school, but at home, on the street and so on (p. 297).

Owning knowledge so that it can be used whenever needed can be considered a core objective of learning at any age. Perkins (1995, p.5) refers to three goals of education as the retention, understanding and active use of knowledge – knowledge that does not just sit there but functions richly in people's lives to help them understand and deal with the world. The ability to actively use knowledge, in other words the transference of learning, remains a basic premise of any educational endeavour where, 'transfer means learning something in one situation and then

applying it in another, significantly different one' (Perkins 1995, p. 122). Perkins

(1998) further explains this view of understanding:

> In a phrase, understanding is the ability to think and act flexibly with what
> one knows. To put it another way, an understanding of a topic is a 'flexible
> performance capability' with emphasis on the flexibility. In keeping with this,
> learning for understanding is like learning a flexible performance – more like
> learning to improvise jazz or hold a good conversation or rock climb than
> learning the multiplication table or the dates of the presidents ... Learning
> facts can be a crucial backdrop to learning for understanding, but learning
> facts is not learning for understanding (p. 40).

Learning for understanding and performance is derived from the *Teaching for*

Understanding model which takes the view that 'what students learn needs to be

internalized, able to be used in many different circumstances in and out of

classrooms, serving as a base for ongoing and extended learning, always alive with

possibilities' (Perrone 1998, p. 13). Blythe (1998) shares this perspective, where

understanding is 'being able to do a variety of thought-provoking things with a

topic ... and representing the topic in new ways' (p.12). These conceptualisations of

understanding and intellectual development provide a useful stance to inform the

revitalisation of the middle school curriculum.

Erickson's (2002, 2007) concept based approach to learning focuses on big

ideas that facilitate intellectual development and student engagement in learning. She

defines a concept as: 'A mental construct that frames a set of examples sharing

common attributes. Concepts are timeless, universal, abstract, and broad' (2007, p.

129). With a conceptual structure inherent in every discipline of knowledge, the

synergistic interplay between the factual and conceptual levels of thinking provides

the key to intellectual development. Traditional curriculum models, intent on

coverage and cognitively shallow teaching and learning, fail to systematically set up

this intellectual synergy (2007, p. 2). Processing factual information through the

conceptual level of thinking facilitates the students' demonstration of 'greater

retention of factual information, deeper levels of understanding, and increased

motivation for learning' (2007, p. 2). The significance of this approach to the way the

young adolescent brain functions and learns is best captured by Jackson and Davis.

> Essential questions, concepts and generalizations help students remember facts and topics, because these overarching motions help organize the seemingly trivial into meaningful patterns (Erickson, 1998, p. viii; Tomlinson, 1998, p. 5). Young adolescents are ready to seek out patterns, to make connections, or to try to figure out the world around them and their place in it as part of their journey toward adulthood. With the big ideas guiding their learning in school, they can see how historical precedents could affect their own futures, how mathematics can help them make sense of the seemingly random, and how literature provides insight into the state of humanity ... Concepts and essential questions focus on the big ideas that reveal patterns while deeply engaging students in the process of making sense of the world around them (Jackson & Davis 2000, p.44).

Keeping learning connected, relevant and engaging for the middle schooler

requires opportunities for student generated, big, deep questions that they have an

interest in, time to explore, and that align with the brain's natural structure and

function. Caine and Caine (2006) posit that providing authentic decision making

experiences naturally leads to the development of new knowledge. 'Every student is

biologically equipped to learn from experience – that is, each has the capacity for

natural learning' (p. 50). When students ask genuine questions focused on what

matters to them, the natural decision making and learning capacities of the brain are

invoked. Therefore the best way to combine academic and natural learning is by

creating environments where students can pursue relevant questions while keeping

prescribed curriculum goals in sight.

Cook (1992), in his case for negotiating the curriculum, notes that learners

work harder, learn better, and own their own learning if they take on the role of

educational decision makers by discovering their own ideas and asking and

answering their own questions. By being actively involved in the inquiry process,

negotiation leads to a sense of ownership in learners and a greater commitment to

learning. This experience sees students emotionally invested in their learning which enhances motivation and, ultimately, understanding. 'Active (i.e. intentional, participatory) involvement in classroom decision making and in the enactment of the decisions, results in more effective learning than does the passivity that attends the performance of a teacher's imposed pedagogical pattern' (p. 16).

Pedagogy grounded in constructivism and focusing on the process of learning offers an effective approach to teaching and learning in the middle years. MacGilchrist, Myers and Reed (2004) explain:

> The construction approach acknowledges and respects learners' engagement in the process of their learning and takes account of the inherent complexity of the process. Learning happens in the process of coming to new understandings in relation to existing knowledge. The research literature suggests that this is an active, collaborative process where learners take responsibility for their learning and also learn about themselves as learners. The constructivist approach acknowledges the importance of an interactive social component in learning in contrast to the reception model that encourages more solitary learning (p. 52).

Constructivism recognises that learning is a complex and active process that engages the learner in the process of making personal meaning in the search for understanding. Windschitl (1999) takes the view that constructivism is a philosophy on which a classroom culture can be based; it is a coherent pattern of expectations that underlie new relationships between students, teachers, and the world of ideas; and that it is premised on the belief that learners actively create, interpret, and recognise knowledge in individual ways (p. 752). He sees constructivism as a culture, 'a set of beliefs, norms, and practices that constitute the fabric of school life' (p. 752), rather than a fragmented collection of practices. The aim of constructivist instruction is guided by a less is more approach, aiming for 'deep and elaborate understanding of selected core ideas' (p. 755).

Brooks and Brooks (1999) present five overarching principles evident in constructivist classrooms: teachers seek and value their students' points of view; classroom activities challenge students' suppositions; teachers pose problems of emerging relevance; teachers build lessons around primary concerns and big ideas; and teachers assess learning in the context of daily teaching (p. ix-x). This framework challenges teachers to create environments in which they and their students are encouraged to think and explore. While admitting this to be a 'formidable challenge' (p. 30), they see little alternative: 'But to do otherwise is to perpetuate the ever-present behavioural approach to teaching and learning' (Brooks & Brooks 1999, p. 30).

This constructivist view of learning experiences is also favoured by Erickson (2007) who supports the recognition of the critical role of the learner in constructing knowledge and the responsibility of the teacher in providing brain friendly designs for curriculum and instruction that 'help students see parts (factual knowledge) in terms of wholes (concepts and big ideas) and that value the ability to transfer knowledge to other contexts' (p. 112).

Abbott and Ryan (2000) pose a convincing case for constructivism in schools by embedding it in the emerging discoveries of neuroscience.

> With a constructivist form of learning, each child structures his or her own knowledge of the world into a unique pattern, connecting each new fact, experience, or understanding in a subjective way that binds the child into rational and meaningful relationships to the wider world. This constructivist view of learning has been strengthened by recent findings emerging from the neurosciences. Rather than thinking of the brain as a computer, it is now seen as a flexible, self-adjusting, ever-changing organism that grows and reshapes itself in response to challenge, with elements that wither through lack of use. Constructivist learning is a dynamic interaction between the environment and the individual brain (pp. 20-21).

MacGilchrist, Myers and Reed (2004) extend the constructivist model to a 'co-construction model' which recognises the social dynamics of learning by

positing that learning is more likely to occur through social interactions than just in the mind of the individual. This model 'emphasizes the importance of discussion and dialogue between learners and each other, and between learners and their teachers and other adults' (p. 52). Such discussion and dialogue enhances the learning experience and reflects Doll's (2002) concept of 'curriculum as conversation' (pp. 48-50) where in conversation 'lie our hopes for both convergence and transformation.'

Active engagement in the process of learning provides another dimension to an effective pedagogy for middle schooling. Doll (1993) defines curriculum in terms of process, where the process of development, dialogue, inquiry, and transformation integrates the experience an individual undergoes in learning, in transforming and being transformed. 'Such a view includes both content and process, with the content embedded within the process, forming part of it ... neither supplanting the other, each needing the other' (p. 13). Process, then, 'is an all-encompassing frame in which many products, moments, or events exist. Important as these "ends" may be they are but turning points in a larger process frame' (Doll, cited in Pratt 1994, p. 87).

Similarly, Caine and Caine (1997) view process as embedded in, and a constant aspect, of all that is ongoing. Their synthesis of a brain based teaching and learning approach identified 'active processing of experience' as an essential element. They conclude that active processing leads to true understanding and mastery of content and allows students to take charge of their own learning and the development of personal meaning. They posit that an active role is required to extract all the potential meaning in experience and their concept of 'active processing' includes: the consolidation and internalization of information, by the learner, in a way that is personally meaningful and conceptually coherent; is the path to understanding, rather

than simply to memory; and that the pervasive objective is to focus on the process of

learning and extract and articulate what has been explored and what it means by the

learner asking about their learning in as many ways as possible (pp. 121-122).

This section of the literature review affirms that transforming teaching and

learning for the middle years is a necessary and challenging task. Many approaches

to middle schooling exist in the literature and, due to the complexity of the context,

no one approach or model has been deemed to be the only answer. Hill and Russell

(1999) summarise the challenge eloquently:

> One of the most frequent comments of young adolescents about schooling is
> that they regard it as 'boring'. This comment reflects a deep need for learning
> that is exciting, engaging at a personal level, that is challenging and
> connected to issues or problems that young people regard as meaningful and
> important. It implies a constructivist view of learning, deep rather than
> surface learning approaches, and a curriculum that requires students to be
> active and to think creatively and solve problems (p. 9).

2.3.4 A new world

> Over the last two decades, the entire world economy has been drifting from a
> machine-based setup to an information-based environment. More recently,
> certain highly developed economies/nations are in fact directing their
> attention and resources towards establishing a knowledge-based structure. As
> the reward for high-value-added knowledge and information-intensive
> activities is much greater, inevitably in the new millennium, all of humankind
> is gravitating towards the nucleus of the information era, the intelligence era
> (Yick 2004, p. 3).

Yick (2004) discusses the emergence of a new paradigm – the intelligence

paradigm – which stipulates that organising around intelligence is the strategy to

adopt in the emerging knowledge-intensive environment that the world is moving

towards. He identifies five major world changes that have affected humankind and its

organisations: (i) While human civilization has drifted rather deeply into the

information era, many of the structures are of the industrial era and are mismatched;

(ii) The economy is now global and competition is no longer confined locally; (iii)

The rapid advancement of technology, in particular information and communications

technology; (iv) Many current theories and models are becoming ineffective/obsolete; (v) Awakening to a cosmic mind and its nonlinear dynamics; the systems of the human world have both linear and nonlinear components that operate as complex adaptive systems (pp. 4-6). He considers this paradigmatic shift in mindset and approach to be significant to everyone, including educators. Preparing our students for this information/knowledge era is becoming an imperative for all schools.

Kress (2000) would agree. He believes that the fundamental aim of all serious education is to provide skills, knowledge, aptitudes and dispositions that 'allow the young who are experiencing that curriculum to lead productive lives in the societies of their adult periods' (p. 134). Kress suggests that as the world shifts to a global economy of services and information, stability will be replaced, if not already, by instability; that locality will become 'virtual', knowledge will be accessible anywhere and communication will be multimodal.

By Yick's (2004) account this is already happening. Schools, and curriculum, have served their purpose of servicing the modern, industrial age and must now become realigned with the demands and dynamics of the knowledge/information era. Senge et al. (2000) illustrate how our school system is trapped in industrial age assumptions about schools and learning (pp. 29-49). The curriculum which was serviceable for a former world will no longer suffice and new, relevant, matching, and useful curricular and pedagogical understandings and approaches will need to be developed.

Kress (2000) proposes a fundamental realignment of the curriculum to 'a curriculum focused on uses of knowledge-as-information in relation to specific domains of application' (p. 141). His concept of 'design' makes the student-as

learner an agent in relation to his/her interests in a specific environment and in relation to the resources available; the student is 'transformative, creative and innovative' (p. 141). Kress' bold view on the purpose of curriculum demands our attention.

> Design asks for production of the new rather than replication of the old. Thus putting 'design' at the centre of the curriculum and of its purposes is to redefine the goal of education as the making of individual dispositions oriented towards innovation, creativity, transformation and change. In my view these are the dispositions which will be essential to meet the demands of the new forms of the economy and of the now culturally plural societies and the conditions of globalising capital. They are also, somewhat paradoxically, dispositions which would in any case recognise the real potentials of humans as always creative, always innovative, always transformative (Kress 2000, p. 141).

The need for students, all students, to develop skills that will help them lead successful, productive lives in the information/knowledge/intelligence era is articulated by several authors (Abbott 1999, http://www.21learn.org/; Abbott & Ryan 2000; Atkin 1999, 2004; Beare 2001; Ellyard 2001; McCain & Jukes 2001; Pendergast 2005; and Thornburg 2002) and exemplified here:

> We need young people who have learned to live with change – people with confidence in their own judgement, competent within a range of intellectual, social and practical skills; with a flair, imagination, enterprise, able to work in teams, but also able to accept individual responsibility. People who can live with ambiguity ... who can think, communicate, co-operate and make decisions ... with the confidence to stand on their own two feet ... These skills have not been the hallmark of too many people in the past – but they need to be for the future. These are the skills that the technological imperatives of the 21st century will demand (Abbott 1999; p. 222).

Abbott (1999) demonstrates the mismatch between what students do in schools and what they will be doing in the workforce by contrasting the differences between successful academic life and real life (commercial) practices: 1. largely solitary study vs. working with others; 2. genuinely uninterrupted work vs. constant distractions; 3. concentration on a single subject vs. different levels across different disciplines; 4. much written work vs. mainly verbal skills; 5. A high analytical ability

vs. problem solving and decision-making (p. 277). Transferable skills are required for dealing 'with the high levels of uncertainty in a rapidly changing world' (p. 297); such skills provide confidence for changing assumptions about the world and our place in it. Middle schools have the opportunity, in fact an obligation, to develop such skills and better prepare students for the future.

Beare et al. (2001) best summarise the task at hand:

We now have a better understanding of learning and of human intelligences and are in a better position to decide what will be an appropriate curriculum to serve students in the knowledge era. It is now time to reconceptualise curriculum along these lines and with a common sense of purpose (p. 38).

Ellyard (2001) is not alone in considering learning as the key to success in a world of rapid change and uncertainty. He calls for the development of a new culture of learning for the twenty-first century: 'If learning is to be maximized a new model and pedagogy of learning – a new learning culture – is needed' (p. 78). This learning culture, which he conceptualised with Julia Atkin (1999, 2004), contains eight dynamic and interrelated elements that would be highly appropriate in any learning context, and especially the middle school context: Life-long learning; Learner-driven learning; Just-in-time learning; Customised learning; Transformative learning; Collaborative learning; Contextual learning; and Learning to learn (pp. 78-84).

Atkin (2004) provides a useful guide (Table 2.1) for developing school practices and structures for learning and preparing students for the future by contrasting a conventional approach with the approach that success in the knowledge era demands.

The world is undoubtedly changing and middle schools (in fact, all schools) must meet the challenge to prepare students for success and satisfaction in the new

era of information, knowledge and intelligence. Diverse and expanding needs are

emerging requiring schools to prepare students with abilities such as: managing

change; coping with uncertainty; dispositions requiring innovation, flexibility and

creativity; intellectual, social, cultural and practical competencies; and the necessity

for global perspectives.

Table 2.1 Practices and Structures for Developing a Community of Learners

Aspect	Conventional Approach	Learning for Knowledge Era
Topic	Imposed	Negotiated
Mistakes	Should not be made	To be learned from
Assessment	Exams	Authentic – various modes
View of World	Right-wrong	Uncertainty / shades of grey
Determined by	Central authority	Local needs in context of general / global framework
Staffed by	Subject expert	Cross curricula team
Aim	Theory to practice	Practice to theory & theory to practice
Approach	Content driven	Process & content driven
Focus	Teaching centred	Learning centred
Teacher role	Expert	Fellow learner / facilitator / sometimes expert
Emphasis	Knowing that	Knowing how & why and how to find out
Student activity	Working alone	Working collaboratively and alone – independence and interdependence
Ethos	Competitive against others	Striving for personal best against criteria & standards
Student role	Passive / receptive	Active / generative. Metacognitive, reflective
Learning experiences	Programmed	Flexible / opportunity guided by framework of outcomes and learners' interests / needs

(Atkin 2004, p. 6)

Managing knowledge as a resource, or how Limerick, Cunnington and Crowther (1998) put it 'the knowledge of how to use the knowledge' (p. 213), is becoming an essential outcome of education. Learning is the key and schools should meet their ethical and social obligations by aligning their curriculum with the demands and dynamics of the global society. Drucker's (1994) seemingly futuristic analysis at the time that 'education will become the center of the knowledge society and the school its key institution' (p. 66), may well be upon us.

2.3.5 Curriculum in the international school context

The literature presents an abundance of information on the significance of the middle years in the context of mainstream schools but, other than Armstrong (2000) Drennen (2002), Catling (2001), and Reimers (2004), comparatively little is currently available that is directly coming from or can be applied to the unique context of an international school. The International Baccalaureate Middle Years Program (IBMYP) has been offered since 1994 (Hill 2007) and receives the most attention (but little empirical research) in the international school arena (Armstrong 2000, 2005) yet the program's potential for addressing the prevailing issues surrounding middle years education remains unclear. This is evident in Reimers' (2004) investigation, which found that the reasons for adopting the IBMYP were predominantly to prepare students for the International Baccalaureate Diploma Programme (for years 11-12) with no mention made of addressing adolescent needs. Even so, her findings show, 'there is minimal, if any, benefit and in some cases, perhaps, disadvantages' (p. 15).

Rick Armstrong (2000, 2005), a leading advocate for the IBMYP, has dampened his initial enthusiasm for the programme and in his recent writing expresses doubts about its effectiveness and calls for fresh curricular vision to

address 'the void of new curriculum and effective learning related ideas' (2005, p. 17). The international school community appears to be preoccupied with the international nature of the middle years curriculum and the coherence, consistency and continuity of the International Baccalaureate Organisation's programs (Stobie 2007) at the risk of overlooking the significant issues of addressing adolescent needs, promoting intellectual development, and entering a new paradigm.

2.3.6 Summary

For many years, researchers and commentators have pointed to the need for a different model of provision for the middle years. The forces of change are gathering momentum as a new paradigm for middle schooling emerges. As advances in technology, the merging of understandings, the growing insights of how humans learn and recognition of the brain's development continue to inform our understanding of adolescent needs, resistance to authentic reform of the middle years curriculum will become impracticable. Building identity, relationships, and intellectual capacity through active engagement with the curriculum and by actively constructing knowledge and developing higher order thinking and deep understandings are the charge of the middle years learner. Providing for this context requires a relevant and challenging curriculum that is somehow integrated, networked or synergised and connects to the learner and to the world beyond the classroom; this forms the basis of effective approaches for middle years educators.

As the world continues to evolve and becomes increasingly more knowledge intensive, middle school outcomes need to become more closely aligned with the demands of the real world.

2.4 School Reform

> We do know more about the processes of change as a result of research of the past 40 years, which has shown that there are no hard-and-fast rules, but rather a set of suggestions or implications given the contingencies specific to local situations ... the uniqueness of the individual setting is a critical factor – what works in one setting may or may not work in another. This is not to say that there are not guidelines (Fullan 2007, p. 64).

While section 2.3 in this chapter revealed that sufficient moves are underway to reform the middle school curriculum, this section reviews the 'suggestions', 'implications' and 'guidelines' pertaining to how the reform process can be actualized in schools. With reform conceptualised as a capacity building process that impacts on the reculturing of schools, the interrelated roles of leadership, collaboration and trust have emerged in the literature as powerful factors in facilitating the necessary functioning of an effective learning community.

2.4.1 Reform as a process

The need to reform middle schools has been clearly recognized, however the processes of change, according to Stacey (cited in Fullan 1993, p. 68), are uncontrollably complex, unstable and in many circumstances 'unknowable'. Andrews and Crowther (2002) refer to the mysteries of educational reform as being characterised as a 'black box' (a concept borrowed from Hallinger & Heck 1996). Handy (1999), in his classic text on organisations, illustrates why the study of organisational effectiveness and change is a complicated, multivariable interplay of many factors.

There is a substantial amount of literature dedicated to unraveling the complexity of school reform and making the unknowable known. Cuban (cited in Cuttance & Stokes 2001, p. 5) distinguished school improvement into 'first-order or second-order change'. First-order change seeks to improve schools without the disturbance of the organisational structure or the roles people play. Second-order

change aims to alter the fundamental relationships of a school by creating new goals, re-organising structures and building new cultures within the school. Cuban's (1988) characteristics of second-order change reflect the patterns emerging in the literature that constitute effective reform. These patterns are showing that the key to effective and sustainable change lies in the relationships of the individual with the environment, which are realised through leadership capacity, reculturing and structural design (Andrews & Crowther 2002, 2003).

> Real change, then, whether desired or not, represents a serious personal and collective experience characterized by ambivalence and uncertainty; and if the change works out it can result in a sense of mastery, accomplishment, and professional growth. The anxieties of uncertainty and the joys of mastery are central to the subjective meaning of educational change and to the success or failure thereof – facts that have not been recognized or appreciated in most attempts at reform. (Fullan 2007, p. 23)

Michael Fullan has been investigating educational change for over thirty years and views this phenomenon as a complex social process that manifests in two domains: what changes to implement (theories of education) and how to implement them (theories of change). Section 2.3 has reviewed the 'what' of middle school curriculum and this section now focuses on the 'how' of school reform. According to Fullan (2007), these two aspects are fused, they cannot be separated because they interact and shape each other. Both the change and the change process have to be understood and shared meaning must be accomplished in relation to both aspects.

Shared meaning is a key concept in Fullan's (2007) theory of change, where 'solutions must come through the development of shared meaning' (p. 9), and this has both moral and intellectual dimensions: 'Moral purpose and knowledge are the two main change forces that drive success' (p. 21). People are the central participants in implementing change in a process of 'coming to grips' with their multiple realities (p. 109). The processes of change play out individually and collectively in social

settings where, 'the interface between individual and collective meaning and action in everyday situations is where change stands or falls (p. 9). Andrews and Lewis (2007) maintain that creating shared meaning within the organization is fundamental to school reform as 'it is this shared meaning that provides a foundation for culture building and the creation of an image of a preferred future' (p. 134).

Fullan (2007) sees educational change as multidimensional:

> Innovation is *multidimensional*. There are at least three components or dimensions at stake in implementing any new program or policy: (1) the possible use of new or revised *materials* (instructional resources such as curriculum materials or technologies), (2) the possible use of new *teaching approaches* (i.e. new teaching strategies or activities), and (3) the possible alteration of *beliefs* (e.g. pedagogical assumptions and theories underlying particular new policies or programs) (p. 30).

He sees all three of these aspects as necessary and that real change in actual practice has to occur in what people do and think for the intended outcomes to be achieved. Stoll (1999) agrees and concludes that effective change in schools goes beyond just changing curriculum, teaching and learning strategies, assessments, structures, and roles and responsibilities; it requires 'an understanding of and respect for the different meanings and interpretations people bring to educational initiatives' (p. 47). Action is key because 'it is only through action that we come to understand and develop the skills and clarity to actually make change successful' (Fullan 2007, p. 13). With change as a process, not an event, Fullan (2007) endorses a 'ready-fire-aim mind-set' where planning and sorting out key problems and basic conditions is of course important, but 'it is necessary to get to action (fire) sooner rather that later because that is where knowledge, skills, understandings, and commitments get sorted' (p. 68).

Fullan (2007) proposes two basic ways to look at the process of educational reform: an innovation-focused approach which traces specific innovations to see how

they turn out and evaluate success; and a capacity-building focus that serves to examine 'the innovative capacity of organizations and systems to engage in continuous improvement' (p. 65). Both are connected and each can feed on the other with the emphasis shifting depending on interests and purposes at a particular time.

Fullan's (1985, 2007) model of the change process, which applies to both foci, is in three phrases simplified as initiation, implementation, and institutionalization, with numerous factors operating at each phase in a continuous interactive way (2007, pp. 65-67). Effective and sustainable change depends on the combination of a variety of factors and themes that interact, synthesise and transform to produce conditions for change or non-change. These factors include the critically important nature of the setting as determined by local factors, such as the character of individuals and the roles and relationships of teachers and administrators; and external factors, such as political and economic influences and relationships.

Senge et al. (2000) suggest that crafting a strategy and a particular path for change is best grown out of a school's individual context and offer several facilitative guidelines (pp. 25-27). Bryk and Schneider (2002) advise that 'meaningful school improvement takes years to unfold and entails changes alone multiple dimensions at the same time' (p. 121). Educational change is by no means an easy process:

> It takes a fortunate combination of the right factors – a critical mass – to support and guide the process of relearning, which respects the maintenance needs of individuals and groups and at the same time facilitates, stimulates, and prods people to change through a process of incremental and decremental fits and starts on the way to institutionalizing (or, if appropriate, rejecting) the change in question (Fullan 2007, p. 105).

School reform is conceptualised as a fusion of two domains, what to change and how to do it, as contextualised in the nature of the setting. People are central to the reform process and it is through their action and experience that transformations

emerge in how they think and behave in schools. School reform is a multidimensional, complex, phasic, and lengthy process that involves altering relationships, reorganising structures and energising a capacity for change. Building new cultures in a school by constructing new and shared meaning is foundational to school reform and this is accomplished through reculturing.

2.4.2 School Culture and Reculturing

All stakeholders concerned with lasting school improvement need to understand the power of school culture. The totality of its influence and the role it plays in all relationships and dimensions is monumental. We need to clearly see and comprehend the position that culture has in so many of the issues we face in our schools (Fiore 2001, pp. 7-8).

2.4.2.1 What is school culture?

Conceptions of culture have evolved over the years and a universally best definition is yet to be accepted. The concept of culture evokes many meanings and connotations and the numerous approaches to defining and shaping culture affirms the significance of culture and the importance of understanding its monumental influence. Schein (1992) provides a widely recognised definition of the culture of a group as:

A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems (p. 12).

Reference to Schein's work appears consistently throughout the literature of organisational and school culture. Schein uncovers three levels of culture as artifacts (visible structures and processes), espoused values (strategies, goals, philosophies), and basic underlying assumptions (unconscious beliefs, perceptions, thoughts and feelings). In the educational context, the way that school members reinforce, nurture or transform these processes, norms, values, beliefs and assumptions manifests as the

school culture. Schein advises that the most useful way to think about culture is to view it as:

> the accumulated shared learning of a given group covering behavioural, emotional, and cognitive elements for the group members' total psychological functioning. For shared learning to occur, there must be a history of shared experience, which in turn implies some stability in the group. Given such stability and a shared history, the human need for parsimony, consistency, and meaning will cause the various shared elements to form into patterns that eventually can be called a culture (p. 10).

A critical aspect of culture is the idea that certain things in groups are shared or held in common (Schein 1992). This is made explicit in Kilmann et al.'s (cited in Owens 1998, pp. 165-166) succinct definition of culture as 'the shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes, and norms that knit a community together'. This agreement among a school's community on how to approach decisions and problems leads to an understanding of, 'how things are done around here' (cited in Owens, 1998, p. 166). Deal and Peterson (1999) define school culture further as, 'complex webs of traditions and rituals that have been built up over time as teachers, students, parents and administrators work together and deal with crises and accomplishments' (p. 4). These cultural patterns are highly enduring, powerful and, most importantly, 'shape the ways people think, act and feel' (p. 4).

Prosser (1999) examines the evolution of school culture research in the United Kingdom and traces how school culture has evolved over the past 30 years. He presents four categories of school culture: 'wider', 'generic', 'unique', and 'perceived' (p. 7) and the evolving theoretical frameworks. He also raises the concept of sub-cultures within a school, the multiple interactions between these sub-cultures, and the 2-way interaction between sub-cultures and the school culture. Hargreaves (1999a) furthers this alternative view of school culture suggesting the

existence of 'multicultural diversity within a pluralistic community' (p. 58), with multicultural relating more widely than the ethnic composition of schools.

Bates (cited in Hoy 1990) argues that Deal and Peterson's conceptual framework for analysing school cultures is too narrow to capture the essence of culture. Hoy (1990) also considers this notion of one culture versus a variety of sub-cultures worthy of further investigation. This view of the dynamics of sub-cultures within a school culture is relevant to the international school context and, in fact, some ethnographic research in this context has been emerging (Allan 2002, 2003; Willis 1992a, 1992b) and is worth further exploration.

The distinction between culture and climate is a contentious issue for some researchers. Hoy's (1990) detailed analysis of this distinction concludes that culture and climate are contrasting and distinct perspectives, that deliver a distinct view of school life, have different epistemological traditions, and that the terms should not be used indiscriminately. The proliferation of meanings and views of climate and culture in the literature causes even more contention. Prosser (1999) attempts to unravel the mess by shedding some light on the issue and points out, among other things, that the use of the terms is also influenced by geographical location, with Americans preferring 'climate'.

Fiore (2001) presents an iceberg model, in line with Schein's definition of culture, with climate resting on top of the supporting structure of culture. This mass under the water is stable and difficult to modify and underpins all that's going on above the surface. The climate, being the exposed part, is more open to environmental factors that can affect change more quickly and easily. Stoll (1999) also discusses an iceberg metaphor in terms of the surface and below surface aspects of implementing change and appears to be supporting Fiore's concept. Trompenaars

and Hampden-Turner (1997) also mention an iceberg image of culture with the large, implicit part beneath the water.

Deal and Peterson (1999) quite clearly do not concern themselves with the issue of climate, as they believe that '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' (p.2). The definitions of climate and culture are often blurred but one useful difference described by Hoy (1990, p. 161) is that culture consists of the shared *assumptions* and ideologies, whereas climate is defined by shared *perceptions* of behaviour. He admits this isn't a large conceptual leap (from assumptions to perceptions) but maintains it is real and seems meaningful. In this study, Deal and Peterson's (1999) view of culture is taken by this researcher.

The use of analogies and metaphors is most helpful in developing an understanding of school culture. The following examples, though seemingly simplistic, can in fact create powerful images that help to assimilate the concept.

> The way we do things around here (often cited to Deal & Kennedy, 1983, but actually hails from Marvin Bower, 1966, and is acknowledged in Deal & Peterson, 1999).
>
> What keeps the herd moving roughly west (in Deal & Kennedy, 1983, but original source is not cited).
>
> The 'glue' that holds everyone together (in Prosser, 1999).
>
> How organisations work when no one is looking (Morgan 1997, cited in Prosser 1999, p.1).
>
> Stoll's (1999) garden analogy, where the nurturing of new ideas allows them to blossom, probably has its roots in Saphier and King's (1985), 'good seeds grow in strong cultures'.

This writer finds the most impressionable and useful analogy is Fiore's (2001) portrayal of schools as a giant patchwork quilt, where all the stakeholder

groups are represented by pieces of this quilt, and the school culture is the thread that binds all of these pieces together. The thread touches every square and no individual square can be bounded to other squares without being woven by the thread. Replacing a patch requires careful rethreading. When culture is strong, the thread is more durable. The state of the quilt's thread, that is school culture, can range from strong, healthy and positive to weak, negative (even toxic), or anything in between. This quilt analogy can be effectively applied to the international school context and has the potential to be used as a conceptual framework to explore the cultures of international schools in the future.

2.4.2.2 School culture in the international school context

School culture barely gets a mention in the literature on international schools. No empirical findings focusing on the concept of school culture in international schools is yet to surface. The most comprehensive published research on international schools is Hayden, Rancic and Thompson's (2000) quantitative research that examines what 'international' actually means to students who attend international schools around the world and to the teachers who teach them. Informative and credible findings are provided that shed some light on Schein's 'basic underlying assumptions' level of culture, however the focus of the research is on student and teachers' self-perceptions of what 'international' means to them. Pearce (1998, 2007) discusses the cultural identity of international school students and the common cultural values espoused by international schools, which is a relevant discussion but lacks any empirical evidence.

Richards (2002), in presenting his model of professional development, briefly discusses culture and climate in international schools. He makes the point that 'schools may actually undergo some sort of identity crises as cultural structures are

bent to accommodate new curriculum models' (p .101). Richards makes several other interesting points in his relatively short chapter. His notion of weaving professional development into the very fabric of school planning in order to achieve successful cultural change, and acknowledging teachers as instruments of such change, depicts an awareness of the connections between school reform and school culture .

Shaw (2001) grapples with the culture/climate distinction in international schools and chooses 'climate' as the term to describe school culture (in order, she claims, to avoid confusion with culture in the national sense). She presents a model of factors influencing school climate (culture) but unfortunately applies it in general terms and does not make it specific to the international school context. She posits the potential for dissonance through misunderstanding is increased in international schools because of the differing expectations from a culturally diverse group. Her chapter appears shallow and a missed opportunity to apply her model in the international school context.

2.4.2.3 The importance of school culture

School culture is important. It is the most significant and powerful feature of schools (Deal & Peterson 1999) and provides the context in which the whole educational process takes place, including any efforts at reform. Fiore (2001) heralds the power of school culture loud and clear, as indicated in the opening quote of this section (2.4.2). Sergiovanni (2000) considers the 'stuff' of school culture as, 'the lifeworld of schools and of parents, teachers and students' (p. 5). This 'lifeworld' (which is, by the way, engaged in a symbiotic relationship with Sergiovanni's 'systemsworld') refers to the human dimension of schools and is underpinned by the understanding that culture is constructed by humans and provides us with a meaningful context in which to live our lives, both personally and professionally.

Culture directs our thoughts and our actions (Trompenaars & Hampden-Turner 1997),

and by adopting Geertz's(cited in Trompenaars & Hampden-Turner 1997, p. 24)

theory, school culture then provides the 'fabric of meaning' with which school

members interpret their experience and guide their action.

Deal and Peterson (1999) are specific about the powerful functions and

impact that a strong, positive culture has on schools. They list six examples that

identify the encompassing influence of school culture:

1. Culture fosters school effectiveness and productivity.
2. Culture improves collegial and collaborative activities that foster better communication and problem-solving practices.
3. Culture fosters successful change and improvement efforts.
4. Culture builds commitment and identification of staff, students, and administrators.
5. Culture amplifies the energy, motivation, and vitality of a school staff, students and community.
6. Culture increases the focus of daily behaviour and attention on what is important and valued (p.7-8).

Identifying a school's culture provides a useful perspective for understanding

what is occurring in schools, and for maintaining or altering that culture. An

understanding of school culture helps to explain why people think and, subsequently,

behave as they do. Educational researchers (such as Bruner 1996; and Sarason 1996)

have been using the concept of culture to understand schools as sociocultural settings,

and the existence of patterns and norms that are created in these settings. Such

patterns develop over time and are highly influential on behaviour: 'Cultural patterns

are highly enduring, have a powerful impact on performance, and shape the ways

people think, act and feel' (Deal & Peterson 1999, p. 4). School culture is compelling,

and the power and endurance of these patterns take time to evolve and, consequently,

will take time to modify and change.

As indicated in Deal and Peterson's (1999) list above, school culture is a

significant determinant of successful schools as well as the process of school change.

Successful schools have positive school cultures that are conducive to learning, increasing student achievement and motivation, as well as impacting on teacher morale and productivity. Rutter et al.'s (1979) momentous investigation into the effects of schooling linked the notion of school culture (they used the term 'ethos') with the effectiveness of schools. The recognition of the significance of school culture on school improvement, and the importance of managing and shaping school culture continues to develop.

In further support of Deal and Peterson's (1999) six points, Stolp (1994) cites studies that maintain the notion that students are more motivated to learn in schools with strong school cultures (Fyans & Maehr 1990), that the effects of school culture can have a significant impact on state-wide test results (Thacker & McInerney 1992), and that teachers can experience higher job satisfaction and productivity (Cheng 1993). Studies conducted by Deal and Peterson (1999) and findings reported by Fiore (2001), such as Sutherland (1994) and Butler (1995), also provide authoritative research that legitimises the connections between school culture and school performance and improvement.

2.4.2.4 Reculturing

Rethreading the quilt, altering beliefs, sharing meaning, relearning, changing the mental constructs about how things are done, fostering relationships, building culture or 're-imaginizing' (Morgan 1998) are all key elements in the process of educational change and all amount to reculturing. In other words, the process of school reform is the process of reculturing. Hargreaves (1995) maintains that the relationships that form the culture of the school must be built among teachers and others before collective action and dialogue can take place and that 'to develop or alter these relationships is to *reculture* the school' (p. 16).

Fullan (2000) declares that reculturing makes the difference, and, put simply, is the process of 'developing new values, beliefs and norms' (Fullan 1996, p. 420). Stoll et al. (2007) consider school culture as influencing readiness for change, and support Fullan's notion that any attempt to improve a school that neglects school culture is 'doomed to tinkering' (cited in Stoll et al. 2007, p. 235). Crowther et al.'s (2002) model of successful school reform has culture building as a core process to enhancing school capacity. They consider the 'evolution of a distinctive school culture . . . as the foundation for sustained school improvement and success' (p. 40).

Educational reform is not just about putting into place the latest policy; it means changing the culture of the classrooms, of the school; and the reculturing of new teachers, who must buy into the shared meaning, is a necessary part of the change process (Fullan 2007). Stoll (1999) goes further and maintains that reculturing extends beyond just teacher cultures and must include student and community cultures as well. Senge et al. (2000) maintain that fundamental shifts in how people think and interact are required, as well as in how they explore new ideas (p. 20). Fullan (2000, 2007) observes the ineffectiveness of strategies for reform that only focus on structures and, similarly, Newmann and Wehlage (1995) warn that restructuring alone will not guarantee genuine reform in teaching and learning practices. Whereas restructuring plays a role in the change process, and Fullan (1993) readily identifies the 'reciprocal relationship between structural and cultural change' (p. 68), reculturing is what is really needed.

> Reculturing refers to the process of developing new values, beliefs, and norms. For systemic reform it involves building new conceptions about instruction (e.g., teaching for understanding and using new forms of assessment) and new forms of professionalism for teachers (e.g., building commitment to continuous learning and to problem-solving through collaboration). Restructuring concerns changes in the roles, structures, and other mechanisms that enable new cultures to thrive (Fullan 1996, p. 420).

It is no easy task to build and shape organisational culture, with Morgan

(1998) articulating reculturing as:

> a challenge of transforming mind-sets, visions, paradigms, images, metaphors,
> beliefs, and shared meanings that sustain existing . . . realities and of creating
> a detailed language and code of behaviour through which the desired reality
> can be lived on a daily basis . . . It is about inventing what amounts to a new
> way of life (p. 143).

In summary, school culture is a multifaceted phenomenon that provides the

life and soul of each school. A school's culture is its most enduring aspect, rooted

deeply in people (Arbuckle 2000). It provides the context in which all things at

school happen. Successful school reform requires the challenging process of building

a new culture; that is, the articulation of all key aspects for reculturing to occur.

2.4.3 Building Capacity

> International evidence suggests that educational reform's progress depends
> on teachers' individual and collective capacity and its link with school-wide
> capacity for promoting pupils' learning. Building capacity is therefore critical.
> Capacity is a complex blend of motivation, skill, positive learning,
> organisational conditions and culture, and infrastructure of support. Put
> together, it gives individuals, groups, whole school communities and school
> systems the power to get involved in and sustain learning over time (Stoll et
> al. 2006, p. 221).

The central aim of education is student learning, teachers are the main human

instruments of this learning (Crowther et al. 2002), and school culture is the context

in which this learning is manifested. Hence, building a school's capacity for

improving these dimensions is the essence of school reform. King and Newmann

(2001) conceptualise the key factors that affect student learning as school capacity:

> The concept of school capacity is useful because it offers a more
> parsimonious explanation of how to improve instruction than suggested by a
> long list of influences within and beyond the school. Further, this conception
> of capacity helps to explain precisely how various factors can contribute to
> higher quality instruction (p. 87).

King and Newmann's (2001) conception of school capacity stresses three main dimensions: the knowledge, skills and dispositions of individual teachers; professional community among the staff as a whole; and program coherence within schools (pp. 88-90). A focus on developing teachers, then, is 'one of the most critical steps in improving student achievement' (King & Newmann 2001, p. 86). They contend that the ultimate aim of teacher professional development is to enhance student learning and achievement and that such programs must address all three of these aspects of school capacity to be effective. Crowther et al. (2002) affirm that improving teacher performance and leadership is fundamental to successful school reform and that a new paradigm for teachers is needed: 'one that recognizes both the capacity of the profession to provide desperately needed school revitalization and the striking potential of teachers to provide new forms of leadership in schools and communities' (p. 3). Katzenmeyer and Moller (2001) and Harris and Muijs (2004) agree that teachers play a critical role in leading a school's capacity for improvement and raising student achievement.

Fullan (2007) emphasises capacity building, especially at the early stages of the reform process, as it is action based and powerful, provides the key experiences of learning everyday and in context, and that these experiences develop the essential ingredients for learning – skills, clarity and motivation. In order to engage in the change process and initiate reculturing, people need to 'secure new beliefs and higher expectations' (p. 58) which are critical to improvement and which are facilitated by new, shared experiences. Building capacity is defined by Fullan (2007) as:

> A policy, strategy, or action taken that increases the collective efficacy of a group to improve student learning through new knowledge, enhanced resources, and greater motivation on the part of people working individually and together (p. 58).

Recent research in school reform is determining that building capacity is the essence of school change and, ultimately, of reculturing (Crowther, Hann & McMaster 2001; Fleming & Kleinhenz 2007; Goh, Cousins & Elliot 2006; Hannay, Erb & Ross 2001; and King & Newmann 2001). Leadership, collaboration, learning communities, and the dimensions of trust are interrelated and are identified in this literature review as core factors in building school capacity for change and will now be explored in turn.

2.4.3.1 Leadership

> Productive educational change roams somewhere between overcontrol and chaos (Pascale 1990, cited in Fullan 1993, p. 19).

Contemporary literature in school leadership is highlighting a shift in thinking about leadership roles, practice, and its relationship to organisational change and development (Harris 2003; Lambert 1998; Limerick et al. 1998; Senge 1990). Taking the view of schools as learning organisations (Senge 1990; Silins et al. 2002) and leadership as an organisational quality (Ogawa & Bossert 1995), new conceptualisations of leadership are emerging, such as 'parallel leadership' (Andrews & Crowther 2002; Crowther et al. 2002); 'distributed leadership' (Gronn 2000; Harris 2003; 2006; Spillane, Halverson & Diamond 2001); 'teacher leadership' (Frost & Durrant 2002, 2003; Katzenmayer & Moller 2001; Lieberman, Saxl & Miles 2000; and Sherrill 1999); and, most recently, Hargreaves and Fink's (2006) 'sustainable leadership'. Demands on schools in the knowledge era continue to increase, making effective leadership capacity, as Harris (2002) maintains, 'widely accepted as being a key constituent in achieving school improvement' (p.15).

Senge's (1990) concept of the 'learning organisation' assumes that all members of an organisation can lead. He presents three critical roles of leadership – designer, teacher, and steward – that require new skills and tools. These new roles,

skills and tools are distributed widely throughout the organisation creating the potential for the significant evolution of an organisation's culture. 'Leaders in learning organisations are responsible for *building organisations* where people are continually expanding their capabilities to shape their future – that is, leaders are responsible for learning' (p. 9).

Limerick et al. (1998) present a multiple role perspective of leadership that contextualises the nature of leadership. Their *Fourth Blueprint* of organisational theory views leadership in an organisation as the task of all participants, realised through 'multiple leadership roles' (p. 220). They propose that leadership is fundamentally a facilitative behaviour, 'as behaviour that facilitates collective action towards a common goal' (p. 222). While acknowledging that many different leadership roles exist within a social context, and that their incompatibility makes it impossible for one person to perform them simultaneously, Limerick et al. (1998) identify different roles or patterns of behaviour, 'which reflect different, balancing, contradictory needs in a system' (p. 223). They identified at least three axes of role formation: (i) process and content roles; (ii) convergent and divergent roles; and (iii) task and maintenance roles (pp. 223-225). Different players carry out these incompatible roles to synergise leadership in harmony with the group's goals.

Furthermore, they propose the notion of 'role flexibility' (p. 226) where a person may play different roles as the context demands, 'they may have to give up one kind of contributing role and play another as circumstances change' (p. 226). Limerick et al. (1998) make clear that multiple leadership roles go beyond shared leadership, as these roles, 'reflect the existence of leadership roles in a group, and which imply a capacity to act together to produce *more* leadership (not to share it)' (p. 227). They also refer to *leadership diversity*, suggesting that a density of diverse

leadership roles exists in effective social systems and that building a 'community of leaders' with synergistic roles is the task of the participants (p. 227). This concept of leadership is congruent with Senge's (1990) learning organisation and proposes an enhanced leadership potential for building capacity for school reform. Its significance as a conceptualisation of leadership for the international school context is worth investigating.

Hallinger and Heck (1996) assert that the way in which leadership actually operates in the process of school reform is hidden in a 'black box', while Fullan (2000) refers to a similar concept as the 'inside story'. While research on school reform in Australia (Andrews & Crowther, 2002; Crowther et al. 2001), the United States (Brown, Claudet & Oliveraz 2004; Newmann & Wehlage 1995), and the United Kingdom (Harris 2004; Harris & Muijs 2004) is opening the lid on this black box, limited information is available in revealing what's going on inside an international school.

Blandford and Shaw (2001), drawing from the distinct features of diversity, transience and host relations as reviewed earlier in this chapter, identify nine ways in which the complexities of school leadership might be different in international schools: differing parental expectations; staff and student turnover; the head's precarious position; over involvement of board members in school business; host country laws and education policies; ephemeral and itinerant membership of the board of governors; the mixed culture of staff, students, and board; choosing the right balance of curriculum; and the head's relationship with the board. They call for more research to address the 'paucity of documentary evidence concerning leadership of international schools' (p. 9).

There are clear patterns among researchers and writers of organisational culture that leadership is vital in building capacity and shaping culture (Handy 1999; Hofstede 1997; Limerick et al. 1998; Owens 1998; Schein 1992; Trompenaars & Hampden-Turner 2002). References to Schein (1992) appear consistently throughout the literature of organisational and school culture, and he is clear in his position: 'The dynamic processes of culture creation and management are the essence of leadership and make one realise that leadership and culture are two sides of the same coin' (p. 1). Recognising the significance of school culture on school improvement and the importance of managing and shaping school culture is prevalent (Deal & Peterson 1999, 2000; Fiore 2001; Hallinger & Heck 2003; Prosser 1999; Sarason 1996; and Sergiovanni 1996, 2000). Crowther, Hann and McMaster's (2001) research for the Innovation and Best Practice Project (IBPP) came to the following conclusion regarding leadership and reculturing:

> In summary, culture–building, in its extrinsic and intrinsic forms, constitutes a powerful force in aligning school vision, participants' values and innovative processes. As such, it represents an important leadership dimension of successful school innovation and reform (p. 136).

The literature is clear in reporting the strong connection between leadership and building culture. With a range of sources indicating that the conceptualisation of leadership in mainstream schools is evolving, there is a clear lack of information available on how leadership is impacting on the reculturing processes in the international school context. Leadership capacity remains contingent on the collaborative efforts of the participants as reviewed in the next section.

2.4.3.2 Collaboration

> A core strategy, then, must be to improve relationships. All successful change initiatives develop collaboration where there was none before. When relationships develop, trust increases, as do other measures of social capital and social cohesion (Fullan 2007, p.52).

While all successful strategies for educational change are socially based (Fullan 2007), the reconceptualisation of leadership and the need to build greater capacity for change is calling for deeper and wider collaboration amongst participants. King and Newmann (2001) affirm that 'collaborative working relationships and empowerment are seen as critical conditions for teacher learning' (p. 86). Crowther (in Andrews & Lewis 2002, p. 239) concludes from research that a 'valueaddedness' is created when a school engages collaboratively in school improvement. Kanter (2004, cited in Fullan 2007) identifies collaboration as a key element for building confidence and developing successful change practices, achieved through four kinds of action: getting connected through conversation; carrying out important work jointly; communicating respect; and demonstrating inclusion (p. 53).

Fullan (2007) maintains that while changes in beliefs and understandings, and individually acquiring meaning, 'are the foundation of achieving lasting reform', the real value for student learning is 'when shared meaning is achieved across a group of people working in concert' (p. 37). Andrews and Lewis (2002) refer to the re-imaging of teachers as a community of collaborative individuals, a concept derived from Limerick et al. (1998), that is 'underpinned by the concepts of collaboration, deprivatization of practice, reflective dialogue and taking a pedagogical leadership role' (p. 239). Louis (2007) considers collaboration as necessary for an effective school (p. 21), and as a core value for quality management of schools and classrooms.

Hargreaves (1999b) in his concept of a 'knowledge creating school' proposes that new knowledge is created through the processes of auditing, managing, validating, and disseminating professional knowledge in a collaborative school culture (p. 124). He proposes networks and webs as the crucial features of 'high

levels of communication and exchange on which professional knowledge creation, dissemination and use so heavily depend' (p. 139).

Collaboration is a powerful, systematic, and systemic process in which teachers, administrators, support staff, parents, students and external agents work together to build school capacity for reculturing and improved student learning. It is a fundamental practice in the realization of effective leadership, a 'core principle' (DuFour 2004), or 'critical element' (Kruse, Louis & Bryk 1994), of the professional learning community, and an imperative for building trust as a resource for school reform.

2.4.3.3 Professional Learning Community

> ... teachers' individual knowledge, skills and dispositions must be put to use in an organized , collective enterprise. That is, social resources must be cultivated, and the desired vision for social resources within a school can be summarized as professional community (King & Newmann 2001, p. 89).

The professional learning community (PLC) emerges in the literature on school reform as a desired, if not necessary, process for building capacity for reculturing and, ultimately, improving student achievement. The establishment of a professional community 'must become the key driver of improvement', of reculturing (Fullan 2000, p. 582). Andrews and Lewis (2007) see the solutions to future challenges in schools 'must be centered on dialogue and collective action by the professional community' (p. 132). Declaring that building capacity is critical (as quoted earlier in this chapter), Stoll et al. (2006) have found that developing PLCs in schools 'appears to hold considerable promise for capacity building for sustainable improvement' (p. 221). Stoll et al. (2007), with a different group of colleagues, asserts that the professional learning community plays 'a key role in building individuals' and schools' capacities for continuous and sustainable learning in a rapidly changing world' (p. 63).

Stoll and Louis (2007) define a professional learning community as:

... an inclusive group of people, motivated by a shared learning vision, who support and work with each other, finding ways, inside and outside their immediate community, to enquire on their practice and together learn new and better approaches that will enhance pupils' learning (pp. 5-6).

Stoll et al.'s (2006) review of the literature on PLCs concludes there are five key characteristics or features of a PLC that intertwine and operate together: (i) *shared values and vision* – having a shared vision and sense of purpose are centrally important, as is an "undeviating focus" on all students' learning; (ii) *collective responsibility* for student learning that helps to sustain commitment, accountability and inclusiveness; (iii) *reflective professional inquiry* which includes "reflective dialogue", "deprivatization of practice", and building, sharing and applying new knowledge in addressing students' needs; (iv) *collaboration* that goes beyond superficial exchanges of help, support or assistance. Feelings of interdependence are central where the goal of better teaching practices would be considered unachievable without collaboration, linking collaborative activity and achievement of shared purpose; and (v) *Group, as well as individual, learning is promoted* where all teachers are learners with their colleagues and the community interacts and engages in serious dialogue and deliberates on and distributes information communally (pp. 226-227).

Stoll and her colleagues' research (2006) also identifies three other characteristics: mutual trust, respect and support among staff members; inclusive membership extending to the school-wide community; and openness, networks and partnerships – looking beyond the school for sources of learning and ideas (p. 227). They also found that PLCs proceed through different stages over time and that they are 'fluid, rather than fixed, entities, perennially evolving with accumulating collective experience' (p. 228). Basically then, the notion of a PLC concerns 'the

potential that a range of people based inside and outside a school can mutually enhance each others' and pupils' learning as well as school development.' With a focus on collective learning within the context of a community of learners, the PLC, as Lieberman (2007) puts it, 'intentionally build webs of relationships around the collective work of the participants' (p. 201).

At the heart of the concept of the PLC is the notion of community (Stoll et al. 2006) which is articulated by Westheimer (cited in Stoll et al. 2006, p. 225) as comprising the core features of: shared beliefs and understandings; interaction and participation; interdependence; concern for individual and minority views; and meaningful relationships. Building community requires an 'ethic of interpersonal caring permeating the life of teachers, students and school leaders' (Stoll et al. 2006, p. 225); where the focus emphasises 'mutually supportive relationships and developing shared norms and values' (Stoll et al. 2007, p. 225). Developing a professional learning community is, for all intents and purposes, a process of reculturing. Stoll (1999) reflects:

> If schools are to become professional communities and to continue to be effective in the future, they will need to build structures which promote interrelationships and interconnections, and simultaneously develop cultures that promote collegiality and individuality (p. 46).

Stoll et al. (2006) present the processes necessary to create and develop PLCs as depending on a series of progressive and interdependent steps operating both inside and outside of schools. They describe these under four headings: focusing on learning processes; making the best of human and social resources; managing structural resources; and interacting with and drawing on external agents (pp. 231-243). Though extending beyond the scope of this literature review, they offer a useful collection of practices and applications for developing effective professional learning

communities. Worthy of mention however, as it extends from an earlier section of this review, is the importance of leadership in the PLC.

> It is difficult to see how a PLC could develop in a school without the active support of leadership at all levels. Leadership is therefore an important resource for PLCs, in terms of headteacher/principal commitment and shared leadership (Mulford & Silens 2003, cited in Stoll et al. 2006, p. 235).

And in a later publication, Stoll et al. (2007) are clear in the role PLCs have in building capacity and the integral role leadership plays:

> There is increasing consensus that professional learning communities play a key role in building individuals' and schools' capacities for continuous and sustainable learning in a rapidly changing world. Leaders have a major responsibility for facilitating the development of PLCs (p. 63).

Hipp and Huffman (2007) conceptualise creating and sustaining PLCs as a 'journey' (p. 130) and Stoll et al.'s (2007) review of the processes provides a kind of map, job list, and packing list for such an undertaking. This undertaking, Hipp and Huffman (2007) conclude, and Stoll et al. (2007) confirm, 'requires resources, leadership, and continuous support to succeed as an inclusive school community' (p. 130). As a driving force for building capacity in the reculturing process, creating, developing and sustaining a professional learning community is important work for all stakeholders; it harnesses the power of collaboration, exploits the capacities of leadership and provides the conditions for harvesting the essential resource of trust.

2.4.3.4 Trust

> Good schools are intrinsically social enterprises that depend heavily on cooperative endeavours among the varied participants who comprise the school community. Relational trust constitutes the connective tissue that binds these individuals together around advancing the education and welfare of children. Improving schools requires us to think harder about how best to organize the work of adults and students so that this connective tissue remains healthy and strong (Bryk & Schneider 2002, p. 144).

Bryk and Schneider (2002) posit that trust in schools is a 'key resource for improvement' (p. 106), which is supported and extended by Louis (2007). Trust is

steadily being recognised as an intriguing and vital element in efficient organisations

and various metaphors have been used in the literature in attempts to capture the

essence of this complex and multidimensional concept. In their analysis of trust in

schools, Tschannen-Moran and Hoy (1998, p. 334), drawing on the work of others,

cite trust as 'the bases for productive relationships (Baier, 1985) ... the mortar that

binds leader to follower (Nanus, 1989) ... [and] has been described as a "remarkably

efficient lubricant" (Powell, 1990)'. Bryk and Schneider (2002) also refer to trust as

'lubricant' (p. 5), as well as 'foundational for meaningful school improvement' (p.8),

as 'a catalyst for innovation' (p. 33), and as 'connective tissue' that binds individuals

together (p. 144). Louis (2007) sees trust as 'a necessary ingredient for cooperative

action' (p. 3), and advises school leaders to view trust as 'the bridge that reform must

be carried over' (p. 20). She concludes from her review of the literature that the

treatment of trust and change is limited in educational literature, and that, while trust

has an effect on organizational outcomes in various settings, the process by which

trust becomes an active ingredient in change is less well studied.

Tschannen-Moran and Hoy (1998) warn of the complex nature of trust and

that studying trust is like studying a moving target.

> Trust is a complex concept. It has been difficult to pin down because it is
> based on many factors, varies with the expectations held in different kinds of
> relationships, and changes over the course of a relationship. Researchers have
> varied in the dimensions of trust they have emphasized or included in their
> definitions. Over the past four decades a variety of definitions of trust have
> been put forth, and there is still little clarity about the exact meaning of trust
> (p. 335).

They also consider trust as 'a dynamic phenomenon that takes on different

characteristics at different stages of a relationship' (p. 337); and that the social

context of groups and subgroups need to be taken into account when examining the

dynamics of trust in schools (p. 340).

Providing some clarity on the complexity of trust, Bryk and Schneider's (2002) research led them to recognising social trust as a powerful concept shaping the thinking and behaviour of local school actors. From their literature analysis and field note reviews they developed an explicit focus on the distinctive qualities of interpersonal social exchanges in school communities which they conceptualised as an organisational property they termed 'relational trust' (p. 12). Drawing from Coleman's (1988) theory of social capital, in which he considers two general factors impacting the social exchanges among individuals that comprise a social network – social network closure and trustworthiness – Bryk and Schneider (2002) developed a multilevel theory 'that roots a consequential organizational property of a school community (defined as relational trust) in the nature of interpersonal social exchanges among members who comprise that community' (p. 14).

Similarly, Louis (2007) perceives trust as a social construct manifesting in two forms in Western society. Whereas 'institutional trust' focuses on the importance of broader social and organizational norms, the other form of social trust, 'relational trust', is primarily a function of interpersonal interactions. Her study found that relational trust rather than institutional trust 'appears to be at the core of teachers' experience with change' (p. 17). Louis (2007) provides a useful definition of relational trust as

> ... the inevitable result of repeated interactions with others in modern organizations. While personal relationships may be limited, individuals interact repeatedly with the same individuals, which leads to expectations specific to that individual or group (p. 3).

Louis' analysis of a number of studies, including Bryk and Schneider (2002), found that behaviours that leaders and followers identify as central to trusting relationships are consistent across studies and include integrity (or honesty and

openness), concern (also called benevolence or regard for others), competence, and reliability (or consistency) (p. 4). Multiple actors co-construct organizational change, with conversation at the centre of the process. At the intersection of trust, leadership and change it is expected that 'conversations of sufficient depth will change the perceptions of both administrators and teachers, and can be initiated (or rebuffed) in either direction' (p. 5). Issues of understanding, performance and closure are the most common place for derailment of the change process to occur.

This writer accepts Bryk and Schneider's (2002) view of schooling as an intrinsically social enterprise (p. 19) and supports their proposition that

> ... social relationships at work in school communities comprise a fundamental feature of their operations. The nature of these social exchanges, and the local cultural features that shape them, condition a school's capacity to improve (p. 5).

Relational trust views these social exchanges as organized around a distinct set of role relationships: teachers with students, teachers with other teachers (and staff), teachers with parents and with their school principal (Bryk and Schneider 2002, p.20). These distinct relationships are interdependent and vulnerable to each other; synchrony must characterize all of the role sets as the social dynamics that make up the daily life of schools fuse into social patterns that generate organization-wide resources (Bryk and Schneider 2002, p. 122). Trust then, and in particular relational trust and the social relationships that it cultivates, operates as a core resource for school improvement.

Embedded in this concept of trust, leadership is conceptualised as the power relations between the school principal and teachers, students and parents. Bryk and Schneider (2002) consider trust 'a critical resource as local leaders embark on ambitious improvement plans' (p. 5). Louis (2007) highlights an apparent enigma: 'While there is consensus that trust is critical in determining the effects of leadership

on followers, we know little about how this effect occurs' (p. 5). Her research on the way trust interacts with the dynamics of change supports the importance of trust in schools and points to a clear association between trust and change, and the inherent role of leaders. With trust clearly affecting initiatives to promote change, she clarifies four implications for leaders:

(i) *Paying attention to daily relationships with teachers inspires confidence in administrators as a person, which in turn provides a foundation for trust in institutional leadership for change* (p. 18).

(ii) Change is often associated with a dip in performance and morale during implementation, which suggests that a school will often get a bit worse when initiatives are implemented. A reservoir of trust, nurtured before or early in the change process can be an important resource. This is particularly true where sensitive issues that directly affect individual teachers, such as assessment criteria and procedures or changing the school schedule, are being addressed. *This implies that administrators need to assess the current level of trust in a building prior to initiating a significant change. If trust is low, trust issues need to be addressed if other organizational improvements are to be introduced on solid ground* (p. 18).

(iii) Having high levels of organizational trust thus allows leaders to ask for change without engendering suspicious resistance ... *The implication for administrators is that trust cannot be easily separated from expanded teacher empowerment and influence. Teachers are not passive actors in the school, but co-constructors of trust. As active professionals, teachers who feel left out of important decisions will react by withdrawing trust, which then undermines change* (p. 18). This follows from Louis' (2007) earlier point that arose out of the literature recommending that leaders create relational trust by involving subordinates in

planning, implementing, and making adjustments in the change as it is carried out (p. 4).

(iv) *Administrators need to keep their fingers on the pulse of trust during a change process, and should not assume that their trustworthy reputation will persist* (p. 18).

So while school leaders need to view trust as 'the bridge that reform must be carried over', Louis (2007) also warns that 'rather than being solid, that bridge is built on changing emotions' (p. 20).

The professional learning community (PLC), a human enterprise affected by the dynamics of trust, has been established in this chapter as another resource essential for successful school reform. A vital link exists between the professional learning community, as a vehicle for building a school's capacity for change and having a systemic and positive effect on student learning outcomes, and trust as the glue that binds the intrinsic social relationships of the PLC.

Bryk and Schneider (2002) consider that the presence of trust among a faculty 'allows it to coalesce as a professional community where teachers take genuine collective work together' (p. 116). Hargreaves (2007) explicates the importance of trust as 'the backbone of a strong and sustaining PLC'; and, citing Meier, notes a 'web of trust as the heart of the holding pattern' that soothes the difficult emotions and anxieties that may emerge during a school's change process (p. 187). Similarly, Halverson (2007) considers trust a critical resource for change; and developing a professional community in schools 'helps build the kinds of relational trust in schools that helps teachers set aside structures that protect their autonomy and relax the cultural barriers for collaborative action' (p. 94), which can then satisfy obligations to improve student learning.

> Trust is important because it allows empowering things to happen in schools: When relational trust is strong, reform initiatives are more likely to be deeply engaged by school participants and to diffuse broadly across the organization … [and] reduces the risk associated with change. When school professionals trust each other and feel supported by parents, it feels safe to experiment with new practices. Equally important, relational trust also lubricates the necessary social exchanges among school professionals as they engage together, learning from each other in the trial and error of implementing new practices (Bryk & Schneider 2002, pp. 122-123).

Relational trust may not affect reculturing nor student learning directly. It functions as a social resource for school improvement, where it 'facilitates the development of beliefs, values, organizational routines, and individual behaviours that instrumentally affect students' engagement and learning' (Bryk & Schneider 2002, p. 115). Trust is valuable social capital that is hard earned, and takes time and effort to build (Hargreaves 2007, p. 187). Relational trust is built up over time through sustained social interactions and is a necessary and valuable resource for building a school's capacity for reculturing and improved student learning.

2.4.4 Summary

School reform is a multidimensional, complex, phasic, and lengthy process that amounts to reculturing in a school by constructing new and shared meaning that enacts a desired shift in the way people think and work. Building capacity for change is the essence of school reform. This literature review identifies collaboration as a powerful, systematic and systemic process; leadership as a diverse and vital facilitator; the professional learning community as a key operator of collective action; and relational trust as a necessary lubricant. These core factors provide a synergistic force that energises the capacity for school reform and the promise of improved student learning.

2.5 Conclusion

This chapter has reviewed the literature on the international school context, the concept of the middle school and its curriculum, and the processes of school reform. The review of this literature demonstrates that the reform of the middle years of schooling is a growing and significant area that requires further understanding and grounding, especially in the international school setting.

The international school context is a worldwide and rapidly growing sector of education that can be readily described as multicultural, multinational and multidimensional. However, this complexity and disparity is hindering efforts to define or categorise international schools. Whereas Hayden (2006) contends that there is no 'simple answer' to this dilemma, she does provide a helpful way of effectively classifying international schools by placing them along an ideologically driven to market driven spectrum.

The international school in this study can be placed around the centre of this spectrum, tending towards the ideologically driven side. International schools vary in clientele and core educational matters such as organizational structures, missions, and curriculum; however they share the distinguishing features of micro and macro diversity, student and staff transience, and unique relationships with the host nation. While these features provide unique opportunities and experiences for the participants, they also provide challenges in operation, administration and delivery of the curriculum. International schools are evolving, and 'now command a consolidated place in the world of schooling' (Haywood 2002, p. 183). As international schools grow in number and stature, more is surfacing about how they function, yet, as this literature review revealed, what's going on in the middle years of these schools still remains relatively obscure.

The review of the literature has revealed that a new paradigm for the middle years curriculum is emerging. This shift in thinking and understanding about what the middle school curriculum should be is being informed by the growing articulation of adolescent needs, increasing insights into the function and development of the brain, growing acceptance of the virtues of a holistic and engaging approach to learning, and the need to better prepare young people for an increasingly knowledge intensive world. Whereas an abundance of literature is available on the conceptualisation of the middle years curriculum in the context of Australian and North American national schools, there is a clear gap in the literature on international schools as very little published research is emerging from this context.

A review of literature on school reform has revealed it to be a multidimensional and intrinsically complex and contextual process. The local context, that is the culture of the school, is a powerful determinant of the way capacity for change can be built and utilised. Four 'pillars' for building capacity, identified as collaboration, leadership, the professional learning community and relational trust, operate synergistically as the processes for reculturing. Addressing the diverse needs of students and improving their learning and achievement in school depends on teachers' individual and collective capacity to improve their practice, facilitated by diverse leadership, in a collective enterprise where trusting relationships provide the necessary coalescence. The reform process and the extent to which these 'pillars' apply to international schools is largely unknown and requires investigation.

The need for further research in the area of middle years reform is voiced in Mergendoller's (1993) comment '… reform cannot be left to rhetoric alone.

Research is needed to validate, guide, and extend it' (p. 445). This is pertinent to

international schools, where there are clear gaps in knowledge and limited empirical

findings on middle years reform. While the unknowingness of school reform in

national schools is becoming more known, our knowledge of middle years reform in

the international school context, in particular curriculum reform, remains in the dark.

This study, with its focus on middle school curriculum reform in an international

school, provides some much needed illumination in this obscure field.

CHAPTER 3 METHODOLOGY

3.1 Introduction

In this investigation on an international school's engagement in the process of middle school curriculum reform, naturalistic inquiry was selected as the most appropriate paradigm to realise the purpose and aim of this study. A research paradigm defines 'the methods and techniques most suitable for collecting and analyzing data' (Merriam 1998, p. 1). The naturalistic paradigm embeds a number of techniques drawn from other research approaches, such as qualitative, grounded theory, case study, quantitative, action research, and portraiture. According to Merriam (1998) choosing a study design 'requires understanding the philosophical foundations underlying the type of research, taking stock of whether there is a good match between the type of research and your personality, attributes and skills, and becoming informed as to the design choices available to you within the paradigm' (p. 1). Consideration of research designs led this researcher to conclude that naturalistic inquiry is the best fit to Merriam's requirements. This chapter explains the appropriateness of this research paradigm and how naturalistic methods and techniques were successfully used to investigate the research questions and realise the aim of this study. Organisation of this chapter reflects the critical elements of naturalistic inquiry and illustrative tables are used throughout the chapter to provide clear and concise representations of the methodological practices.

3.2 The Naturalistic paradigm

Lincoln and Guba (1985) conclude that, 'for virtually all instances of sociobehavioural inquiry, the naturalistic paradigm is the paradigm of choice' (p. 260). The focus of this study, to accumulate sufficient knowledge to lead to a holistic understanding or explanation of the phenomenon of middle school curriculum reform

in an international school, positions this inquiry in the naturalistic paradigm.

Multiple perspectives are inherent in the process of school reform and naturalistic

inquiry assumes that 'there are multiple realities, with differences among them that

cannot be resolved through rational processes or increased data' (Erlandson et al.

1993, p. 14). The naturalistic approach provides the methodology to bring together

these interrelated parts to gain some understanding of the whole. Lincoln and Guba

(1985) explain:

> There are multiple constructed realities that can be studied only holistically;
> inquiry into these multiple realities will inevitably diverge (each inquiry
> raises more questions than it answers) so that prediction and control are
> unlikely outcomes although some level of understanding (verstehen) can be
> achieved. (p. 37)

Based on this naturalistic axiom system, the fundamental tenets that underpin

the inquiry, the naturalistic paradigm is determined by this researcher as a suitable

choice and is congruent with Lincoln and Guba's (1985) criteria for determining fit

of paradigm to focus: (i) the phenomenon represents a multiplicity of complex

constructions; (ii) there will be a high degree of investigator-phenomenon

interaction; (iii) there is a high degree of context dependence; (iv) it is unreasonable

to ascribe conventional causal connections to the phenomenal elements observed; (v)

values will be crucial to the outcome as this project is dealing with a "natural" group

in a "real-world" context (pp. 229-231). Table 3.1 provides examples of

characteristics of this study that illustrate compliance with these five axioms that

underpin this paradigm. All direct quotes are from Lincoln and Guba (1985).

To adhere to the naturalistic inquiry paradigm, Lincoln and Guba (1985)

stipulate four requirements (three mandatory and one optional but highly desirable)

that must be fulfilled. Table 3.2 demonstrates this study's position on all four

requirements. All direct quotes that appear in Table 3.2 are from Lincoln and Guba

(1985).

Table 3.1: The Naturalistic Inquiry Paradigm – Compliance with the Five Axioms

Axiom 1: *The nature of reality: Realities are multiple, constructed, and holistic*	
'Naturalistic ontology suggests that realities are whole that cannot be understood in isolation from their contexts' (p. 39).	· Data collected from a natural, context-rich setting that was not created for research purposes · Examination took place from a holistic perspective, as the researcher was an observer-participant (teacher) in the reform process · Several forms of data were collected to capture various participant perspectives · Participant comments during the collection of data and feedback after completion was used to construct the findings that emerged · The criteria used to discuss the rigor of this study are based on a naturalistic ontology.
Axiom 2: *The relationship of knower to the known: Knower and known are interactive and inseparable*	
'The inquirer and the "object" of inquiry interact to influence one another; knower and known are inseparable' (p. 37).	· The researcher as participant observer interacted with the participants as a member of the teaching staff; interactions were ongoing, frequent, continuing and meaningful · The researcher discussed emergent issues and themes with the participants; the participants were invited to share their opinions and views · Researcher and participants created the data together.
Axiom 3: *The possibility of generalization: Only working hypotheses are possible*	
'The aim of inquiry is to develop an idiographic body of knowledge in the form of "working hypotheses" that describe the individual case' (p. 38).	· Working hypotheses that emerged from the data collection and analysis process were used to develop shared constructions that illuminated the context and were progressively modified and refined as patterns emerged · These propositions were specific to the context under investigation and gave meaning and direction to the research; providing a 'photographic slice of life' (p. 155) of a dynamic, contextualised process.
Axiom 4: *The possibility of causal linkages: It is impossible to distinguish causes from effects*	
'All entities are in a state of mutual simultaneous shaping so that it is impossible to distinguish causes from effects' (p. 38).	· Recognition that any factors observed are bound together in a whole cloth pattern in which each part is dependent on every other part · Use of webs (web of circumstances), nets (communication net) and/or patterns (patterns of influence) to express 'here-and-now' explanations (p. 155).
Axiom 5: *The role of values: Inquiry is value bound*	
'Inquiry is ... influenced by the values of the inquirer…the assumptions underlying both the substantive theory and the methodological paradigm . . . and by the values that characterize the context in which the inquiry is carried' (p. 161).	· This researcher acknowledges that values play a significant part in this inquiry (as opposed to the 'numerous undesirable consequences of accepting the position that inquiry can be and is value-free' p. 173). · This study is 'value-resonant' (p. 38), as the focus, context, substantive theory and research design of the study exhibit congruence. (Table adapted from Agostinho 2005, pp. 7-8)

Table 3.2: The Four Requirements of Naturalistic Inquiry

Requirement	Compliance in this Study
1. 'The inquirer adopt the stance suggested by the axioms of the naturalistic paradigm. These axioms form a synergistic set, and must be adopted as a set. Mix-and-match strategies are not allowed, nor are accommodations or compromises … that the inquiry be carried out in ways that are consistent with them [the axioms]' (p. 251). (mandatory)	Demonstrated in Table 3.1
2. 'The inquirer commit him- or herself to the development of a level of skill appropriate to a human instrument and sufficiently high to ward off criticism on the grounds of instrumental inadequacy' (p. 252). (mandatory)	A research audit trail for the study was produced.
3. 'Prior to implementation, the inquirer has made a serious effort to develop an initial design statement' (p. 250). (mandatory)	This proposal was approved by the USQ *Proposal Defence Committee.*
4. The inquirer engage in prior ethnography to provide both a springboard and a benchmark for the more formal study to follow (p. 252). (optional, but highly desirable)	Researcher is an experienced international school teacher and was employed at the field site for 12 months prior to this study. Unobtrusiveness, cultural accommodation and informational orientation are present.

Lincoln and Guba (1985) describe fourteen characteristics that operationalise naturalistic inquiry and justify these synergistic characteristics by their logical dependence on the axioms that undergird the paradigm, and by their coherence and interdependence (p. 39). Erlandson et al. (1993) provide practical guidance for conducting naturalistic inquiry based on the theoretical work of Lincoln and Guba (1985). Figure 3.1, adapted from both these sources, incorporates these characteristics, illustrates the flow and development of this naturalistic inquiry and outlines the operation of this study. The inclusion-exclusion criteria and the boundaries of this inquiry are determined by the focus of the study.

3.3 The Setting

The *Natural Setting* is Bay International School (a pseudonym), a non-profit organisation founded in 1924 and among the first schools to use the word international in its title. The school is located on one campus, the former British military training grounds and across the road from the former British Consulate, in a densely populated major city in Japan. The campus is comprised of 4 modern classroom buildings, a full size gymnasium and a recently built early learning centre housed below the school's auditorium.

The school has approximately 700 students from over 40 countries and 50-60% of students are non-native English speakers. The average student stays 3 years and around 200 new students have enrolled in the school each year for the past 3 school years (2004-2007); amounting to around 30% turnover of students each year. The student population has grown from 450 in 1996 to peak at 750 in 2006-2007. Approximately 45% of students have one parent and 22% have both parents as host nationals.

The school employs approximately 80 teaching staff from 12 countries, including 10-12 host nationals. Teacher turnover averaged at about 15% during the period 2004-2007. Administrators have remained stable during these three years with only the Elementary Principal replaced due to his retirement. The Headmaster has been in his position since 1996.

An international curriculum is offered with the Reggio Emilia Program for 3-4 year olds, the International Baccalaureate Primary Years Program (PYP) for Kindergarten to grade 5, the International General Certificate of Secondary Education (IGCSE) for grades 9 and 10, and the International Baccalaureate Diploma

Program (IBDP) for grades 11 and 12. Grades 6-8 form the middle school with a

local curriculum that is under review (and forms the basis of this study).

3.4 Human Instrument

> Most important is the fact that the researcher him-or herself becomes the
> most significant instrument for data collection and analysis ... the human
> instrument allows data to be collected and analyzed in an interactive way ...
> follows the normal process by which humans solve their daily problems
> (Erlandson et al. 1993, p. 39).

The researcher's role in this study is as participant-observer, where the

researcher's activities, known to the group, are subordinate to the researcher's role as

participant. This role in naturalistic inquiry includes the researcher as the main data

source, to see the context as the subjects see it, to live in their time frames, to capture

the phenomenon in and on its own terms, and to grasp the culture in its own natural,

ongoing environment. Relationships are established through which the mutual

shaping of constructions is a collaborative exercise in which researcher and

respondents voluntarily participate. Developing compatible constructions guided

much of the data collection and analysis in this study. The challenge for this

researcher, given his significant involvement in the reform process under

investigation, was to combine participation and observation so as to become capable

of understanding the program as an 'insider' while describing the program for

'outsiders' (Erlandson et al. 1993). The constant use of a reflexive journal helped this

researcher in describing what was going on from both perspectives. (This journal was

in three parts and recorded: the logistics of the study and what was going on; a

variety of information about self e.g. reflections, insights, propositions; and decisions

about the method.) In order to maximise all of the abilities of the human instrument

to the fullest extent possible, there must be frequent, continuing, and meaningful

interactions between the investigator and the respondents or other objects of

investigation (Lincoln & Guba 1985). Qualitative and quantitative methods were used to record these interactions and are more fully explained in section 3.5.2 and shown in Tables 3.3 and 3.4 respectively. Lincoln and Guba (1985) outline compelling reasons for conducting inquiry in ways that maximize rather than minimize the investigator's interactions (p. 107). They also provide techniques available to the naturalistic inquirer that, while falling short of guaranteeing balance and fairness, can provide a system of useful checks and balances. These techniques are included in the treatment of trustworthiness (Table 3.6 and 3.7) and include member checks, triangulation, debriefing by peers and independent audits.

3.5 The Cyclic Interaction with Data

The reform process illuminated in this study was directly observed over a two year period in a cyclic manner as depicted in Figure 3.1. This cycle was repeated until redundant and consisted of purposive sampling, collecting and analysing data, developing theories and propositions, and allowing the design of the research to emerge and unfold. The components of this cycle are described below.

3.5.1 Purposive Sampling

Naturalistic inquiry relies upon purposeful rather than representative sampling and emergent rather than preordinate design. Erlandson et al. (1993) suggest two basic decisions must be made in purposive sampling: (i) to select 'the sources that will most help to answer the basic research questions and fit the basic purpose of the study' (p.83); and (ii) to decide who or what not to investigate (considered important by this writer given the real risk of being overwhelmed with too much information).

Figure 3.1: The Flow of Naturalistic Inquiry

Natural Setting
Bay International School

demands

Human Instrument
Researcher as primary data-gathering instrument

building on

using

Tacit Knowledge
Researcher's & others' to gain insights

Qualitative Methods
Observations, interviews, documents, artifacts

engaging in

Purposive Sampling
Info-rich context to illuminate study's focus; variety of sources guided by emerging insights

Emergent Design
Unfolding, emerging design as a function of the interactions between researcher and context

repeated until redundancy

Inductive Data Analysis
Analysis continuous & interactive with the collection of data. by unitising, categorising, & constant comparative method

Grounded Theory
Theories & themes emerging from the data and grounded in the context; defining next steps

involving

Negotiated Outcomes
Confirmation and verification by sources

leading to

Case Report
Thick description to aid communication for transferability. Several drafts and external audit

which is both

Idiographically Interpreted
Holistic understanding of this context and the constructed realities

Tentatively Applied
Judgement of transferability vested in the person seeking to make the transfer; possible transfer to other contexts

The sample in this study was determined on the basis of what the researcher wanted to know (answers to the research questions) and from whose perspective that information was desired. Thus, individuals were selected on the basis of what they could contribute to the emerging understanding of the phenomenon under study, i.e. middle school curriculum reform. The core sample consisted of the headmaster, three middle school teachers, and two other teachers who were directly engaged in the process. Other participants, such as other teachers or administrators and external agents visiting the school, also formed part of the sample when appropriate, as did the middle school students. All members of the sample were volunteer participants.

This researcher (as a key participant in the reform process) emerged as a main source of data as he experienced, shaped and reflected on what was going on as well as attempting to document it. As the school's headmaster was a key person in the reform process, he was the starting point for the first interview. Subsequent respondents were chosen on the basis of what was learned from the first respondent, and also to triangulate, elaborate or explicate constructions. At one point all middle school teachers were invited to participate in a written survey.

The purposive sampling of observations (where and what to look for), and the collection of documents and artifacts also followed the cycle in Figure 3.1. Thus, sampling was conducted 'serially' (one at a time) and 'contingently' (based on what has been learned from previous respondents) (Erlandson et al. 1993, p. 92).

3.5.2 Inductive Data Analysis

Within the naturalistic paradigm, Lincoln and Guba (1985) view data as stemming from an interaction between the inquirer and the data sources (human and non-human). Data are 'the *constructions* offered by or in the sources; data analysis

leads to a *reconstruction* of those constructions' (p. 332). The process of data

analysis is therefore inductive, in which the constructions that have emerged (been

shaped by) inquirer-source interactions (i.e. gathered from the context) are

reconstructed into meaningful wholes (Lincoln & Guba, 1985). Inductive analysis

begins not with theories or hypotheses but with the data, from which theoretical

categories or relational propositions may be arrived at by inductive reasoning

processes (Lincoln & Guba 1985, p. 333).

The analysis of data in this research was a progressive, on-going process and

involved 'an inseparable relationship between data collection and data analysis'

(Erlandson et al. 1993, p. 114). As the data were gathered they were analysed and

this informed subsequent data gathering procedures and strategies in order to

maximise the effective collection of rich data and provide the basis for shared

constructions of reality.

Lincoln and Guba (1985) insist that not very much can be said about data

analysis in advance of the study. 'It is clear that most analyses will be carried out in

an open-ended way, following the steps …. usually called the constant comparative

method' (p. 241). Furthermore, they assert that it is important to recognise that

> data analysis is not an inclusive phase that can be marked out as occurring at
> some singular time during the inquiry (for instance, following data collection
> and preceding report writing). Data analysis must begin with the very first
> data collection in order to facilitate the emergent design, grounding of theory,
> and emergent structure of later data collection phases (p. 242).

The research questions provided the focus and guided the interactive process

of collecting and analysing data. As an employee of the school and a member of the

middle school curriculum team, this researcher had unlimited access to the research

site and its members (the context) providing ample opportunities for collecting and

analysing data and investigating the research questions. Data was gathered from a

variety of sources, both qualitative and quantitative, and in a variety of ways in order to construct a comprehensive, holistic portrayal of the social and cultural dimensions of the context. The research questions were explored using the four general sources that a researcher utilises in naturalistic research: interviews, observations, documents and artifacts (Lincoln & Guba, 1985) as presented in Table 3.3, and quantitative surveys (Table 3.4).

Lincoln and Guba (1985) consider the method of constant comparison, provided by Glaser and Strauss, as providing an excellent fit with the process of continuous and simultaneous collection and processing of data (p.335). The constant comparison method is described by Glaser and Strauss (cited in Lincoln & Guba 1985, p. 339) as following four distinct stages:

1) comparing incidents applicable to each category;

2) integrating categories and their properties;

3) delimiting the theory (constructions);

4) writing the theory (reconstructions).

These steps were followed by this researcher and an electronic interface was created (a web page, rather than index cards as suggested by Erlandson et al. 1993) as a data base to manage the large amounts of unitised data and the creation, comparison and integration of categories. Given the focus of this study on tracking the process of reform at the school, chronological order was also an important consideration in analysing the data.

Table 3.3 Data Collection and Analysis (Qualitative)

Source	Operation in this study	Data Analysis
Interviews	· In naturalistic research, interviews take more the form of a dialogue or an interaction, 'a conversation with a purpose' (Dexter 1970, in Lincoln & Guba, 1985; p. 268) · Used a variety of forms, including very focused or structured to very open-ended · Issues related to the research questions were explored as well as emerging insights · Facts, opinions or insights were sought · Allowed movement back and forth in time; to reconstruct the past, interpret the present, and predict the future (Lincoln & Guba, 1985) · Interviews were conducted by researcher: hand written notes taken; or recorded electronically and transcribed	· Research questions provided the frame from which the phenomenon of middle school curriculum reform in an international school was investigated · Analysis as a progressive, on-going process, guided by the research questions · Interaction between data collection & analysis is one of the major features that distinguishes naturalistic research from traditional research (Erlandson et al. 1993) · Constant comparison method of data analysis as a means for grounding theory · Units of data identified within observational & interview notes, documents, and records; chosen for relevance to addressing research questions · Unitised and categorised data, along with critical incidents & artifacts, to reconstruct realities · Grounded theories were developed using triangulation, inductive data analysis, & member checks · Followed cycle of data collection & analysis as shown in Figure 3.1
Observations	· 'The systematic description of events, behaviours and artifacts in the social setting chosen for study' (Marshall & Rossman, 1989, in Erlandson et al. 1993). · Allowed for here-and-now interworkings of the context · Range from focused to unstructured forms · Participant-observer role of the researcher · Used Merriam's (1998; pp. 97-98) checklist of elements which include setting, participants, activities and interactions, frequency and duration, conversations, and subtle factors · Recorded in journal or field notes	
Documents	· Includes broad range of written and symbolic records as well as any available materials and data · Examples include meeting agendas & minutes, curriculum documents, reports, presentations, emails, memos, school publications, teacher notes	
Artifacts	· Material artifacts of the setting that give insight into the culture's technology, social interaction and physical environment (Erlandson et al. 1993) · Physical evidence may include classrooms and resources, internal/external layout of school, library acquisitions, bulletin boards, timetables and scheduling, technology, space	

Table 3.4 Data Collection and Analysis (Quantitative)

Data Gathering Source	Operation is this study	Data Analysis
Student paper survey (Appendix A)	Administered twice to all middle school students at the end of school year: first year 153 responses; second year 160 responses In response to emerging question on how students were experiencing the implemented changes to the curriculum Provided student feedback on perceptions of the new curriculum Survey items decided by what teachers (and this researcher) considered would be useful student feedback; attempts to maximise student comments	Simple descriptive analysis applied for each survey and combined – frequencies and proportions in percentages; written responses categorised. See Chapter 4.9
Innovative Designs for Enhancing Achievements in Schools (IDEAS): The Research-based Framework for Enhancing School Outcomes (RBF), (Crowther et al. 2000). Used IDEAS Rubric (2004) as survey tool. (Appendix B)	Inductive analysis of data suggests that the organizational capacity of the school and the alignment of relationships should be investigated; leads to the IDEAS rubric (2004) as preferred tool for collecting such data. Administered to all middle school teachers (13 responses). IDEAS rubric used as a reflective tool to gather feedback on strategic foundations, community, pedagogy, infra-structural design and school outcomes.	Simple descriptive analysis based on frequency patterns presented in percentages. Provides insights into the context under investigation as it captures the alignment of organisational elements. Included as Appendix C as an enriching supplement to understanding the context of this study.

3.5.3 Emergent Design

The very requirement of emergent design, in which succeeding methodological steps are based upon the results of steps already taken, implies the presence of a continuously interacting and interpreting investigator (Lincoln & Guba, 1985, p. 102).

The direction of the research was determined by what was unfolding from the collection and analysis of data and the tentative theories that were emerging from this researcher's interactions and interpretations of the data. This research process can be described as occurring in three phases (Lincoln & Guba 1985, pp. 235-236) and Table 3.5 presents this process as this study's emergent design.

Table 3.5 Three Phases of the Research Process

Phase 1 *Orientation and Overview – Determine what is important enough to follow up in detail*	
June 2005	Ethics approval granted Formal interview with school headmaster [Headmaster Interview 1] Collected archived documents and records (Feb. 2004 – Sept. 2004) relevant to the study's focus from teacher informant. Archived data documents the reform process before the researcher arrived at the school; provides historical background; reality is constructed from documented records of past events Informal interview with external agent visiting the school
July – August 2005	Interviewed Head of Social Emotional Learning department Examined referential materials and artifacts Began data analysis (unitising and categorising data) Began member-checking process (for archived data) Began reflexive journal; connections to tacit knowledge Identified critical incidents in archived documents Developed preliminary working hypotheses, grounded theories Developed interview questions for unstructured, exploratory interviews Identified initial participants (members of the reform team) Identified insights, patterns and emerging themes in archived documents Constructed the context and its boundaries.
Phase 2 *Focused Exploration – Obtain in-depth information about salient elements and uncover*	
September 2005 - June 2006	Began participant-observation and field notes Continued journal Presented study to school faculty Explored possibility for focus group Expanded sample to continue refining the focus Continued documenting critical incidents Continued analysing referential materials and artifacts as they became available Continued member-checking process Conducted formal and informal interviews with selected sample (e.g. middle school teachers in the reform team, headmaster, and two other external agents) as informed by the interactions with the context Conducted peer debriefing sessions Modified grounded theories as new insights emerged through engagement in the reform process Reflected on emerging issues and themes in journal Continued data analysis of observations, reflections and documentation (constant comparison method) Developed provisional outline of the case report
July 2006	Administered student questionnaire to all middle school students as a way of collecting evaluative feedback on their experience of the curriculum *(continued on next page)*

(Table 3.5 continued)	
August 2006 – June 2007	Reflected on the process so far and decided that another year of data collection and analysis was required because: (i) the reform process needed more time to unfold; (ii) the collection and analysis of data was not redundant
	Continued moving through the 'cycle' as shown in Figure 3.1 and maintained collecting and analysing data, developing theories, member checking and peer review of propositions and hypotheses. Administered RBF survey as reflective tool Administered second student questionnaire to all middle school students as a way of collecting evaluative feedback on their experience of the curriculum Conducted second formal and 'reflective' interview with Headmaster [Headmaster Interview 2] Wrote final journal entry Determined Lincoln and Guba's (1985) criteria for stopping the collection and processing of data had been met (p. 350).
Phase 3 Member Check and Writing – Write report and obtain confirmation from informants	
July 2007 – May 2008	Finalised constant comparative method Developed web page of categories, constructed theories, chronologies; confirmed and verified by sources Wrote case report (thesis)

Table 3.5 outlines the process that this researcher engaged in that allowed

him to develop understandings and insights drawn from the data and to co-construct

meaning as a negotiated outcome with the participants. The purpose of the research

inquiry, according to Erlandson et al. (1993), is 'to seek to resolve the problem by

accumulating pertinent knowledge and information and, in collaboration with the

various stakeholders in the social context being studied, construct meaning directed

toward that end' (p. 49). This writer ascertains that this purpose has been met and is

expressed in Chapter 4 as the case report.

3.6 The Case Report

The case report is recognised by Lincoln and Guba (1985) as the vehicle of

choice for reporting results of a naturalistic study. They identify three major purposes

for using the case reporting mode: (i) it is ideal for providing the thick description

that is essential for enabling transferability judgements and may read like a novel to 'make clear the complexities of the context and the ways these interact' (p. 214); (ii) it is most responsive to the axioms of the naturalistic paradigm, as it makes multiple realities easier to communicate; and (iii) it is ideal for communicating with potential readers, as it is likely to appear grounded, holistic and lifelike which may help make possible judgements of transferability to other sites.

Erlandson et al. (1993) advise that there is no single format for reporting naturalistic research, however the main task is 'to communicate a setting with its complex interrelationships and multiple realities to the intended audience in a way that enables and requires that audiences interact cognitively and emotionally with the setting (p.163). They refer to Lightfoot who describes her case studies as "portraits" because 'case studies, like portraits, must capture the essence and myriad dimensions of the subject ... she tells the stories from "the inside out"' (Erlandson et al.1993, p. 168). This writer was inspired by this notion and subsequently applied some of Lawrence-Lightfoot and Davis' (1997) concepts of portraiture (such as the use of metaphor) to the data presentation report (Chapter 4) in an attempt to create a narrative that is complex, inviting, and holistic and that 'documents human behaviour and experience in context' (p. 11).

Chapter 4 is in the case study mode and integrates the reconstructed meaning of the data (drawn from journal writing and data analysis) with the idiographic interpretations of this researcher, is thick in description, and attempts to be free of the researcher's 'interpretations and evaluations in the descriptive segments' (Erlandson et al. 1993, p. 165). Using the metaphor of a growing tree as an overarching theme, the chapter retells the story of the participants' engagement in reforming their middle school curriculum. Combined with the meta-analysis of chapter 5 (Discussion), the

purpose of these chapters is to build on the reader's tacit knowledge, encourage the reader's own interpretations on the subject, and improve the reader's understanding of middle school curriculum reform in the international school context.

3.7 Rigour in this Study

As this study is approached from the naturalistic inquiry paradigm, it is appropriate that rigour be addressed according to the naturalistic process quality criteria of trustworthiness. Lincoln and Guba (1985) and Erlandson et al. (1993) propose that the conventional criteria for trustworthiness – internal validity, external validity, reliability and objectivity – be replaced with 'credibility', 'transferability', 'dependability', and 'confirmability' respectively (Lincoln & Guba 1985, p. 219). The naturalistic techniques used to establish trustworthiness in this study are presented in Table 3.5. These techniques, with indications of each and examples of how they are evident in this study, are then presented in Table 3.6. This researcher determines that trustworthiness is established in this study.

Table 3.6 Naturalistic Techniques to Establish Trustworthiness

Conventional Term	Naturalistic Term	Naturalistic Techniques
Internal Validity	Credibility	Prolonged engagement Persistent observation Triangulation Referential adequacy Peer debriefing Member checks Reflexive journal
External Validity	Transferability	Thick description Purposive sampling Reflexive journal
Reliability	Dependability	Dependability Audit Reflexive journal
Objectivity	Confirmability	Confirmability Audit Reflexive journal

(Adapted from Erlandson et al. 1993, p. 133)

The *Dependability Audit* refers to an external check on the processes by which the study was conducted by providing an audit trail that provides documentation and a running account of the process of the inquiry (such as the researcher's journal), both of which were submitted to this researcher's principal supervisor throughout the investigation.

Similarly, the *Confirmability Audit* was ascertained when the same supervisor confirmed that the conclusions, interpretations, and recommendations made in this study are supported by this inquiry and can be traced to their sources.

Table 3.7 Applied Techniques for Establishing Trustworthiness in this Study

Naturalist Technique	Indication	Evident in this study
Prolonged Engagement	Learn the 'culture'; Build trust; Develop rapport; Build relationships; Obtain wide scope of data; Test for misinformation.	Researcher as member of the school faculty; an 'insider' of the social context. Trust, rapport, relationships and access to data established from onset. Able to 'capture the life' of the organisation. Participant-observer for two years.
Persistent Observation	Open to multiple influences – mutual shapers and contextual factors; Obtain in-depth & accurate data; Sort relevancies from irrelevancies; Recognise deceits.	Ability to engage in purposeful and assertive investigation. Access to data and informers. Researcher as core participant in reform process under investigation.
Triangulation	Verify data.	Uses different or multiple sources and methods (see Table 3.3 & 3.4).
Referential Adequacy	Provide a 'slice of life'.	Access to unobtrusive measures such as handbooks, yearbooks, memos, newsletters, emails.
Peer Debriefing	Keep inquirer 'honest'; Test working hypotheses; Find alternative explanations; Explore emerging design and hypotheses.	Formal and informal discussions with peers such as other faculty, supervisors.
Member Checking *(in process and terminal)*	Most crucial technique for establishing credibility Test categories, interpretations, or conclusions (constructions).	Continuous informal or formal checking of data with respondents such as at the end of an interview or meeting, review of drafts.
Reflexive Journal	Record information about self and method; Document researcher decisions.	Daily or weekly written journal over two year period.
Thick Description	Provide database for transfer-ability judgments; Provide a vicarious experience for the reader.	Relevant data and rich descriptions in the report that provide sufficient base to make comparisons of similarity.

Table 3.7 continued

Purposive Sampling	Generate data for emergent design and emerging hypotheses.	Access to useful sources & maximum variation sampling. Allowed for uncovering of multiple realties as they emerged.
Audit Trail	Allow independent determination of trustworthiness.	All data was systematically recorded and stored. External audits provided by supervisor.

(Adapted from Lincoln & Guba 1985, p. 328; and Erlandson et al. 1993, p. 161)

3.8 Ethics

An application for Ethics Clearance (Appendix D) was lodged to the USQ Ethics Committee and approval was granted in June 2005. All conditions of this Ethics Clearance have been adhered to. To maintain confidentiality of the school and participants, all names have been disguised by pseudonyms (including Appendix D where the school name has been replaced by XXX).

3.9 Limitations of this study

The limitations of this study centre on the usefulness of this research product and must be considered within the realm of naturalistic inquiry. On the surface, and taken with a view outside of the naturalistic paradigm, it may seem of little value. It is a single case study of a curriculum reform process that impacted only a segment of the school; the findings rely on multiple realities being reconstructed by a single researcher; and the context of the study could never be replicated or generalised. However, within the naturalistic paradigm in which this study is embedded no attempt to generalise is made (Lincoln & Guba 1985; Erlandson et al. 1993). This stance highlights a universal truth that 'no two social settings are sufficiently similar to allow simplistic, sweeping generalizations from one to another' (Erlandson et al. 1993, p. 13). This study presents 'a slice of life' (Lincoln & Guba 1985, p. 155) where readers of this study are invited to make their own conclusions and where

transferability of findings to other settings should be made only with due consideration of their appropriateness for the receiving contexts.

3.9 Conclusion

This study's use of naturalistic inquiry is appropriate as its design is emergent and flexible and was responsive to contextual conditions as the process of curriculum reform unfolded. The researcher as the human instrument for data collection and analysis, and as participant-observer in the school, allowed him to interact with the data smoothly and be responsive to the total context. Techniques of data collection were able to be adapted to the circumstances, data was processed immediately including confirmation and verification with sources, and the data was collected and analysed as a progressive and on-going process. Purposive sampling allowed the researcher to select a sample from which the most insight could be learned and allowed the flexibility to decide what data to collect next and from where, as questions, propositions and theories emerged. The trustworthiness of this study is established using naturalistic techniques such as prolonged engagement, persistent observation, member checks, reflexive journal, and audits. The case study report is richly descriptive and affords the reader the vicarious experience of reliving the curriculum reform process in order to build knowledge and encourage interpretations on the subject, and to aid transferability to other contexts.

The suitability of this study's placement in the naturalistic paradigm has been explained and the methods and techniques used for collecting and analysing data have been presented in this chapter. This study adheres to the philosophical and mandatory requirements of naturalistic inquiry and this methodology was used successfully to investigate the research questions and achieve the aim of this study.

The following chapter presents the case report of the results obtained with these methods.

CHAPTER 4 DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The purpose of this chapter is to report the findings and results of the study and provide a 'thick description' (Lincoln & Guba 1985, p. 359) that reveals the multiple realities of the participants as they experience curriculum reform at Bay International School. By presenting a holistic and lifelike description of the unfolding realities of the reform process, this writer aims for a convincing and authentic account that achieves the convergence of narrative and analysis (Lawrence-Lightfoot & Davis 1997). The metaphor of a growing tree is used as the overarching theme for retelling this story and serves to provide greater clarity and refinement of the emergent themes and patterns that scaffold the narrative and reveal the growth of the actors and the curriculum initiative. With the curriculum initiative as a seed and the context as a forest, this metaphor provides a dynamic framework that captures the changing and evolving process that was observed, documented, and analysed by this researcher. The reconstruction of the data led to the construction of the narrative that documents the behaviour and experiences of multiple actors in a context that shaped and was being shaped by these actors. The context provided a frame for the action and supplied a rich resource for the researcher's interpretations of the actors' thoughts, feelings and behaviours (Lawrence-Lightfoot & Davis 1997). The chapter begins with a metaphoric tale that serves as a synopsis. This tree metaphor then provides the theme for the presentation and analysis of the data, organised in two sections, and offers an account of what happened when Bay International School reformed its middle years curriculum.

4.2.1 The Story of a Growing Tree

The Local Actors

Master Arboriculturist	One who cultivates trees; Headmaster for 9 years of Bay International School (BIS) in Asia
The Apprentice	Middle School teacher and Apprentice to the Master; international school teacher for 10 years; newly recruited to this school; researcher and author of this study
Ambassador Greenforest	Change-agent for forest (school) reform; President of a private organisation dedicated to reforming schools for the 21st Century
Nursery Assistant	Elementary teacher at the school for 5 years; moves to middle school at the time of the reform
Lady Botany	Head of BIS Social Emotional Learning Focus (SELF) department for 4 years; teacher at the school for 15 years
The Budgies	Middle School students who use the tree; approximately 60 students at each year level 6,7 and 8
The Cockatoos	Middle School parents representing approximately 40 nationalities across the school community
The Birdkeepers	The school faculty; about 80 teaching staff from approximately 15 nationalities
Green Tree Bash (GTB)	Annual BIS school community conference

The External Actors (experts)

Billy Amsun	Professor of Curriculum at Southern State University, USA
Jules Ozsun	Australian Sun – Education and Learning Consultant
Gez Ambrain	Co-founder and President of a brain education and healthcare consulting firm based in the USA
Johnny Ausbrain	Director of an Australian private consultancy focusing on brain education
Mass Tree Inc.	Multinational producer of mass trees (International Baccalaureate Organization)

The 'Props'

seed/tree	Reform initiative: The Humankind Curriculum
soil	The school community
forest/s	The whole school/s
woodland	Specific areas of the forest: upper woodland, high school; lower woodland, elementary school
flora/shrubs	Smaller but essential plants in the forest; supplementary programs
water	Needed for seed/tree to survive/grow; school's resources
sunlight	Comes from the external actors (experts); needed for seed/tree to survive/grow
warmth	School climate; needed for seed/tree to survive/grow
insects	Resisters to change
disease	School structures that limit the tree's healthy growth

The Master Arboriculturist had been tending to his forest for over 6 years and he was most pleased with the thick growth of the woods and flora so far – except for one patch that lay in the middle field. He had been laying in wait for some time, contemplating the best way to rejuvenate this barren tract that separated the lushness of the lower and upper woodland. Concerned about the Budgies long and significant flight between the two established woodlands, he was sure there must be a better way to get them across the middle patch and knew he had to do something. The right conditions to start his rejuvenation project were approaching. Ambassador Green Forest, whose interests lay in greening the Earth's forests for effective and sustainable growth, had offered the Master Arboriculturist details of a new breed of tree that was required to survive in today's changing world and that, if the conditions were right, would thrive in his patch. The Master Arboriculturist, excited by the prospect of creating a hybrid tree that could help the Budgies become fitter and stronger, set to work straight away.

The Master, an experienced and successful arboriculturist, knew the importance of preparing the soil. With a good supply of water, access to sunlight and warmth, and the trust of the Birdkeepers and the Cockatoos (who could thwart any good intentions with their noisy gatherings), the Master set about fertilizing the soil. He knew he needed to grow a big, strong tree that all the Budgies could use. He also knew that tree seeds are harder to grow than flowers and shrubs and require more preparation as well as special attention.

The Master devised a plan to hold a Green Tree Bash that would rake and soften the soil. At this Bash, the Cockatoos and Birdkeepers could gather to bask in the sunshine while they learnt about new ways to make the forest more comfortable and meaningful for the Budgies. Ambassador Green Forest was invited to initiate the

fertilisation process and present his ideas for saving the Earth's forests so that all Budgies could fly freely across cultures and through time. It was a success and the soil was already starting to change.

The Green Tree Bash became an annual forest event where rays of sunlight would come and shine, sometimes for days and sometimes for years. Others followed the Ambassador to nourish the soil, each offering their expertise and adding a mix of complimentary compounds to the patch. Of worthy note are Gez AmBrain and Johnny AusBrain, who raised the level of warmth in the whole forest with their essential element that enabled the Birdkeepers and Cockatoos to help the Budgies fly higher and faster. Jules AusSun, also provided much sunlight and food to the soil, and the seed as well, with her ideas on cultivating fertile soil and growing strong trees. The Master, and Lady Botany too, often provided their own substances to the mulch to maximize the opportunities presented to the soil and to the whole forest. The once barren soil was now becoming rich and fertile.

The Ambassador and Master worked together to choose the right seed for this patch. They exchanged many ideas and formulas and finally decided on a draft composition that they thought was best suited to this forest, and maybe other forests too. They showed their seed to the Birdkeepers but were very careful to protect it from the insects that especially like to devour new seeds. Of course there were ready-made trees that could have been planted in this middle patch but the Master warded off the temptation to just take another of the Mass Tree Inc. products (even though the upper and lower forests were successfully seeded from this source). He just didn't think Mass Tree Inc. had the right seed this time. He really wanted to concoct his own special seed and, given the favourable conditions, he was able to do so.

Our Master Arboriculturist then thought it would be best if the Birdkeepers were involved, so he let them form a bunch in the forest to see if they could help him find the best components for the seed. But the Bunch of Birdkeepers was having problems and was not able to make much progress. They had many ideas – so many ideas from all over the world that they weren't able to do anything with them. Lady Botany tried to help by giving her advice and sometimes they listened to her. She thought the Budgies were most important and everything the Birdkeepers did should be centered on the Budgies. The Lady and some of her attendants even started to draw a map to guide the new tree.

But, as his seed lay dormant for several months, the Master grew increasingly frustrated; the soil was so fertile now and he did not want to lose this opportunity. Given his success in growing trees previously, he thought it was time to assist in the germination of this seed. He presented a more detailed plan for the middle patch and lay out the DNA for the seed. The Bunch of Birdkeepers were a little shocked at the haste with which the Master wanted the seed to germinate but agreed with his plans nevertheless. Laying in wait was a group of insects especially eager to destroy this seed. Fortunately, the Master was too skilled at protecting his seed and his forests and thwarted their attempts to sabotage his plans.

As a successful arboriculturist, the Master used known treatments to assist the germination of the seed. One of these was to bring it into his conservatory and only let a trusted few (Lady Botany, the Apprentice, the Nursery Assistant and an old, trusted Birdkeeper) tend to it. This certainly helped the seed germinate and some roots and a stem were starting to develop. A seedling had sprouted!

Just by luck the Master discovered Billy AmSun who was able to visit the forest for a few days at just the right time. Billy AmSun provided a burst of sunlight

that nourished the soil tremendously and warmed the whole forest. The little seedling was trembling with excitement as it pushed its little roots deeper into the fertile soil and basked in the lovely warmth that Billy AmSun was granting.

The Master introduced the seedling, which was now looking quite healthy, to the Cockatoos who, due to the trust they had in the Master, were generally pleased with what he had planned for the middle patch. Water and food for the patch were secured, the insects were contained, and so far there were no signs of disease. The seedling's growth continued to accelerate as the Apprentice and Nursery Assistant, assisted by the Master and Lady Botany, busily worked to prepare for the Budgies' imminent arrival.

The Budgies arrive as expected and take to the new tree with much curiosity and enthusiasm. They realize that the tree is young and growing and are patient and considerate as they flutter with anticipation at the unique opportunities that it may offer them.

The Apprentice is now well and truly engaged in caring for the growing sapling and is taking on a leadership role in providing for the Budgies as well as nourishing and tending to the young tree. The Master oversees as the Tree Tending Team (TTT), consisting of the Apprentice, Nursery Assistant and two new members work to nourish the growing tree. Mulch is continuously added to nourish the roots and budding leaves.

The TTT is developing new ways of working together in order to strengthen the tree and provide many possibilities for the Budgies. The Budgies are demanding and there are many new ideas to be explored, strategies to implement and challenges to overcome. The Master does what he can to support the TTT. Johnny AusBrain pays the middle patch a visit and provides another burst of sunshine and nourishment

that everyone enjoys. The sapling continues to strengthen and grow. Even the Cockatoos are pleased at the special events held to show them the value that the new tree is adding to the middle patch.

The Master spends some time sharing his knowledge with the Budgies and most of the time they are enthralled with his presence in the middle patch. This attention that he gives the tree (and the Budgies) provides the opportunity for the trunk to strengthen and new branches to form.

The Budgies are getting used to the new tree and the role it now plays in their lives. They are asked on two occasions what they think of the tree and their comprehensive responses provide valuable feedback to the Master and the TTT. Changes are made wherever possible to accommodate the Budgies' requests. As time passes the TTT is becoming more adept at satisfying the Budgies (and the Cockatoos) and nurturing the young sapling. As the tree grows in stature and possibility, the Budgies begin flourishing in the shelter and sustenance that the tree provides them.

The young tree continues to thrive as conditions in the forest inevitably change. The Master, acknowledging that all is going well in the middle patch, appoints the Apprentice as leader of the TTT. A new member, cleverly enticed from a distant forest, replaces the Nursery Assistant who departs for a different pasture.

Another year commences with great hope and promise. That is, until the Master announces the troubling news that he must leave the forest. A sense of urgency grips the Apprentice who must now ensure that all is in place to secure the tree's survival. Fortunately, the young tree is standing tall, continues to be well nourished with enough water, warmth, and sunlight and is free of any debilitating disease.

Detailed plans envisioning the future of the tree and the middle patch are constructed by the Apprentice, in consultation with the TTT, and with the Master's approval. These plans are accepted by the Birdkeepers. Although still very much an infant, but with plenty of growth potential, the tree's future holds much promise for the Budgies, the revitalization of the middle patch, and the whole forest.

As the Master leaves the forest, he passes on the reins of the tree's destiny to the Apprentice.

4.2.2 Finding the Ground

The Humankind Curriculum was years in the making (Headmaster Interview 1).

The Master joined the school as headmaster in August 1996. He came into a school, according to Lady Botany, with 'no leadership, no centralisation, no vision, fragmented and dismembered parts within the school with people doing their own things and a community polarised.' Considered a visionary leader, the Master set about rebuilding the school community and instigated and implemented a host of school reforms. With the bottom and top end needing immediate attention, he concentrated on these areas first as well as the social-emotional approach in the school. Lady Botany asserts that, after several years and many changes, the school could finally provide 'a rigorous, consistent and egalitarian curriculum across the school.' (Head of SELF Interview) With a Reggio Emilia program in place in the Early Learning Centre, the IBPYP for grades K-6, IGCSE in years 9-10, and the IB Diploma for 11-12, the problem clearly remained in the middle.

> I knew that middle school needed to be tackled, I wasn't quite sure how to do it but over the years I've been here, following up on things that arose out of the issues of putting a social emotional program in place, for example brain research, it became more and more evident that when I did come around to

tackling middle school it would have to be a fairly major operation … and I actually wanted a middle school that would reflect the needs of that age group, which I didn't think was in virtually all the schools that I've been in (Headmaster Interview 1).

In a changing world, and in the emerging understandings of middle school learning, the existing curriculum was not addressing the perceived needs of Bay International School (BIS) learners:

> I actually think that what is in place is not very good at all. In fact if I was going to plan a curriculum that'd be the last thing I'd plan. In fact if I tried to impose that into a curriculum, people would tear it apart. But we just accept it because that's the way it is … it's just a standard curriculum. You drive your kids through examinations. You work backwards to what they need to do (Headmaster Interview 1).

So, at around the end of November 2002, with positive relations in place with teachers, 'a level of credit in the bank with parents' (Headmaster's comment at middle school meeting, May 28, 2007) and the Board of Directors, and a climate of acknowledging the social-emotional dimension of learning, the time for sorting out the 'dreadful mess' (Headmaster Interview 1) of the middle school curriculum had come.

4.2.3 Preparing the Soil

You have to prepare the ground … The middle school program is a direct result of the [Green Tree Bash] Conference (Headmaster Interview 1).

The inaugural Bay International School Community Conference "Green Tree Bash" (GTB) was held in November 28-30, 2002. This conference was framed by the following questions and guidelines*:*

- *How do schools of the present become schools of the future?*
- *How can we communicate and connect effectively with our children?*

- *How well do parents and teachers understand each other?*

This community conference provides an opportunity for both teachers and parents to listen to some of the ideas that are influencing the development of education, and also affecting the traditional links between home and school as well as relationships within both.

*The conference has been structured to accommodate the professional requirements of the teachers, as well as to provide parents with the opportunity to reflect upon some of the issues facing schools and teachers at the onset of the twenty-first century (*Conference Brochure).

This conference was seen as a way to create a framework to share knowledge about education with the school community. The aim was to create a community that was aware of some of the ideas that were out there about effective schooling for all learners, and in particular for middle school learning. The Master wanted this spread of ideas to occur not just for teaching staff but for the whole community, particularly parents: 'It's feeding all this out into the community so when I start making steps people say oh yeah I know about this because because because … preparing the soil. It's been years of preparing the soil.' (Headmaster Interview 1)

At this first conference, a Professor from a university in the United Kingdom spoke of change and Ambassador Greenforest returned to BIS (he had visited the school on previous occasions) as a keynote presenter to speak about the future educational needs of students and the role and direction of schools in the 21st Century. Seeds of change for the middle years at BIS were being scattered and a growing acceptance that the middle school had to change was evident. With the Mass Tree Inc Primary Years Program for K-5, the International General Certificate of Secondary Education (IGCSE) catering for years 9-10, and the Mass Tree Inc Diploma for 11-12, there was a clear gap in the K-12 continuum. The Ambassador was starting to present many issues which subsequently influenced the middle school reform process.

One idea was to develop a unique curriculum in consultation with 'wise people/experts' with the Ambassador playing a central role as the ideas man.

Drip feeding the community as a means of fertilising the soil and planting seeds continued at subsequent GTB conferences with keynote speakers as follows:

2003 – The Ambassador returns; also Gez Ambrain

2004 – Johnny Ausbrain and Jules Ozsun

2005 – Theme: *Diversity*: a British professor and author on creativity and a British 'computers-in-education guru'

2006 – Theme: *Values and Narratives*: An Australian professor on critical literacy and a British expert on information literacy.

This strategy of preparing the ground and providing professional development for teachers (and parents) not only involved bringing people into the school but also included encouraging staff to attend professional development activities outside of the school, usually out of the country:

> I've been bringing people into the school who are also interested. I've developed my own staff here … So I accept and encourage certain teachers to go away and do work …. All that leads to a build up of alliances, if you like, that we can call on or use for support … It's very clever to create that nice rich mulch and then you get ideas coming from the teachers themselves … (Headmaster Interview 1).

A Professional Development Committee run by the teachers was established in the school at around this time to monitor the budget (separate for Elementary and Middle/High School) and approve applications from teachers.

One of the early investigations for a suitable middle school curriculum was to explore the suitability of the Mass Tree Inc's Middle Years Program (MYP). The

school sent a staff member to an MYP introductory workshop in Thailand in March

2003 and subsequently a report was presented to all MS/HS staff. A clear majority

indicated interest in pursuing the MYP option further. However, the Master had

reservations about the suitability of the MYP for BIS as summarised below:

- o That the IBO [Mass Tree Inc] have been trying to fit the 3 programs together and insist that it's one program when clearly that is not the case.

- o That the IBO needed to get people in to talk about this continuum indicating that there was some difficulty in making it fit.

- o That the MYP was developed for a totally different purpose. It was developed to find a program that would dovetail into the IBO Diploma. Not because the needs for that particular age group had been identified. (Headmaster Interview 1)

So I'm coming from the needs of an age group that we are now beginning to identify in a world that is very different as opposed to what would fit the IB diploma … So philosophically I'm not necessarily against the MYP I just think that to put it in place because it is there would be counterproductive when here we've got the opportunity to develop something that makes sense in our context and in the context of where education is worldwide and the context of where the world is in terms of globalization and in the context of what we now know about brain research. None of this was in place when the MYP was developed so it seems to make sense, don't borrow, don't bend, and don't take things (Headmaster Interview 1).

The soil continued to be fertilised in various ways throughout the reform

process. The following descriptions of these contributions serve as examples of

ways in which the school community was progressively exploring and building new

knowledge about the middle school curriculum:

Ambassador Greenforest

The Ambassador's organisation is dedicated to facilitating the development of new approaches to learning that draw upon emerging understandings of the human brain, the operation of human societies, and learning as a community-wide activity (Rephrased from website).

The Ambassador's draft article, *Roots and Wings* (February 10, 2004), was

distributed to Heads of Department as a way of introducing his ideas in written form

and to stimulate discussion amongst staff. The Ambassador's bigger picture was concerned with developing systems of education that 'go with the grain of the brain'. This brief essay captured the reasons for needing to reform the middle school curriculum and is summarised as follows:

- Developments in technology enable us to understand the brain and the learning process so that the present generation has an unprecedented opportunity to redesign systems of learning that acknowledge the brain's biological constraints and opportunities.

- Quality education involves both thinking and doing.

- The basic aim of formal education has to be to give the growing child an ever increasing control of his/her own learning so that the young person is effectively weaned of their dependence on the teacher for instruction before the conclusion of formal schooling. This calls for applying subsidiarity to explain the evolving relationship between teacher and taught. Adolescents should be given the essential opportunity of learning to take responsibility for their own decisions and actions therefore providing young people the critical stimuli they need for a lifetime of thinking and doing, and growing up to become independent people.

- Simply reforming school systems is no longer adequate; a complete redesign of the environment for young people's learning is required.

- The middle years of schooling are the time that adolescence is at its most acute and possibly the time when conventional schooling is least satisfactory. This is the time that a Humankind Curriculum needs to be incorporated within the more formal disciplinary studies of a conventional curriculum. [This is where the term *Humankind Curriculum* is first used.]

- The purpose of such a Humankind Curriculum would be to respond to the young person's growing sense of self-awareness (Why am I like this? What can I do about it? How do I relate to others and to my deepest spiritual needs?). Also, to respond to those hormonal changes that are also pressing upon the adolescent to take control of their own future. Well grounded and confident young people will know how to reach for their own future.

   - Six themes for such a Humankind Curriculum are presented:

      Origins of Man

      Brain

      Culture / Belief

      Resources / Economy

Creative Impulse

Mind / Body

o He proposes forming a community of schools from around the world to find ways to implement such ideas and to support and interact with each other.

This was a seminal document as the points above raised much discussion and provided the foundation for the Humankind Curriculum. The Ambassador's ideas that he had been sharing with the Master and the school community for several years were now at a pinnacle. Not only did the Ambassador provide much fertility to the soil, he had also offered the essential characteristics of the seed that was soon to be planted.

Gez Ambrain

Gez Ambrain's work was concerned with teaching individuals and organizations how to optimize brain function and promote brain health. He was first invited to the school as a keynote speaker at the 2003 GTB (alongside The Ambassador) where he presented his brain health and function materials. The whole school was now very much engaged in learning about the human brain and this resulted in a Brain Committee being established with representation from all levels of the learning continuum. The aim was to share and disseminate information about the brain and learning in the school community. Gez Ambrain's visit and this committee played an active role in promoting the importance of understanding the function of the brain in human learning. This awareness was critical in understanding the emerging fundamentals of the Humankind Curriculum.

As the focus of the school's reform was on the middle years, Gez Ambrain was invited back the following September (2004) to present at a 3 day staff

workshop (including a parent presentation) on the *Hidden Curriculum for Adolescence: Forging an Authentic Personal Identity in a World of Burgeoning Autonomy and Increased Expectations*. Gez Ambrain brought together a number of perspectives in the realm of the adolescent brain including motivation, emotion, learning behaviours, the significance of curiosity and creativity, the impact of the environment, and practical implications. This second visit occurred at the time when the seedling was starting to sprout and served as a burst of sunlight to the task of developing a brain friendly and developmentally appropriate curriculum for the middle school. Gez Ambrain was also invited to a Middle School Curriculum Committee where his advice was sought for developing strategies to implement the powerful propositions that he was presenting.

<u>Johnny Ausbrain</u>

Johnny Ausbrain, a brain consultant and dynamic presenter to both students and adults, began his affiliation with the school upon invitation to the 2004 GTB. His presentations were very well received by a school community that was, at the time, sufficiently immersed in learning about the workings of the brain, in particular the adolescent brain, and assimilating brain compatible content and approaches in the middle school curriculum and beyond. Johnny Ausbrain was particularly successful in presenting information to parents who were urged to activate their role in supporting a child's learning and success at school. This very much reinforced the Ambassador's position presented at the previous year's GTB that parents play a critical role in a child's potentiality. Johnny Ausbrain presented a host of visually captivating demonstrations for teachers and parents on the workings of the brain including physiology, memory, emotion, diet, drugs, and learning preferences. His visit not only provided further validation for a brain compatible middle school

curriculum but he also offered concrete suggestions for achieving this in practice. Subsequently, he was invited for a week's visit the following August (2005) to launch the brain component of the Humankind Curriculum to the students and continued to provide a consultancy role in developing brain compatible learning materials for the Humankind Curriculum. His close work with the teachers developing these resources and his ongoing involvement in the curriculum development process saw him providing not only fertilisation and mulching for the soil but he was also a regular source of nourishment and pruning for the tree.

<u>The Apprentice's Interview and Project Zero</u>

The Apprentice was interviewed for the position of grade 6 classroom teacher in February 2004. He considered himself an 'outsider' at that stage although he had substituted at the school for several weeks the previous school year. Keen to get a job at the school, he had heard that there were some middle school changes going on that he was interested in learning about. Little did he know at the time that he was actually being recruited as an apprentice to the Master Arboriculturist. There was much enthusiasm from the administration team for the project and his interest and willingness to be involved was clearly appreciated. Points from this interview capture the Master's discourse and indicate how well prepared he believed the soil was:

- o Desire to create a new approach and philosophy for middle schooling that crossed the boundaries of nationality, culture and politics; to be based on brain research and a constructivist theory of learning.

- o In the changing post-modern world, the curriculum needs to match.

- o International schools are on the cutting edge of the globalised world; the question of 'who are you?' and 'what are your values, where do they come from?' are pertinent questions for middle school students.

- o Reflection and relevancy activates the restructuring mind of the adolescent.

- o The aim of the new curriculum is to develop wise individuals that can find their place in the changing post-modern world.

- o The plan is to start the new curriculum in the 2005/06 school year.

- o The reasons for change are based on the Headmaster's beliefs.

This was not only fertiliser for the Apprentice's mind but also seeds had been planted and he was excited to be a part of this project. It seemed quite clear at the time that the school was committed to developing its own curriculum and that this seed, as he eventually found out, was far more developed in the Master's mind than in the school community.

Upon the Apprentice's inquiry about suitable professional development that he could undertake to prepare himself for contributing to this process, the Master suggested he look into the Project Zero course offered at Harvard University. On the subject of professional development in the 2005 interview, the Master says: ' … there are certain individuals in the school who you pick up as a head who are very interested in their own professional development and you guide people into areas that are going to be of benefit to the school' (Headmaster Interview 1). The Apprentice was grateful for this guidance and completed this course in July 2004 at his own expense. Project Zero proved to be a valuable resource in providing the Apprentice with relevant background knowledge to engage effectively in the curriculum reform process and supplied him with a wealth of valuable resources that were drawn upon throughout the development and implementation of the Humankind Curriculum. In fact, he turned out to be fertiliser for the soil and a little ray of sunshine for the seed!

The Master now considered the soil to be suitably prepared. He created a new position, Middle School Curriculum Coordinator, who was appointed in April 2003

to take effect the following school year (September). The school was becoming increasingly committed to middle school reform.

4.2.4 Planting the Seed

…. and now we can plant a few seeds (Headmaster Interview 1).

The 'planting the seed campaign' by the Master was in full swing by February 2004. Days after the Ambassador's *Roots and Wings* document was released, the Master distributed several papers to the faculty over the next 2 months. The first of these was distributed to the Heads of Department (HODs) for a Middle School Strategy Meeting with the intention that the HODs would share these deliberations with their department for further discussion that would involve all Middle/High School teachers. The discussion paper mirrors the Ambassador's article (outlined above) with modifications appropriate for a school document. Further points include:

- o The title: Humankind Curriculum – making sense of self, and the world

- o The idea would be for teachers to use the 'Humankind Curriculum' as a framework within which to develop discipline-specific skills and fully integrate their disciplines within this structure.

- o A typical learning structure is presented (this becomes the 'Process' in later documents) and is the first indication of a pedagogy for the middle school.

- o The idea of a network of schools to develop this curriculum is further explained (as proposed by The Ambassador above).

The second document, *Aims for Consideration,* contained ten key points that remained in place throughout the process and could also be considered as contributing (along with The Ambassador's points above) to the essential characteristics of the tree:

- o The provision of a curriculum for the Middle School Grades 6-8.

- o   A curriculum to build upon the constructivist, inquiry based PYP in the elementary school.

- o   A curriculum that will allow for teaching methodologies that are brain friendly (i.e. based upon the research findings of how the brain learns best).

- o   The provision of appropriate methods of assessment and reporting.

- o   The provision of a curriculum that is content relevant to the age group, to the international context and to the global context.

- o   A curriculum that makes appropriate use of the technology available.

- o   A curriculum that is 'values based'.

- o   A curriculum that is demonstratively different.

- o   A curriculum that allows for regular interaction with adults both within and outside school.

- o   A curriculum that will enable students to progress smoothly into High School.

The seed was fairly quickly attacked by 'insects' as evident in comments made by some teachers such as: 'what exactly is up for discussion, too many ideas'; too much jargon is included and needs to be defined; and that the term Units of Inquiry as used is a PYP term and may need to be redefined so as not to be confused with PYP use.

Early April sees the circulation of two 'fertilising' documents. The first, from the Master, was a single paged, untitled composition outlining a philosophical rationale for the new approach to the middle school curriculum. The extent of circulation amongst the faculty of this document was unclear however it was part of the Master's 'drip feeding' communication of what he is thinking and where he wanted to go with this. This document was supportive of earlier statements and began to provide the makings of a theoretical framework:

- o We live in an uncertain world and are constantly seeking answers to questions and solutions to problems. Humans are physiologically engineered for inquisitiveness and our brains are adaptive, plastic, changing physically to continually construct new 'knowledge' in response to a variety of stimuli, of which the most crucial component is past experience.

- o Wisdom is required in moments of uncertainty, when change occurs, when difference becomes apparent, or when different 'certainties' meet, or possibly collide. The world is not constructed on certainty and we are dependent on elements of choice that exist largely in shades of grey.

(The Ambassador added to this notion of wisdom in schools suggesting that

schools should be places of wisdom, not instruction, and teachers are

seekers of wisdom to impart to their students. In light of this, he also

calls for a redefining of the role of the teacher in the middle school.)

- o A moral stance is required with wisdom, and a value system that acts as a filter to enable us to get at the essence of a problem, and to find solutions. The diversity of humankind that enriches us all is a result of the way that values influence our decision making. As humans, we share common values on which we base our responses.
(The Ambassador also refers to values as the 'fundamental heart of

school'; that permeate throughout the school, and a 'values based

curriculum' remained a constant aim throughout the process.)

- o 'Schools must prepare children to face uncertainty, change and difference in their lives, and in an international school, where we benefit from the added dimension of greater cultural complexity, we are provided with an exceptional opportunity to meet this educational challenge. Every member of our school community is on a boundary, at a point of meeting with the unfamiliar, the different. It is not a place for certainties or 'black and white' answers; it is a place for discussion, debate, compromise and consensus. It is not a place to fear alternative viewpoints, theologies, cultures, physical characteristics or age differences. Equally, it is not a place for bigotry or aggression; neither is it a place where anything goes, or where all things can be tolerated. Boundaries require a response – unfortunately, all too often that response becomes a wall or fence.'
[complete paragraph cited here]

- o The origins of humankind and the origins of development of difference will become the focus of study. We want to lead students to the boundaries, the grey areas, where they will reflect upon issues that have relevance in our contemporary world, and to each of us as individuals. The experience and learning through this process will help to respond

positively to the changes and differences in our lives as we reinvent ourselves and construct our futures.

The second document, of a similar nature, was an excerpt from a paper the Ambassador presented at a conference in January 2003, in which three clear and familiar points are made:

1. We need a curriculum that 'joins things together' rather than splits them apart (this is a fundamental principle of the Humankind Curriculum he often referred to and forms the basis of his notion that 'pupils should become qualified to act as stewards of our common humanity'). A curriculum that values synthesis as much as analysis; honours emotion and individual experience and spiritual values; and one which gives every child the ability to perceive the hidden connections between otherwise disparate phenomena.

2. We need to honour a process of learning that 'goes with the grain of the brain' and this includes honouring the principle of Subsidiarity.

3. We need to ensure that young people really do know what it is that makes us humans tick.

Subsidiarity was a buzz word at the school for a while (once people could understand its meaning) as the Ambassador had spoken of this principle at previous presentations. Pope Pius XI developed the principle in his encyclical *Quadragesimo Anno* of 1931, and in the above document the Ambassador defines subsidiarity: 'This stated simply and unequivocally that it is wrong for a superior body to hold itself the right to make decisions for which an inferior is already well qualified to make for itself.' How this could be realised in a middle school curriculum emerged later in the process.

Around the time these documents were being circulated, the Ambassador visited the school again and presented at a faculty meeting. This visit instigated further discussion and documents indicating that although the seed was being firmly planted, its chance of survival was still undetermined. This was a critical point in the

seed planting process. The following points taken from the minutes of this meeting

indicate the emerging direction of the reform:

- o Identified the need to reassess how early adolescence is viewed.

- o Agreement that the restructuring of the middle school was ultimately a whole school matter, therefore input should be sought from a wide array of people and areas in the school; the proposed working group should represent an array of perspectives

- o There was broad agreement that a major theme or central idea should drive the subjects in each of the disciplines. 'It's not about what we teach as much as how we teach it.'

- o Agreement that there is content that the students need to know. The role content should play in determining the set-up of the middle school years needs to be determined. High standards should be maintained and the new curriculum should deal with content of substance.

- o The Master stated that a significant part of the MS working group's responsibilities will be to work out a plan for how concepts and content interact within the structure of a MS curriculum.
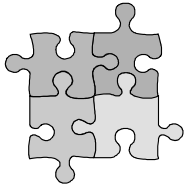
It is worth viewing the notes the Nursery Assistant took at the meeting as a

record of her interpretation of the discussion, to add further to the understanding of

the proposed reform, and to divulge how this seed was taking root; certainly in her

mind and, by extension, in the mind of other faculty. These notes are summarised:

- o Regarding change: grow into rather than revolutionary, moving incrementally, on an understand basis

- o Holistic curriculum

- o Allowing time for reflection, flexibility; less is more

- o Ever increasing control of learning

- o Concept of apprenticeship

- o Redesign environment for young people's learning

- o Building skills for lifetime of thinking & doing, not just for high school

- o Questions/Implications of process, methodologies, responsibilities, action and consequences, etc have not been raised.

The Master responds shortly after the meeting in an email where he clarified and consolidated his position. In order to maintain the veracity of his lengthy response, the email is included in full as Appendix E and bold emphasis is added by this researcher to indicate pertinence.
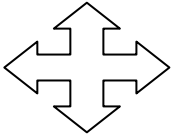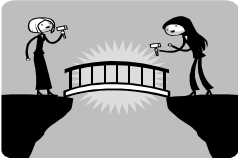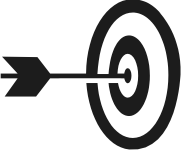
The seed for reform was now well and truly planted. The school was committed to making changes to the middle school and was in the early stages of constructing a framework for implementing these changes. Although there was neither a definite plan nor a 'coherent manageable framework' that the Nursery Assistant calls for, there was consensus that something needed to be done and a proposal had been presented. Forming a representative committee facilitated by the Middle School Curriculum Coordinator was the path taken from here. Table 4.1 summarises the essential elements of this initiative that have so far emerged.

Table 4.1 Summary of Essential Elements of the Humankind Curriculum

Visual Representation	Essential Elements of the Humankind Curriculum
	A curriculum that joins things together; holistic in nature and driven by central concepts/themes.
	An identifiable middle school, redefining the learning environment; whole school matter.
	Crucial time for adolescents; responding to special needs of the age group e.g. growing sense of self-awareness.
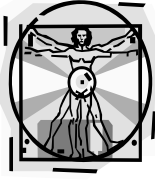
Table 4.1 continued

	Horizontal and vertical integration of disciplines; including adult interaction.
	Subsidiarity - intellectual weaning; providing adolescents with the essential opportunity of learning to take responsibility for their own decisions and actions; providing the critical stimuli they need for a lifetime of thinking and doing, and growing up to become independent people.
	Using technology appropriately.
	Wise individuals and teachers; a values based curriculum; values as fundamental.
	Filling the gap/link between the Elementary and High School; adolescence as a special period requiring special approaches.
	Targets represented as *Aims for Consideration* and *General Features*.
	Curriculum designed for international school context; preparing students for changing world.

Table 4.1 continued

	A curriculum that explores what makes humans tick; our place in the world.
	Content that is relevant to the students; the story of humans; application to own lives/modern world.
	An appropriate response to the developing understanding of how the brain works; going with the grain of the brain.
	A new approach/philosophy to middle school; innovative; demonstratively different.
	Thinking and doing; time to reflect and apply understanding to other contexts.
	Humankind Curriculum as the framework for change.

4.2.5 A Seedling Emerges

Seeds compete not only for food and sun with each other but many are eaten by forest animals, others are destroyed by insects and disease, and some simply do not find a suitable place to sprout ... In order for any seed to sprout and develop it must have food, water, sunlight and warmth. Until it gets roots, a stem above ground, and some leaves or needles, the seed uses the food stored in its shell to develop growth. As roots go deeper into the soil they absorb water and minerals from the soil and send these up into the stem.

Most seeds, when sown in the fall without any pre-treatment, will begin to germinate the following spring. Be sure to sow the seeds at the recommended depth. If the seeds are planted too deep, this could delay or inhibit the spring germination process. With some seed varieties you may see germination spread over two or three years with some seeds germinating in the first spring and others taking longer to break dormancy and germinate (Appalachian Hardwood Manufacturers Inc., date unknown).

With the soil fertile and the seed planted, the next stage in our metaphoric tree was for germination to take place. The Master reflects:

Well, I attempted to create a middle school committee of teachers to examine all aspects of the middle school and with a middle school curriculum coordinator, in the hope that all the ideas that have been coming out of various things would bubble and surface. My feeling was that there were agendas there … What we ended up doing was people were interested in making changes across the school rather than having huge interest in the middle school and everybody seemed to have their own agenda about where they were … So that was an attempt and the attempt was to make the ideas come out of the teachers themselves … I don't think enough of them had sufficient background to understand some of the ideas that were coming through (Headmaster Interview 1).

The Middle School Working Group (MSWG) was established and the first meeting held on May 10, 2004. Members were either volunteers or invited to join this group and, to achieve the aim of whole school involvement, the initial group comprised of 17 members from all aspects of the middle school and beyond. On the surface, this reflected the genuine interest in the middle school reform from across the school, however, as the Master suggests above, the motivation of each member to serve on this committee may never be truly known. Representation was included from each of the following areas: Math, Science, English, SELF, PE, Library,

History, Geography, IB, PYP, Health, Languages, Theory of Knowledge (TOK),

Performing Arts, Middle School Coordinator and Middle School Principal (whose

role was to oversee the committee).

Prior to the meeting the Coordinator distributed a lengthy preamble of

statements that reflected the discussions that had occurred so far and observations

and comments on visiting speakers such as Ambassador Greenforest, Gez Ambrain,

and Johnny Ausbrain. The agenda for this first meeting was intended to serve as a

stimulus for discussion and consensus building and contained the following sections

indicating the breadth of issues they were discussing:

1. Concept and Skills
2. Content and Relevance
3. Space
4. Student choice
5. Brain Research
6. Issue Related Topics
7. Constructing Assessment
8. Pair/Group Work
9. Question-Based Project Orientation
10. Negotiation
11. Subject Collaboration
12. Portfolios
13. Descriptor Assessment

The MSWG met twice more before the end of the school year. A workable

format for meetings was adopted with an agenda distributed beforehand as well as a

detailed *Proposed Provisional Plan of Action for 2004-2005* from the Coordinator.

The Minutes of the May 24 meeting lists 16 points regarding a vision for the middle

school curriculum:

1. Student focused curriculum; not content based; learner centered
2. Shared school-wide explicit philosophy
3. Adolescent friendly, developmentally appropriate
4. A curriculum that has subsidiarity at its core
5. Holistic – mind, body, spirit
6. A curriculum that creates a sense of wonder, maintaining PYP inquiry
7. An explicit values based curriculum

8. Create objective and wise people
9. Cultivate a strong work ethic
10. Excite teachers
11. Influenced by brain research
12. Teach responsibility and aim for interactive, reflective and independent students
13. Mentor programmes
14. Create opportunities for adult interaction
15. Parental involvement
16. Cross discipline approach – question leading to subject rather than the reverse.

The second meeting held in early June was dominated by discussion on a plan of action. New ideas that were 'bubbling up' (as was the intention of the Master) and fed into the discussions included reference to the UNESCO Earth Charter, the supportive role the Brain Committee could play in disseminating information on the brain and learning, programs from the USA that included apprenticeship/work, and vocational programs available in Australia. The priority for the plan of action at this stage was to discover middle school initiatives and innovations from the diversity of the members' experiences (from locally at other international schools in the country to around the world). The group compiled a list of readings, related to the topics they were grappling with at this point, to be undertaken during the upcoming summer break. The list indicates the knowledge they were accessing at this point and included: learning approaches for middle years, constructivism, differentiation, adolescence, international school students, and concept based curriculum.

A key player at this stage of the reform was Lady Botany, Head of the Social and Emotional Learning Focus (SELF) Department (this department in the school was an initiative of the Master as mentioned earlier and had been headed by the Lady for 4 years at this point). Lady Botany, who oversaw and nurtured several flora in her extensive garden, was playing an instrumental role in supporting other staff members with her understanding of the bigger picture, providing resources to the Master (a

source of 'fertilisation' of the Master's mind over several years) and engaged in much debate and discussion on middle school issues. She befriended the Apprentice almost immediately and mentored him for two years of the process (until she moved on to a bigger forest). Lady Botany was an active advocate for the social and emotional needs of the adolescent learner and nurtured the seed carefully with the intention of gathering supporters and warding off the insects. The Lady provided much sunlight and it was likely that the seed would never have survived without her efforts. Most certainly it would have grown differently without her attention.

At around the time of these meetings, the Lady distributed a composition titled a *Big Idea for Middle School,* with the intention of aiding the thinking and philosophy of the Middle School Curriculum Working Group. She threaded the emerging constructs (such as those contained in Table 4.1 and proposed that identity must lie at the centre of the middle school curriculum. As a result of her ongoing efforts, the Minutes of the May 24 meeting contained comments regarding the importance of an adolescent's knowledge of identity and the group agreed that this needs to be reflected in the emerging curriculum. This was not as easy as it may seem as the Lady had in fact experienced 'considerable frustration in people understanding/accepting the significance of identity' (Head of SELF interview). Nevertheless, identity at the centre of the middle school curriculum became an essential component of the seed. The Master shared his support, 'Self and identity became the central focus of the middle school initiative because of [Lady Botany's] influence. Identity as central focus is backed by 'experts' such as [Billy Amsun, Ambassador Greenforest, Jules Ozsun] and many others.' (Headmaster Interview 1)

August 2004 saw the Apprentice arrive on the scene. He was promptly invited to join the Brain Committee and the Middle School Working Group. This

Group was renamed the Middle School Curriculum Committee (MSCC) and now comprised 19 members. The area of interest and nationality of each member has been defined in Table 4.2 and illustrates the dynamics of the school and the professional and cultural diversity of the group.

Table 4.2: Members of the Middle School Curriculum Committee

Area of Interest	Teacher Nationality
Middle School Principal	British
SELF; Theory of Knowledge; Extension English	British
Library and Info Services; Theory of Knowledge	British
Social Studies: Geography	British
Social Studies: History	British
Health Education	British
IB Diploma	British
Science	British
Mathematics	Australian
Visual Arts	Australian
Physical Education; Australasian perspective	Australian
Grade 6; transition from PYP	Australian
Grade 6; Project Zero	Australian
Middle School Curriculum Coordinator	Australian
Yoga and spiritual values	American
Elementary School; PYP	American
Physical Education	Japanese
English	Canadian
Modern Languages	Belgian

The first meeting of the school year was held without much delay on August 30, 2004. The summer readings were discussed at this meeting with an attempt to draw out the essence and relevance from each article and a summarized table was produced. Among the points discussed and agreed upon were: the idea of the student at the centre of learning; the notion of learning to know, learning to do; having a practical element in the curriculum; a relevant combination of knowledge, skills, concepts and thinking; communities; and project oriented tasks. In our tree metaphor,

these could represent the seed's potential branches or, alternatively, could be recessive genes that were not expressed. Despite discussion on a way forward, no action was agreed upon and the next meeting time was left unarranged.

The next meeting was eventually held a month later. The Master's first move (perhaps indicating that all was not well) was when he joined this meeting as an 'invited guest' and it was announced that he will be joining all meetings from now on. It was likely that his presence would have somehow changed the dynamic of the group and raised scepticism among some members. The Apprentice noted that the size of the group and the diversity of backgrounds and interests, while providing a wealth of resources, were in fact having a debilitating effect on the group's ability to move forward. This was reflected in the minutes from this meeting that read like a fragmented 'wish list' for middle school learning. The Apprentice, after discussions with Lady Botany (who had taken him under her wing) presented a bridge metaphor as a way of illustrating the role and aims of the middle school curriculum that had emerged so far. This bridge analogy was useful in conceptualizing the reform and was effectively used as a guide for some time.

So what of the Humankind Curriculum? Since the planting of the seed in April and the forming of the committee, no mention had been made of the Humankind Curriculum in the four subsequent meetings. The fragments of this seed had only been referred to in meetings and in documents (e.g. the brain in the Preamble, appropriate approaches to adolescents in the emerging Philosophy statement, references made in Lady Botany's composition). Sometimes when a seed doesn't germinate, it needs assistance:

> *Starting trees from seed can be one of the most rewarding gardening activities, but tree seeds often require a little more preparation than many*

common flower or vegetable seeds. In most cases, there are two ways to start tree seeds: The natural way, which often includes sowing the seeds in the fall, or through forced or 'assisted' germination. The 'natural way' to germinate tree seeds, then, is to allow nature to take its course. Although natural germination is an acceptable way to start most tree seeds, sometimes better and more consistent results can be achieved through forced or 'assisted' germination. Basically, it means using various techniques to mimic the role nature plays in causing tree seeds to germinate. Many seeds require one or more treatment steps to stimulate the germination process (Tree Help Ltd., date unknown).

'Assisted germination' occurred on November 1, 2004, when the Master Arboriculturist, deciding that his seed had lay dormant for long enough, called a meeting of the MSCC and presented his Middle School Proposal. As an introduction to his 17 page document (and perhaps as an attempt to 'warm-up' his audience) he makes the following points (from the Apprentice's notes of the meeting):

- o The present curriculum at BIS needs changing, it is just 'not good enough'
- o Comparison of a Modernist closed system of education vs. a Post-modernist open system
- o A closed system does not match how the brain works/learns; learners need to construct their own knowledge
- o The need to do less stuff better.

The Master's blueprint for a middle school curriculum includes the earlier conceptualisation of the Humankind Curriculum and further articulates the key ideas. This document contains the following 4 sections:

1. Components (philosophy, pedagogy, structure, content)

2. Curriculum Structure 1 (the 4 domains: Prescriptive, Expressive, Negotiated, Vitalic)

3. Curriculum Structure 2 – the Humankind Curriculum (Process, Content, Content Examples)

4. Assessment / Reporting

At the time, this proposal became a core document for the development and implementation of the Humankind Curriculum. The Master, keen to add more

assistance to the germination of the seed, presents at another MSCC meeting two

weeks later where the structure of the Humankind Curriculum was further explained

as well as implications for timetabling and staffing. Questions are posed. The MSCC

was then asked to consider the model and to either accept or reject the Master's

proposal within the next week.

The MSCC meets a few days later with comments in the minutes including:

- o The middle school coordinator expresses surprise in regards to the current situation the committee is in but that the committee still has an important role in sorting through and clarifying aspects of the Humankind Curriculum.

- o That the committee has no alternative to the Master's model so feels obliged to accept his proposal despite dissatisfaction among members with the way this was being forced upon them.

- o Some members feel more time is needed and want to see other models; shock is expressed about time limit and feeling the last 5 months is wasted.

- o All departments end up supporting the document with the exception of Social Studies and Science.

- o Social Studies department expresses concern that History and Geography will evaporate from the middle school curriculum.

- o Issues about timelines and deadlines.

- o A list of questions is produced to present to the Master including 'What is the future of this committee?'

The MSCC accepted in principle the Master's Humankind Curriculum

proposal and this turned out to be the MSCC's last meeting. The Master decided that

the committee had served its purpose of finding a model to base the middle school

curriculum on and that the committee was now defunct. At around this time, the

middle school coordinator's position was also dissolved for the same reason. The

Humankind Curriculum, after months of dormancy, had germinated with the

assistance of the Master and his followers; the seed had sprouted and shoots have

started developing. The Master discusses these events in his first interview:

> *Interviewer*: It was a genuine attempt wasn't it [to set up a committee], to try and have the ideas coming from the teachers?
>
> *Master*: It didn't fail. It didn't work as well as I would have liked it to work. The teachers that got involved started to see more and more and they were discussing things. It wasn't me going along, you know, I spent 3 years waiting for this to happen, really. I'd been hoping that something would emerge and it hadn't emerged in the way that I wanted so I fed things in, I fed people in, I fed ideas in.
>
> *Interviewer*:   And in the end you?
>
> *Master*: In the end I was getting frustrated that we weren't moving quickly enough. And in the third year when I felt that we weren't making progress I felt it was my job now to provide a little bit more effective leadership and so I banged in there as I did to 2 or 3 sessions. I felt something had put us off track and that's what I'm paid to do. You know if I have a vision that is generally accepted on the whole and then if it's not emerging then I feel it's my job to go in there. If the ship's going in a different direction or if the engine's not working I've got to do something to kick start it or to turn the rudder a bit. And that's what I did. Hopefully not too heavily although I'm sure I trod on a few toes … but that's my job.

The insects soon swarmed to devour the seed's fresh sprouts. The Social

Studies department felt they had the most to 'lose' from this middle school

curriculum proposal as it effectively replaced the History and Geography subjects for

grades 6-8 with the Humankind subject. There was much resistance to such changes

from this department and in particular from the Head of Social Studies. A response

was sent to the Master documenting their concerns and comments (this was not

shared outside the administration for some time). Their argument rested mainly on

the need for content to be covered in order to prepare students for the grade 9 and 10

curriculum. The opening paragraph from this document best illustrates their attitude:

> The proposed new middle school curriculum published last Monday is radical in form and content and is intended to have a major impact on the long term development of BIS. This impact will be felt most in the area of Social Studies.

The insects gnawing away (by verbalising their discontent at both formal and informal gatherings) continued for some time. The Master skilfully handled the threats to the young seedling and, as it grew, and as some of insects' concerns were addressed (for example, that enough Geography would be covered in the new curriculum), the insects eventually went away. However, one of them, the leader, relished any opportunity he had to launch an attack on the seedling. The Master's view as expressed in the first interview:

> Master: Yes, History and Geography have been taken off the timetable as subjects … That's still a shocker, still sending shock waves through my Social Studies department.
>
> Interviewer: Why is that?
>
> Master: Because they're very panicky about that. Of course, who's going to teach about the Reformation? We have these things, these are essential pillars. Who's going to do map reading? They're panicking that the kids won't have the stuff to be able to pick up the rest of the course. These are fairly serious, fairly major changes, and for parents too. How are we going to grade? These things are coming in and so we've got to really look at how we do grade.
>
> But the concept, this is the biggest change really, is that in the international school, I hope the student goes out and reflects on the curriculum through the lens of their own background and culture and frame themselves in …   and this is an opportunity right throughout the humankind curriculum that I hope will come in. It will always reflect back on them, their culture, and bringing it back in, in a way that if you've been asked to create an international curriculum, it's very artificial when all the kids want to be the same.

On another front, the insects had other questions that were often constructive in that they raised relevant issues but were simply not addressed at the time:

o   Queries about assessment including no mention of authentic assessment; need for accountability/rigour, criteria for assessment and reporting, rigorous criteria needed for self-reflection.

o   Where are the kids in the Master's work? The child should be at the centre of the curriculum structure but this is not evident.

o   What are the learning outcomes?

o   What are the plans for professional development?

     o   Who will be involved in the development?

At around this time, and fortunately for the Master, the third Green Tree Bash (GTB) conference took place with Johnny Ausbrain and Jules Ozsun as keynote presenters. The Master was blessed with the timing and content of this conference as both speakers were dynamic presenters and both validated key components in his proposal, effectively providing much sunlight and nourishment for the seedling. Both speakers were popular with the parents and Ausbrain, in particular, was most convincing in supporting the brain friendly, going with the grain of the brain, learning about learning fundamentals of the proposed curriculum (which the parents were not aware of yet but it served as a very effective dose of 'preparing the soil' for the soon to be announced changes to the middle school curriculum.) Ozsun was equally effective in supporting the Master's proposal and took on a consultative role while she was there (and for a short time after). The content of her presentation at the GTB had an almost uncanny relevance and was most timely in the school's process of curriculum reform. Both experts complimented each other's knowledge, were building relationships with the learning community that was emerging, and played a role in helping to shape the Humankind Curriculum by providing impetus to the seedling's development.

> *Germination can be as quick as a few days or as slow as several months, depending on the species and the environmental conditions. Once the seeds germinate, move the seedlings to a brighter location. You may need to nurse the seedlings indoors for a few months before planting outdoors. Try to give the young plants as much sun light as possible* (Tree Help Ltd, date unknown).

Another technique used by the Master Agriculturist to assist germination and ensure the seedling was carefully tended was to create a small group to 'take the seedling indoors for a few months' for nursing in order to further the growth of the Humankind Curriculum. This core group was led by the Master himself and included

the Middle School Principal, Lady Botany, the Nursery Assistant and the Apprentice

(the last two were now deemed to be teaching the course next year), with other

faculty consulted as required. This 'nursing' group (the Reform group) met in the

Master's conservatory (office) as regularly as possible to develop the Humankind

Curriculum for implementation in the next school year (starting late August). With

only five months remaining in the school year and the clock ticking, this was the

most productive period of development as they focused on constructing a curriculum

structure, based on the Master's 'blueprint', with shared understandings and

strategies for implementation.

As much sunlight as possible was provided to the young seedling at this time

and some of the strongest rays come from Billy Amsun, a curriculum expert and

Professor from an American university, who came on the scene in November 2004.

His book was discovered in the school library and handed to Lady Botany who read

it and subsequently handed it to the Master. He was impressed with the author, as the

Humankind Curriculum appeared to resonate with Billy Amsun's perspectives on

curriculum reform. The Master contacted him and they started an email exchange

that led to the Master inviting Billy Amsun to the school to become involved in the

development of the Humankind Curriculum. The Master recalls:

> I had read his book … and it fitted in with where we were, with the thinking
> of where we were so I contacted him and said we're doing this, that and the
> other and would he come over and that was where all our money was spent
> from the budget this year but it was worthwhile bringing him over
> (Headmaster Interview 1).

Billy Amsun's initial email response includes:

> Indeed the curriculum you propose is radical (but not too much so), exciting
> (very), contiguous with past curricula (but deviating from), and most forward
> looking (leading us into the century we have just entered).

Billy Amsun arrived at the school on February 14, 2005 for a 5 day stay.

During this time he held several informal discussions with the small Reform group

that were nursing the seedling, and presented his materials on curriculum and

instruction for a post-modern world to the faculty and parents, including members of

the Board of Directors. He provided a wealth of information, advice and inspiration.

The Apprentice's notes from these presentations included the following points that

helped shape the Humankind Curriculum:

- o Presents historic background of curriculum e.g. Ramus (1515-1572) organized knowledge, Calvin – first use of curriculum. Are the reasons we have for the current structures still valid? Those structures come out of particular times and circumstances.

  [The Master used this historic info in his parent presentation in April.

  The 'campaign' for change that the Master was leading was based on the

  notion that the structures have come from a modernist paradigm and are

  invalid for today's students.]

- o The post-modern curriculum is based on networks; simple Boolean networks, where 'the really real, is the relational' (Whitehead). The curriculum should be based on relationships; 'the real thing are relations'. Presents the structure of the Humankind Curriculum as a network and comments: (i) faculty and students are in touch/contact with all 3; (ii) what will emerge is knowledge that is deeper, broader, wider, richer; (iii) they all need each other, look to each other; (iv) need all 3 interacting with each other. Relationships are integral – back and forth, two way (As opposed to connections which he sees as one way). Post-modern instruction is 'vitalic', dynamic and interactive.

- o The Humankind model of the curriculum domains provides a support, structure, and limits; it is a model that has both possibilities and limitations. Also advised not to make the structure too rigid; to be imaginative and flexible and to have a sense of rigour (he spoke of rigour a lot). He liked the domains of the Humankind structure and likened them to the 3 aspects of life: the logic and reason of Science, the narrative, personal, cultural Stories, and the vital, integrity of Spirit (found in classroom, subject, and person). The interplay between science, story, and spirit is important. The *mysterium tremendum* (latin for 'overwhelming mystery') of life.

- o   In response to 'which ideas/what do we teach?' Finding ways to move outside the box – pitch a main idea and throw it into combinations; study a little well; few and important ideas. Alfred North Whitehead: Let the main ideas that are introduced into a child's education be few and important and let them be thrown into every combination possible. The grey areas are the interesting ones – where the opportunities exist to struggle with the materials = learning. All knowledge must be placed in context, creatively.

- o   Encourages the school to explore in depth what we have; that we are beginning to see what we do not yet see.

Amsun proved to be a wealth of information and resources and provided much nourishment to the soil and roots. Upon his departure he presented the school with two key documents (i) *A Report for the Bay International School*; and (ii) *Keeping Knowledge Alive*, which, combined with the impact of his visit, proved to be instrumental in shaping the thinking of those involved in the curriculum reform, especially the Master and Apprentice. Amsun instilled confidence and direction in the reform process and his influence was long lasting (contact was maintained by the Apprentice) and immediately evident in the Reform group's discussions after his visit. Fresh topics for discussion included much talk about relationships, the post-modern paradigm, curriculum as a journey, richness, transformation, and the significance of what we were trying to achieve.

The Master released two documents shortly after Amsun's departure, both containing elements of Amsun's theories. The first included a conceptual chart that attempted to unpack the underlying concepts and themes of the origins and instincts of humans. A few days later, the Master presented another draft of the matrix for the Negotiated domain of the Humankind Curriculum with relationships now prominent (a clear Amsun influence). This 3x3 matrix contains Biological, Social and Spiritual threads that organize the original nine concepts across the three grade levels (6, 7,

and 8). The concepts in this matrix are summarised below to illustrate how changes

occurred as new learning took place and to demonstrate the flexibility and emerging

nature of the initiative (and how some sprouts can be stunted or change direction

depending on the environment). In fact, this matrix became the foundation for the

Negotiated domain of the Humankind Curriculum.

HUMANKIND CURRICULUM

NEGOTIATED: IDENTITY – RELATIONSHIPS

BIOLOGICAL	SOCIAL	SPIRITUAL
GRADE 6		
Evolution	Hunter/Gatherers River Valley Civilization (Select)	Beliefs
GRADE 7		
Environment	Rise and Fall of Empires Conflict/War (Select)	Religion Religion v. State
GRADE 8		
Scarcity	Industrialisation Ideologies (Select)	Religions Conflict Terrorism

Within the seminal topics concentrate on generic issues to enable students to relate through time and across cultures.

Topics were included (not shown above) to illustrate the possible ways to

explore the concepts. This idea of relating through time and across cultures became a

fundamental component of the Humankind Curriculum due to its relevance to the

international school context and the multicultural nature of the students – that they

bring their own culture to the learning, that they learn about their own culture and

other cultures, and that this helps build personal identity. 'Through time' refers more

specifically to the spiralling, recursive nature of the curriculum and that the

curriculum was not necessarily linear; that links are often made to the learner's

present context, and that students can come and go through the curriculum (because

of the transient nature of the student body) and still get a sense of the whole picture (i.e. the story of humankind).

Around this time it was decided that the Humankind Curriculum referred to the whole middle school curriculum and that the Negotiated and Vitalic Domains were the Humankind Core subject (to be known as the HKC). This was never formally nor officially promoted which lead to ambiguity and confusion among staff for some time. Furthermore, the focus at this time, and for the short-term future, was on preparing a curriculum for the HKC classes (8 periods a week each for grade 6-8) that were to commence in August; there was no time or energy left to implement anything more. The Board of Directors had now approved the Master's plan and the new structure was incorporated into the upcoming school year's timetable.

The Apprentice and Nursery Assistant were well and truly united in their struggle to understand what the HKC was meant to be and how they were going to realise it in the classroom in a few months. The Nursery Assistant, upon reflecting on the issues at hand, sent the Apprentice a 'rave of ideas' and many questions about what had transpired in the development process and what could be going on. She considered these ideas to be, 'the result of discussions, essences of ideas from the collective 'us' discussions over the last few weeks in particular.' Her concerns were about managing and planning the process of developing and implementing the curriculum innovation and are included here as insight into the perspective and emerging understanding of another key player in the curriculum reform process:

- o Ways to include the other two teachers who will form the team for next year (the plan is to have 4 teachers with the whole year level at a time, 50-60 students, in an open learning environment)

- o Release time provisions for us to work on details and that this would also be 'an acknowledgement/recognition, in principle, of time

involved/needed in development of an innovative middle school curriculum.' (Two days time release was eventually provided later in the year to prepare for the start of the program.)

o Preparing the students for the changes: 'Involving them in the planning/expectations/new demands of their curriculum?' (This never happened so the students were unprepared for the changes the following year. The biggest change was for the grade 8s as they would lose the History and Geography subjects from their timetable.)

o Resources – raised issues of budgeting for a new program and providing the resources needed including the space, furnishings, and computers. (All this was eventually taken care of and financing the changes was never an issue).

o The Homeroom Tutors role in establishing supportive relationships with the students (This was followed up in later discussions as the tutor/student relationship was identified as an important role in developing identity.)

o Questions regarding the implementation of an innovative curriculum (What are the essentials? How do we record it?)

o Issues regarding evaluation of the new curriculum and what criteria will be used to judge the effectiveness of the Humankind Curriculum.

o The connection between Ambassador Greenforest and Billy Amsun and the management of the basic principles that each offers to form the basis of what we're trying to construct.

o Outside interest in the program and any relationship that we are to form with the other schools that the Ambassador had mentioned.

After having sheltered and nursed the seedling indoors for several months, the Master felt the timing was right (and in fact necessary) to inform the middle school parents of the changes that were to occur to the middle school curriculum. All middle school parents were invited to attend the Master's presentation held in the school auditorium. This event was well attended with about 200 parents and some teachers. His presentation, influenced by both Amsun and the Ambassador's assertions, presented the case for change and then unveiled the Humankind Curriculum to the middle school parents for the first time. The presentation was also videotaped. The Apprentice's observations of this event are below:

o   Presented the argument for change from a historical perspective.

o   Introduced the postmodern paradigm and how schools need to shift into this thinking.

o   Presented the structure of the Humankind Curriculum.

o   The Master was particularly focused on the reasons for making the changes to the middle school curriculum and covered this is some detail leaving less time to present the changes.

o   He answered some questions from the audience. Parents received the ideas favourably. Some concern about students who change schools half way and if they will be prepared enough to enter back into mainland schools (especially the USA). Concern especially about History and Geography not being specifically covered.

o   The Apprentice spoke to some parents afterwards who indicated a very positive and welcoming response to the changes.

The Master presented an analogy for school change that was revealing of his approach to leading change (it has been expanded it a little here to apply particularly to changes in international schools): Schools are like a jumbo jet – heading to a place through the air with the passengers on board coming from many different backgrounds and experiences and, whilst heading in the same direction on this flight, ultimately are heading to different places. The pilot (headmaster) and crew (staff) try to make the journey as comfortable as possible for everyone. The pilot will try to make changes without upsetting people thereby minimizing turbulence. The internal atmosphere of the cabin and the external environment both contribute to the smoothness of the trip.

Part of the reasons for this presentation was to 'minimize turbulence' for the parents (and to get them comfortably on board in order to minimize the turbulence that could be caused in the future). This analogy of minimizing turbulence can also be applied to the actual reform that was taking place. The actual changes suggested here were neither groundbreaking nor wide-ranging. By differentiating the 4 domains,

all other subject areas are unaffected at this stage of the reform. As far as the parents were concerned, the difference was the reshaping of History and Geography into the HKC subject (a contentious issue for some) and a realignment of priorities on the timetable.

The Master reflected on this two years later: 'I didn't touch Math, Science or English, I left it as it is because parents here consider it too important. I left the grades there as well' (Middle School teachers meeting, May 2007). As a Master Agriculturist he must also have known that tree seeds must be planted much shallower than other seeds. This can apply to the case that the reform proposal didn't go too deep in terms of major structural changes to the school and did not overly challenge the stakeholders' understanding and tolerance for change. The significant changes were to be in the mindsets of the teachers and the way that teaching and learning in the middle school was to be approached.

The Reform group continued to meet regularly during the remaining two months of the school year. The other two teachers were appointed – one grade 6 teacher who was returning to the school from a year's leave, and the other, a Geography 'specialist', employed locally. The Geography teacher was able to attend some meetings when possible. The following quote, used at one of the meetings, perhaps best illustrates what was going on in this frantic period of the process.

> If you look at any of the work on creativity and learning, or if you look at the lives of great scientists, or if you look at you own creative process, it's not a nice orderly step-by-step process that moves you towards a great idea. You get incredibly frustrated, you feel you'll never solve it, you walk away from it, and then Eureka! – an idea comes forth. You can't get truly transforming ideas anywhere in life unless you walk through that period of chaos (Wheatley 1999, p. 43).

Significant developments during this period of chaos, creativity and accelerated growth are presented here.

The new classroom and timetable

Part of the Master's plan was to have one large learning environment with 4 teachers working collaboratively. Insights into his thinking on the middle school reform are revealed as he explains this idea in the first interview:

> *Interviewer*: There's been other changes too. What about the building? Where did that idea come from, to have the big open space with lots of kids, lots of teachers?
>
> *Master*: You need a block of time so that's why I've gone with triple periods between breaks. A proper break. ... let's get more than one person in there and get people together where the kids can learn alongside the teachers ... we've got to learn along with them. I like the idea of, first of all, large blocks of time, lots of teachers involved and of course the idea of the specialist room ... I do want a specialist area because it's an area where they have greater freedom so I did want an area where that was in place, so it seemed to make sense that if I want 3 or 4 teachers in the middle school working together on similar things and given the flexibility I don't want to go from one class to another class to another class ... let's start with a big area so I got more teachers all the kids and rest will be chaos (laughs)
>
> But interestingly just last month I read a book and it talked about a learning plaza and it was all there. But this was for a high school concept. Well I think the middle school is the lost section of most schools and it has been for a long time but we now know, and this is so important, we now know that it's one of the most important areas of brain growth and development and human being formation. In fact we've know that instinctively. The best teachers have always known that, but now we have hard scientific evidence saying, so it must be right. Evidence that that's a key place. But to get to there, I mean these are radical ideas for teachers you've got to fully sow the seed. I've spoken to teachers about this, I've spoken to parents, at [GTB], I've talked to the middle school committee, I've talked to the heads of departments, and the Board, and the Trustees. So there are lots of opportunities where you drop this in. All you get then, and I've had 3 meetings with parents, all you get then are at least that the parents are prepared to give it a whirl. I've been here 9 years, they like most of what's happened so they're prepared to give me a

chance and I don't think many heads would be able to do it after 2 or 3 years I couldn't have done this 5 years ago (Headmaster Interview 1).

The Apprentice mostly led the discussion on the layout and requirements of this new learning space. The three existing grade 6 classrooms were redesigned into one open space. Storage spaces for students, audio-visual facilities, interactive Smart Board, 30 new laptop computers, movable furniture, teacher work spaces and other supplies were decided upon and ordered. Funding was not an issue as the Board fully supported the initiative.

<u>Student Input</u>

The Nursery Assistant put forth a proposal for involving students in the planning process. Despite agreement on the appropriateness of involving students, no action was taken mostly due to the sheer overwhelm with the task at hand.

<u>Vitalic Domain</u>

It was agreed that the Vitalic component of the Humankind Curriculum will parallel and compliment the Negotiated content covered in the eight periods. The School Counsellor was to be involved in the process. Flexibility was key in implementing this new structure.

<u>Content</u>

This was discussed the most as it was of prime concern for the teachers who were charged with teaching this new class of 60 students in two triple periods and one double period block. The need to define the 9 concepts that made up the matrix was essential in order to proceed any further. The Apprentice and Lady Botany started with succinct defining statements, which led to the Master devising a list of essential understandings, and then further defining of the concepts and possible ways to unpack and present content was continuously discussed. A method was unfolding

for exploring these big ideas with the aim of hanging the outcomes around the nine concepts. Each area of investigation would be introduced through case studies, and students would be required to reflect upon key concepts through their own experiences and cultural backgrounds. Within each of the seminal topics, there would be a concentration upon generic issues to enable students to relate to issues through time and across cultures.

The Ambassador Visits

Ambassador Greenforest visiteds the school for half a day on his way back to England from somewhere. He was impressed with the progress being made and was keen to offer any advice or support he could. In the brief meeting with the group, he spoke mainly on areas already covered but also encouraged the teachers to 'capture their imagination on what it means to be human'. He considered one of the challenges in middle schooling to be inspiring the students to become interested in their Self, who they are and where they come from. He also cautioned that students are pretty much trapped in a 'learned helplessness' and teachers needed to provide time and skills for them to break free; and that it takes time for teasing things out. He also talked about a new model of 'learning systems', Philosophy courses for children, and recommended books for teachers to read.

Features of the Humankind Curriculum

This document was released in June, just days before the summer break, and summarised the state of the Humankind Curriculum at this point in time. The two page document (summarised below) was divided into 8 subheadings and represented where the curriculum initiative was at by the end of this school year:

1. Process driven – a clearly defined process will provide the framework for investigations.

2. Negotiated investigations from generic concepts – concepts examined will be relevant to today's society and the students own lives. The concepts will be applicable through time and across cultures, and the students are free to negotiate their own areas of inquiry based upon the concept under investigation.

3. Individualized investigations – students will be expected and encouraged to explore their own cultural backgrounds throughout the individual inquiry. Each inquiry should be unique to the student.

4. Skills based – a list of skills

5. Holistic and inclusive in aim – the course will be constructed in recognition of the complexity of our knowledge systems, and allows for creative thinking in a range of directions.

6. Collaborative – an important part of the overall process is the opportunity for group activities, discussion and exchange of ideas.

7. Guided and supported learning – a major part of teaching time will be coaching students in their learning. Teachers will observe the learning taking place, and make suggestions when appropriate. More time will be spent supporting students rather than in formal 'teaching'.

8. Brain friendly – current research on how the brain learns, and the optimum conditions for learning will be applied whenever possible.

The school year ended with the Apprentice and Nursery Assistant feeling both optimistic and apprehensive about implementing this new curriculum that they feel they still don't know enough about. They found most comfort in the stance, 'let's see what emerges.'

Lady Botany's written reflection provides a summative perspective on the reform 'journey' so far from another point of view (note MSC = Middle School Curriculum):

What is most extraordinary to me now as I look back on the 'journey' of developing the MSC is how much of what we are proposing for the MSC reflects what we have just experienced.

We had no single preconceived idea of what we wanted from the MSC. A group of people from a diversity of viewpoints, with a diversity of interests met to negotiate a curriculum, a path, which would be satisfactory to all. It

wasn't always harmonious or easy but it soon became apparent that nothing would emerge if we didn't collaborate. This meant each of us had to be open to the ideas of all the others. When we came up against 'Closed systems' by which I mean people or departments who were unwilling to negotiate, then we stagnated.

The curriculum has emerged from the input of those who lasted the course and we have ended up proposing that a journey of collaboration and relationships that honours the voice and direction of each individual is the best.

This reflects the ideas of the new paradigm of postmodernism in a global world of which (this school) is a microcosm.

4.2.6 A Young Sapling: The Apprentice at Work

The seedling was laying roots, sprouting leaves and developing into a sapling.

A tree grows upward from the tips of the branches, downward from the roots, and outward from the trunk. The roots anchor the tree to the ground, and the trunk gives support to the branches. As the tree grows from the food it manufacturers, it adds new layers of wood to its trunk (Appalachian Hardwood Manufacturers Inc., date unknown).

The Apprentice had been thinking about the seedling all summer holidays and whether it would grow into a sapling or just whither and die. He felt that he had been well-trained by the Master and all the experts he had provided for them and was highly motivated for success. He was keen to get started and arrived at school 10 days early to get things ready. He was pleased with the newly renovated classroom and saw its potential as a unique and empowering learning space. It was designed specifically to facilitate the philosophy and approach in the HKC class and he felt satisfied as he looked around and saw many of his ideas realised. How it would in fact work, and how flexible the space would actually be with 55-60 students and 4-5 teachers, remained to be seen; but he was confident and prepared for the challenges that lay ahead.

The classroom's resources were also impressive: three classrooms converted into one 140m2 open space, carpet tiles in a cool green colour, ceiling mounted

remote-controlled projector, DVD/Video/Music mixer and console, 30 brand new ibook laptops, an iMac, a smart board, whiteboards, stackable tables and chairs for 60 students, 60 storage cubbies for each student, TV, teacher desks, and bookshelves. No expense was spared and they got everything they had asked for. The Apprentice proudly made and hung up in the corridor a nameplate for this new place: *The Humankind Centre.* This was, after all, meant to be a special place for the middle school students and certainly this classroom was unique in this school, perhaps in the world.

The Apprentice was keen to see what would emerge out of this curriculum initiative and how the 'tree' would develop. He had been committed to its success for over a year now and had worked long and hard to get the seedling to where it now stands. Not that it stands very tall, or that it was deeply rooted, but it was healthy and full of promise. He knew that there was more that they didn't know than they did. They were in unchartered territory and were mapping the course with an incomplete compass. He was not completely convinced that enough was in place to be able to implement the program with the students right now but he had faith and trusted that all would unfold as they got going.

The Nursery Assistant was less trusting about teaching a course that she barely understood herself and had taken some convincing by the Apprentice that they were going to be okay. She felt it was premature to implement such a large project when they had had so little time to develop and prepare. This was true. Where they disagreed was that she wanted the Master to lay things out for her, whereas, the Apprentice was happy to create around the loose structure that the Master had provided. She may have been right, but they had to move ahead anyway, they had to take action, to take those first steps despite their uncertainties. The Apprentice agreed

with the Master, they just had to do it – it's the only way that they would learn; the only way the tree would grow.

The school's *Curriculum Handbook*, distributed to all parents in CD format, had been updated to reflect the middle school curriculum reforms. An excerpt is included as Appendix F as this was the official school position on the reasons for the changes, and summarises what the Master had been presenting to the community.

The Apprentice and Nursery Assistant were clearly united on the importance of the four HKC teachers' relationships with each other. It was essential that they got along, trusted each other and built a strong, collaborative team. All four teachers had experienced team teaching and collaboration to some extent (the Nursery Assistant the most with her 6 years of PYP teaching) but never to the degree that was now being demanded. There were no doors to shut out their peers in this classroom and they were going to be constantly in each other's view whether they were actively 'teaching' or not. They were all going to be taking risks and needed to trust each other. The Apprentice and Nursery Assistant were debating which attributes were more necessary for success – the teacher's skills, experience and knowledge, or their ability to work with other people in this truly open and collaborative environment. Both were important but they felt the latter was more essential.

So far the four members of the HKC team were all getting along fine. They all came from different backgrounds and experience: Australian female, 20+ years elementary; New Zealand male, 10+ years elementary and music; British male, 20+ years middle/high Geography and History; and Australian male; 15+ years middle/high ESL, English and Social Studies. They were pretty much unknown to each other (although the Apprentice had worked with the Nursery Assistant in grade

6 the previous year) and had much to learn about each other as well as from each other. Personal beliefs on many issues, including their approach, would be challenged and, consequently, articulated, shared and reshaped. As a team, they were charged with developing and implementing this curriculum and their capacity to work collaboratively was crucial. Although group roles had not yet been defined, the Apprentice had naturally taken a leading role and the other three seemed comforted by that.

'I am trusting you', said the Master to the Apprentice just weeks into the new school year, 'to deliver the Humankind Curriculum without me being too much involved.' Well the Apprentice was pleased but the Nursery Assistant wasn't. For him, this further heightened the sense of ownership that he was already feeling. But the Nursery Assistant was still unconvinced. The students were about to start and on the one hand the Apprentice felt a bit like a midwife delivering someone else's child, and on the other he felt like an expectant father, with a plethora of feelings and emotions – joy, anxiety, fear, trepidation, excitement, relief, wonderment and anticipation for the future.

An early priority that the Apprentice introduced was to build a learning culture that would complement the aims of the HKC. This whole approach was supposed to be different to what the students had been experiencing so a 'new' learning culture would have to be cultivated. One of the aims was to build a strong middle school community and this would involve building the communities that were naturally nested within one another. They had the opportunity in the HKC to build community within each year level, as the students from each group would participate in the class all at the same time. The four 15-18 student homeroom groups formed

another community, as did the three 18-22 student tutor groups (assigned for the other subjects) as well as the language groups, based on student preferences.

Billy Amsun's notion of 'curriculum as community' could be realised here; where the community, the social context for learning, is a dimension of the curriculum that acts as organising glue and becomes the vehicle through which the process of learning can occur. The Apprentice believed that a strong school community is a feature of an effective middle school and Billy Amsun articulated its importance as an essential, integrated component of curriculum. The Apprentice also knew that it would have to be a school-wide, collaborative effort but he was not yet entirely sure how to go about it.

Shaping the school culture like this would require leadership capacity on several levels, and would require much collaboration. For the time being, he was confident they could make a difference in the HKC class and perhaps that would have a rippling effect into the rest of the middle school. The Master often spoke about getting the HKC sorted out first and then the approach could expand deeper into the other domains of the middle school. With this goal in mind, many of the early sessions in the HKC were devoted to community building activities, including special presentations by guest staff from the local Project Adventure organisation.

By four weeks into the term some of the teachers' initial concerns had faded (and new ones had appeared). The four of them were especially concerned with the long blocks of time that they had to work with – up to 2 hours in some cases. Patience and noise tolerance was definitely another required teacher attribute. This was new to them all and the idea of preparing relevant and engaging learning experiences for a triple period (2 hours) of 6-8th graders seemed overwhelming at

first. As they were getting more experienced at it they were adjusting their approach and finding, ironically, that they were often running out of time. The students also had to adjust to the new context and timetable. All their other classes (except for the arts and PE) were 45-minute single periods, so two triple periods and a double each week was a major adjustment for them. Just managing the time and space in this context called for a whole new approach to teaching that they were still grappling with.

A key ingredient in the growth of this tree was the HKC teachers' pedagogy. With five teachers (including the School Counselor) working together from differing backgrounds, experiences, and expectations, the challenges were apparent. How had their personal pedagogy been formed? What was their shared approach to successfully delivering the curriculum in the HKC class as well as the whole middle school? They had accepted the underpinning principles that the Master had presented, however there were clearly differences in their personal approaches that impacted their understanding and actions. They were all feeling challenged by this new context and spent much time engaged in discussion but they had never really constructed a common pedagogical approach, nor considered drawing from any authoritative pedagogy. Broad terms such as 'constructivism', 'inquiry-based', 'teaching for understanding', and 'brain-friendly' had been tossed around and added to the mulch but at this early stage of discovery they were yet to unpack exactly what these implied and how they could be applied to their context.

Their planning discussions, guided by an inconsistent understanding of the HKC features and aims that they were still coming to terms with, were primarily focused on providing engaging content and activities, and managing the time and space. Engagement in learning was their priority and they were trying out ways to

achieve this. One hour of meeting time each week was designated to reflecting on what they were doing and how they felt it was going and this proved to be a valuable practice that they maintained. They were making progress in unpacking and developing an effective approach to middle school learning in their pocket of the school but a whole-school approach was out of reach at this stage and would require a renewal of collaborative vision building, goal setting, and leadership.

The HKC was pretty much running on its own as far as the rest of the school was concerned and, with the Master effectively stepping aside, there was an identifiable need for a different leadership capacity to drive and expand the reform process. Then again, perhaps no one was ready for this yet; the tree was still so young. Time was needed to provide for the required growth and maturity, when more roots and branches could emerge, to provide for these bigger ideas.

The focus on 'learning how to learn' got kick-started by Johnny Ausbrain, who was invited back to the school for a week to launch the brain thread of the HKC. The whole community (students, teachers and parents) enjoyed Johnny's classes immensely. The brain dissections were the highlight, and a real buzz about learning about the brain was evident. It was interesting to watch the kids so engaged in his work and to listen to them talking and learning about themselves as learners.

He had left the teachers with a number of resources and ideas and they now had a number of options to follow through and continue with what he had introduced. The plan was for him to return and take them to the next level in a training program where the teachers could learn how to lead the students through his modules on the brain and learning. This provided a reliable source of nourishment for the soil and the tree. It was also a commitment by the school to establish an ongoing relationship

with an outside specialist and provide effective on-going professional development for the teachers; as opposed to the regular approach of bringing in specialists as a one-off and losing the momentum, skills and knowledge after they leave.

Johnny Ausbrain and his colleague were rather impressed with what the school was doing and even commented that they visit many innovative middle school programs and that what was being done at this school 'leaves the others for dead.' That was gratifying for the HKC teachers to hear. When Johnny was asked what he thought to be the most important ingredients for successful teacher teams, he considered skills for being collaborative and building team capacity to be vital.

The Apprentice had been thinking and talking about collaboration for some time: how the students would collaborate with each other and with their teachers, and how the teachers would collaborate with each other, how they would build a learning community. Johnny's comment made him think about what these skills were, where they could be found, and what they were doing about developing them for the students and themselves. Were they even in fact skills, or were they more personal attributes? Perhaps both? Was collaboration even the issue or was it really, as Billy Amsun and others suggest, all about relationships and community? The Nursery Assistant frequently reminded them that they should be modelling for the students what the teachers expect of them. The four teachers were certainly collaborating and the whole reform process so far had relied on a collaborative approach.

The *Back to School Night* was an annual event, held in the third week of the school year, for middle and high school parents to visit the school in the evening and gain a sense of what the students would be doing during the year. In the first part the parents listen to short speeches from various department heads and then proceed to

visit classrooms or booths set up by the various faculties. This year the middle school parents were all invited to a presentation on the Humankind Curriculum.

There was enormous pressure for the HKC teachers to put something together for this presentation so early in the year, and the Apprentice had been working frantically to create something that the parents would appreciate. The presentation he settled on captured his understanding (with the team's agreement and the Master's approval) of what the Humankind Curriculum was about and how they plan to implement it. Other than the basic structure, the content details of the HKC were still unfolding so they had very few details to share with the parents about what they were going to be doing in class beyond the next week or so. It was still a huge work in progress but they wanted to play that down to the parents. They had a big picture but at this point we were still very much trying to hang the meat off the bones that the Master provided.

They strategically planned for a 15-20 minute PowerPoint presentation with no question time (the parents had to go off to visit other subject areas). Indicated by their responses, the parents (about 80 in a packed Humankind Centre) were pleased with the presentation. Some follow up questions were taken up individually after the presentation and these were mostly from new parents to the school. The Cockatoos were happy and the Master was especially pleased with his young Apprentice.

The teachers noticed that the students were not accustomed to being asked to think about their learning, to reflect, and then to express and develop their thinking. They were passive learners and less inclined to actively want to construct their own learning. Evidence, perhaps, of what the Ambassador was getting at regarding students trapped in 'learned helplessness'. This was especially so with the 8th grade

students, who had not been exposed to a reflective inquiry-based approach for some time, and were the most reluctant to engage in metacognitive tasks. The younger students, in particular the 6th grade, were more comfortable and competent at being active thinkers and reflecting on their learning. They were used to it from the PYP (and part of our approach was to draw upon the relevant practices of the PYP).

The HKC teachers were actively building a new learning environment with different routines and practices and accepted that it takes time to cultivate the students' skills and approaches to meet the demands of these new expectations. The benefit of much of what they were doing may not be seen for some time. For example, they couldn't really see how much the students had assimilated the materials covered on the brain and learning because they had just started increasing awareness in these areas, which was not immediately visible. The teachers acknowledged that they hadn't provided enough time for the students to reflect and were constantly discussing and trying out different strategies for optimizing the opportunities and methods for reflective writing.

The Master proposed that he come into the classes and present his materials on the Hunter and Gatherers portal (we had agreed at some point to call the topics 'portals', as a gateway to exploring the big concepts.) The teachers were all willing to support the Master, even though they didn't have a thorough understanding of what it was he wanted to do or how it fitted in with their plans. He was keen to get into the classroom to launch the negotiated part of the Humankind Curriculum and the Apprentice was particularly interested in seeing how he would go about it. It would be useful for the Master to experience first hand some of the ideas that he had initiated. The Apprentice believed that getting into something and doing it deepened their learning (just as they expected the students to engage) and that the Master

would also benefit in this way. The teachers arranged for the Master's visit and prepared the students for the launch of the Hunters and Gatherers portal.

The Master took the HKC classes for several weeks and the following observations illustrate the impact this experience had on their professional growth and the development of the sapling:

- The opportunity for the Master to work with the class and to experience first hand the delivery of this curriculum in the context he had created enhanced his own learning and shaped his thinking and awareness of the challenges of this reform initiative.

- It took the focus/pressure off the Apprentice and he could observe his students learning.

- While the Master was presenting the Apprentice was forming ideas about how to present similar content.

- The most successful sessions (judging by the students' observable engagement in the tasks) were when the students where 'doing'. The Master's simulations were especially engaging and the students' reflections revealed an enjoyable experience as well as the ability to demonstrate key understandings. This was beneficial to the HKC team as it (i) heightened their awareness of the importance of varying the tasks over the time period and (ii) led to development of other simulations.

- Confirmed that pedagogy was a vital ingredient in this reform process. Lecture style mode was clearly not engaging for middle school students

- The experience heightened the team's awareness that collaboration takes time and must be active, inclusive and intentional.

- Presentations to the students in this context must be carefully planned, well resourced and differentiated for a range of skill abilities.

- Adequate background knowledge was required for students to be able to negotiate a research topic.

- An appropriate approach to research needs to be agreed upon, and applied across the middle school.

- Changes made to key components of the curriculum that were not shared or discussed caused confusion and frustration.

- Agreement on key terms (e.g. concept, inquiry, research process) needed to be shared.

- Trust between the Master and the HKC teachers was strengthened in many ways (e.g. by the opportunity to collaborate and create learning experiences with the Master); but some 'cracks' had also formed (e.g. unexpected changes to the curriculum; lack of agreement on some key terms such as concept, inquiry, and the research process).

The school held another *Humankind Curriculum Information Meeting for Parents* (November 8, 2005). This meeting was held as part of the Master's campaign to keep the parents informed about the reasons for the Humankind Curriculum and how it was developing and being implemented. Keeping the Cockatoos happy was an ongoing priority for the Master and he seemed happy to oblige. However, only some 30 parents attended making the school auditorium seem empty. The Master presented much the same as he had last year, with some updates, going over the reasons for change and sharing some of the areas covered in the HKC class so far. Convincing the parents that their children were not missing out on any History and Geography concepts (a concern that was still being raised) was a theme of this presentation.

February saw the end of a 'cycle' so the team took time to reflect on what had been achieved so far and where they considered improvements were needed. They had a meeting with the Master to share and discuss their observations on how they were doing. This review meeting came at a time when they were collaborating at their best and things were falling into place. They were all rather upbeat about the exponential growth in their learning and the progress they had made. They had gone around many corners, up and down bumps, and were having breakthroughs. Things were clearer now than they had ever been, for the Apprentice anyway. So this meeting was a very positive experience and the Master had much to say, all very encouraging and positive. He realized, and admitted, that it was not in the students'

best interests to attempt huge projects (such as the research essay he had set) without them being thoroughly prepared. They considered reshaping their approach so that the research process was more incremental and building up to a significant research project at the end of the 8th grade. They all agreed that managing time was their greatest challenge and all had a chance to express their thoughts on their perceived strengths and weaknesses. These are summarized here.

Strengths

- o Students had produced a significant document in the research essay they had been working on (topics were negotiated).

- o Students had engaged in a research process over a number of weeks that allowed them the opportunity to develop an area of interest, search for information in this area, record information from a number of different sources, use the information to organize ideas, and write an essay based on these discoveries.

- o A framework for conducting research was provided (but this needs improvement in terms of how students access and use knowledge).

- o Students were guided by teachers in the groups (though more preparation by teachers would have benefited the students).

- o Resources were provided to students and they were able to access a broad range of information in most cases. The library was very supportive.

- o Space and time was being utilized effectively during class time.

Improvements

- o More guidance required for essay writing.

- o Student background knowledge lacking; they were unprepared for the inquiry process.

- o Time for drafting and rewriting (where the real learning takes place).

- o Assessment criteria should be known to students upfront.

- o Less breadth in the topics so that more effective guidance could be provided.

- o More depth in the students understanding should be demonstrated during the process.

o The whole process was unstructured in terms of links and connections.

o A driving concept/s to frame the whole inquiry process was lacking; the inquiry was not driven by big questions or big ideas.

o Resources were lacking in some areas and more direction from teachers could have been provided.

o Some students became bored and/or overwhelmed with the project (especially in year 8).

o The reliance on class time to work on the project did not allow class time to be used for other learning experiences. Homework is required.

o No choice in presentation (all were essays).

o It was our first attempt at negotiating the curriculum with the students and more structure is needed to enhance this process.

This informal discussion was their first attempt at reviewing and evaluating their progress. In terms of the tree metaphor, the sapling's roots were anchoring, the trunk was thickening, and branches were growing and strengthening. Guided by the teachers' collective experience and shared reflection, they had identified areas that needed more attention and were becoming increasingly aware of what cultivated the sapling's development and, equally important, what could be seen as hindering growth.

Completing the assessments for the essays was another fruitful learning experience for the teachers and they shared their personal perspectives. It was a long process as they used a detailed form for the teacher feedback. Overall, the teachers were pleasantly surprised and impressed with the students' compositions and there were many examples of quality writing that managed to capture not only an understanding of the topic being researched but the exceptional ones were also able to make connections to their own identity. This was pleasing considering the students were inexperienced in making such connections and little time was spent on

facilitating this difficult task. The teachers provided extensive comments and the assessment process also included an extensive student reflection.

The triangulated assessment included: 1. Process assessments along the way; 2. Student reflection with parent comment (this needed to be explained more clearly to parents as some misunderstood the purpose of this task and directed comments to the teachers rather than directly to the student as was intended); 3. Teacher assessment completed by the research supervisor that the student worked with. This was sent to parents as part of the HKC report card for the first semester. One of the goals of assessment in the HKC was to provide regular and authentic feedback to the students and involve the parents in discussing this feedback with their child. Part of the reculturing challenge was to open up the communication between parents and student and parents and teachers. It was another component of the reform process and another budding branch that was primed to push forward.

The HKC teachers were grappling with the issue of student feedback. The Apprentice and Nursery Assistant considered genuine, collective student feedback to be an important component of informing middle school reform and it had come up in the early stages of development but they just hadn't been able to harness it yet. They stumbled across hearing student feedback as, quite spontaneously, an open discussion with the students was held in class about the essay's assessment/feedback method. The grade 8 students had struggled the most throughout the year with the absence of letter grades (these had been used the previous year in their History and Geography classes) and were still used for the middle school subjects in the *Prescriptive Domain* (Math, Science, English, and Languages). This essay that they had just been assessed on was the biggest project to date in the HKC so their feedback was welcomed by the teachers. About half of the sixty grade 8 students (an

unusually high rate for this class) contributed to the whole class discussion and we recorded their insightful comments as summarized in Table 4.3.

Table 4.3: Grade 8 Student Comments on Assessment

For Grades	For Comments	For Grades & Comments
Know what grades mean	Scores were basically same as letter grades, so could see what you get plus get lots of useful comments	Comments were good
Give more sense of achievement		Points on scale were like grades
Could compare with other classes	Less stress; don't compare to others	Grade plus overall description was best
Not used to having comments	Grades shouldn't define you as a person	'We all had our standards to keep and if I get lower than a B, I could easily tell I had to improve.'
Know where you were e.g. in top half	Some people take grades very seriously	
Done so much, want a bit more back	If you get F, it shouldn't mean that everything you did was a failure	Comments were useful but harder to tell how going with just comments
Could try harder to improve i.e. get a better grade next time	Some people do what teacher tells them to do to get an A = no creativity	
Know where we were	Different expectations in different subjects so couldn't compare anyway	

The girls dominated the discussion (about 86% of the comments came from girls) and the teachers noticed that the high achieving girls were the most in favor of a graded mark on their work; they appear to be most interested in comparing themselves to other students and subjects. Unsurprisingly, the 'weaker' students were not in favor of a letter grade and preferred just comments. In the end the students were told to calculate the points in the numbered section of the form to get an idea of a grade if they were so in need of one, and some were happy to do that. Our discussion closed with agreement that all students value the comments and extensive feedback but many still prefer a grade as well.

Given the valuable insights we gained with the grade 8 discussion we decided to raise the issue with the other classes. The grade 7 discussion was not as lively and they did not express such a strong feeling on the grades issue. All indicated a

preference for the extensive teacher comments and less than 25% indicated a preference for both. The grade 6 discussion was conducted in small groups with positive comments about the essay feedback and few students were concerned with grades. Student comments included:

> *I could easily see what I need to do to improve.*
> *Lots of comments were good.*
> *I could see it all in one go.*
> *I like the separated sections but more numbers would be good.*
> *Would like a grade too … overall score like other classes.*

This data provided the teachers with informative feedback from the students, with the differences across the age groups proving most interesting. Not surprising when considering the enormous differences in emotional and intellectual growth between a 12 and 14 year old adolescent. This feedback also provided some indication of the culture of the school where students (and parents) are highly driven by grades (especially in the high school) and learning and achievement was expressed and understood by a letter grade, score, or ranking. Several issues were raised here that needed to be addressed across the middle school. The reform process would at some point have to include assessment procedures and reporting as this aspect of the curriculum had yet to be reviewed. The Master was philosophically opposed to grading in the middle school but knew that removing grades totally at this time was too big a change for many teachers, students and parents to accommodate. He knew not to plant the seed too deeply as it would never have germinated.

The perception of not doing enough geography continued to be discussed within the HKC team, with the Master, and with other teachers. The requests for more geography from the students were particularly evident with the grade 8 group.

This was probably because they were doing History and Geography as separate subjects the previous year and this year they were absorbed into the HKC. It seemed they felt they were missing out on something but they didn't really know what it was (or had a very narrow perception of what Geography was) when in fact we were covering a range of geography skills and knowledge. The following comment from one of the year 8s provides a student's perspective: Copenhagen came up during a presentation and one girl didn't know what country it was the capital of. One boy turns to the teachers and says, 'That's because we don't do enough Geography!' A cheeky comment said in jest but indicating his opinion of what he thinks Geography was (many students seem to think that it is solely about capital cities).

The Apprentice suspected this misperception was fueled by a lack of being really clear about what they were doing in the HKC and why. The teachers and Master were aware of this Geography issue since the start (as it was the only real concern expressed by parents and caused the most distress amongst the Social Studies department) and it may take some time for the perceptions of students and parents to catch up with the leap that the HKC had made in terms of how geography would be studied (i.e. in a relevant and connected context rather than as an isolated subject). However, a clearer articulation of this approach would have helped everyone. The Apprentice had a revealing conversation with a parent on this:

> *Parent*: Why aren't you doing more geography in HKC?
> *Apprentice*: What do you think Geography is?
> (She didn't really know and could not answer.)

This supported the Apprentice's position that this perception about a lack of Geography was based on their structure of integrating disciplines of knowledge and that some of the students and parents were struggling with this practice as it

mismatched their own experiences and perceptions. Despite the Master's repeated efforts at explaining what they were doing, some parents' understanding of knowledge and the way it was constructed and learnt was incongruent with this approach. The parents' different understandings were not surprising given the diversity of backgrounds that they came from (with over 40 nationalities in the school community). Time was needed to adjust to the changes; and ongoing and explicit communication in what they were doing in the class and why could have impacted the reculturing process more effectively at this early stage.

Lady Botany, the Nursery Assistant, and the Apprentice discussed leadership in the HKC and in the middle school quite regularly. They all agreed that despite the strong relationships they had built with each other, the HKC was doomed without someone with the capacity to collaborate, coordinate and lead the process. To develop and implement any kind of curriculum reform without the supporting structures, especially one as fundamental as leadership, was unlikely to succeed. Leadership was there, the Master's and the Apprentice's, but Lady Botany and friends were talking more about the recognition and accountability of a leader. As the Master had withdrawn his authority in the process, someone needed to take it up. The sapling would simply wilt if no one was recognized and responsible for sustaining its growth. The Master and the Apprentice trusted each other and often had long and productive discussions about the HKC. Eventually, the Apprentice shared his views about the need for a recognized leader, summarized in the following four points:

- o Someone needs to have the time to write the curriculum document (especially if we were serious about sharing it with others).

- o Someone needs to be 'in charge' of the Core curriculum to ensure that goals were met, innovations were developed, and to lead the collaborative process.

- o Next year could be the start to integrating the whole middle school curriculum into the Humankind Curriculum approach.
- o Someone to act as a liaison with the Master and to keep developing the Humankind curriculum.

The Master agreed and said that he didn't want to put a leader in place the first year because he wanted to provide all teachers with a year of experiencing the program to see how they fitted into it. The Master made an interesting point regarding the uniqueness of the international school context, and this school in particular. He affirmed that, because of the transience of students, it was fundamental for international schools to focus on the process of learning and not just content (as in the Humankind Curriculum). In this school, 40% of students did not complete the three years of middle school (grades 6-8). Therefore, it was the skills and an understanding of the process of learning that the school should ensure they take with them as these would be most useful for their continuing learning. It was also about developing life-long learning skills that they would always have. The middle school curriculum therefore had an obligation to clearly identify these skills and make them explicit in the curriculum (which had not been done yet). Such issues, the Apprentice reminded the Master, were exactly why a leader was needed to ensure they were addressed.

Progress in terms of leadership capacity was made when some weeks later the Apprentice was appointed Head of Humankind Curriculum, with the status of other heads of department. Below is his record of the meeting he had with the Master and Middle School Principal upon his appointment which, in many ways, reflects on and maps out the future of the reform process:

- o Stay focused on the following four areas: the concepts and the conceptual basis of the curriculum; the negotiated aspect; simulations to overlay or underpin the concepts; assessment and reporting.

- o The Master was happy with the progress that they had been making and accounts that success to the Apprentice's efforts.

- o Parent feedback had been minimized over the past few months.

- o The Vitalic component was now up to the HKC team to implement as they saw fit. Adjustments would have to be made to accommodate staff changes next year.

- o The Master was happy to present to the classes upon invitation.

- o The Master welcomed the Apprentice's move to start engaging the other subject areas by sharing and aligning approaches, and identifying relationships.

- o The Apprentice proposed holding specific middle school meetings when appropriate and fitting a period into the timetable where a liaison person from Math, Science, and English could be freed to meet.

- o Discussion on building a dynamic network of relationships across the curriculum had commenced and the Master encouraged continuing this.

The Nursery Assistant had decided to leave the school for various reasons including her deteriorating relationship with the Master (the trust just wasn't there) and lack of faith in the program. It turned out that the Humankind Curriculum and the way it was being developed just wasn't for her anymore and she needed to move on. The Apprentice and Nursery Assistant had shared the closest relationship of the four HKC teachers so her decision to leave the school was regrettable for the Apprentice both personally and professionally. She was leaving their team and although a suitable replacement had been found (who had been flown in from overseas to be interviewed, an unprecedented procedure for a teaching position), the team dynamic would change and this created some uncertainty about our future.

The HKC Questionnaire was administered to all of the middle school students in the last week of the school year and the results were very encouraging for the teachers (see 4.3.1 for details) as most of what they were doing seemed to be well received by the students. Upon review of the responses, they decided that they must give the students more frequent breaks, address the way they approached reflective

writing, and ensure that they provided a mix of activities that kept the students engaged and focused, especially for the 6th graders, during the triple period. The year thus ended on a positive note and the teachers and Master anticipated further improvements to the tree's function and growth in the next school year.

4.2.7 A Developing Pole: Apprentice to Master

Growth rings are a feature of trees that grow in climates where growth virtually ceases for part of the year and then, usually in spring when these trees burst into growth, wood was formed relatively rapidly causing growth rings to form. Sapwood was composed of the living cells nourished by the roots and sent to the branches, stems and leaves. This sapwood dries and hardens becoming heartwood and new sapwood was made in a continuous cycle of growth. New layers of wood added to the trunk are called annual rings because one was formed each year and may be used to tell the age of the tree (NSW Department of Primary Industries: Forests, 2005).

The new school year started positively on two fronts. A new teacher had joined the team (replacing the Nursery Assistant) and brought with her a new energy and enthusiasm for nurturing the tree. Sharing with her all that they were trying to achieve generated a positive spark into the team's ongoing discussions. The second positive change was the announcement that the Middle School would now have separate faculty meetings after a combined High School/Middle School meeting. Accommodating this request allowed them the opportunity to discuss issues in a smaller, more focused group and was much welcomed by middle school teachers. This enhanced their capacity to reform the middle school and was actually the first time in the school's history that separate meetings were conducted on a regular basis.

The first professional development opportunity for the year, held 4 weeks after the term commenced, also added strength and vigour to the developing tree. A milestone was reached in terms of the Humankind Curriculum as all middle school teachers met for the first time for a special meeting to discuss ways to make connections with the HKC across the other subject areas. Over 20 new teachers had

joined the school, with six teaching in the middle school, so the Master spent some time filling all teachers in on what the Humankind Curriculum was about.

The meeting climate was very positive and cooperative and the learning community seemed to be gaining force. The Master outlined his view on the relationships within the middle school curriculum and urged teachers to not try to force integration but to seek what he termed 'moments' when real and enhancing connections and relationships emerge. It was the first time in a long time that the nine concepts and essential understandings of the Humankind Curriculum were shared with other middle school teachers and ideas were presented about how this structure could be implemented. The key points that came out of the meeting are presented here:

- o The Humankind Curriculum provides the opportunity for the student to emerge as an adult with confidence, kindness, courage, a strong sense of identity, an awareness of individual and social responsibilities, and an understanding of the world.

- o The nine concepts central to the Humankind curriculum are fundamental to being a human being – Evolution, Simple to Complex Organization, Beliefs, Environment, Economic Necessity, Religion, Scarcity, Production, Ideologies.

- o Aim at this point was to seek 'moments' where connections can be made and relationships formed.

- o A network of the 4 domains of the Humankind Curriculum was presented – *Prescriptive, Expressive, Negotiated* and *Vitalic.*

- o Three factors were identified as key to implementation:

   1. Communication (teacher to teacher, teacher to student, teacher/student to parents; sharing a common vocabulary across the middle school including assessment tools).

   2. Knowledge (sharing what we are doing, when, how and why).

   3. Time (to share, discuss, identify connections/links, develop approaches to teaching and learning in the middle school).

The second professional development opportunity held at the same time was the presentation to all staff by a visiting specialist on inquiry learning. Although her visit to the school was specifically for a two day workshop for elementary teachers, all teachers were invited to her keynote presentation where she made a convincing case for inquiry as a stance/philosophy, and outlined her practical approach to inquiry learning. In many ways she was validating what they were doing in the HKC class as they were in fact trying to implement much of what she was advocating. The Apprentice presented his notes on her presentation at a HKC meeting soon after to discuss how they could adopt a constructivist 'inquiry as a stance' in their teaching practice and this led to them striving to better incorporate student centred inquiry into their approach. This turned out to be rather nutritious mulch that was added to the soil to help the tree grow.

The Ambassador, who was in effect an external member of the team, was still providing nutrition (albeit indirectly) to the tree's roots. This time, from the Apprentice reading one of his books, it was in the form of affirmation of what they were trying to achieve and why. There was definitely a parallel in the teachers' learning (and the application of this learning to the development of the curriculum) and the recursive, spiraling and emerging path the students were expected the students to take. The Apprentice continued to share deeper understandings of related elements of the Humankind Curriculum that he gained from reading the Ambassador's book with the Master and the HKC teachers. These included: the critical importance of parents in the development of students; valuing skills that will help children survive in the ever-changing world; getting the 'real world' into the classroom; arming students with tools for learning that they can use anywhere/everywhere; developing students in a holistic way – emotionally,

spiritually, and ethically; and developing a curriculum that would develop and stretch both students and teachers as they learn together.

Despite the constructive start to the second year of the Humankind Curriculum, the future direction of this reform initiative was suddenly clouded by the Master's unexpected announcement that he would be leaving the school at the end of the year due to family health reasons. Although the Master's role in developing and implementing the curriculum had lessened over the past year, he remained the strongest advocate for this reform. His impending withdrawal from the reform process added urgency to developing and documenting the curriculum. It was around this time that the Apprentice realized that his 'apprenticeship' was coming to an end; with the Middle School Principal reluctant to lead in curriculum matters, he would have to assume a master's responsibility for the Humankind Curriculum.

The teachers' understanding of the concepts that framed the Humankind Curriculum, and the subsequent manifestation of these in the classroom, remained one of their biggest challenges. It was critical to have a shared understanding of these concepts as they formed the framework of the Humankind Curriculum and what they were to actuate in the HKC class. Eventually, their understanding would also inform the other teachers and areas of the middle school. They continued to collaboratively build their understanding and it was starting to take genuine shape, making this a significant experience in the reform process.

By the start of this second year of implementation it was becoming apparent in their discussions and practice that the framework as it stood was too problematic to implement effectively. The idea grew that they needed to reorganize the concepts in a more efficient and relevant way. It seemed to the Apprentice that the nine 'concepts' they had were not in fact concepts and that was part of the reason for the

difficulty in implementing a concept-based curriculum. The Master was a little

resistant at first to giving up his matrix but the Apprentice continued playing around

with the framework and several structural changes were eventually made to the

model without affecting the core principles (i.e. an exploration of the fundamental

concepts of being human). The understandings that unfolded out of their experience

informed the refinement of the framework.

The Apprentice led this process and his consultation with the HKC teachers,

the Master, and other teachers saw the framework evolve into the version which was

accepted by May 2007 (Figure 4.8 below). This model evolved into a schema that

was better understood and potentially more operational across all subject areas

(rather than be limited to only a social studies context, a criticism from other

teachers). The evolution of this framework is presented in Figures 4.1 to 4.8,

beginning from the first applied matrix of February 2005:

Figure 4.1: The Humankind Curriculum Framework 1, February 2005

Grade 6

ORIGINS	Evolution	Simple to Complex Organisation	Belief

Grade 7

CONTROL	Environment	The Economic Imperative	Religion

Grade 8

INDUSTRIAL AGE	Scarcity	Production	Conflicting Beliefs

Framework 1

An initial matrix developed by the Master and included in the early

documentation and presented to the school community, including the *Curriculum*

Handbook for the school year 2005-2006 (Appendix F).

Figure 4.2: The Humankind Curriculum Framework 2, April to September, 2005
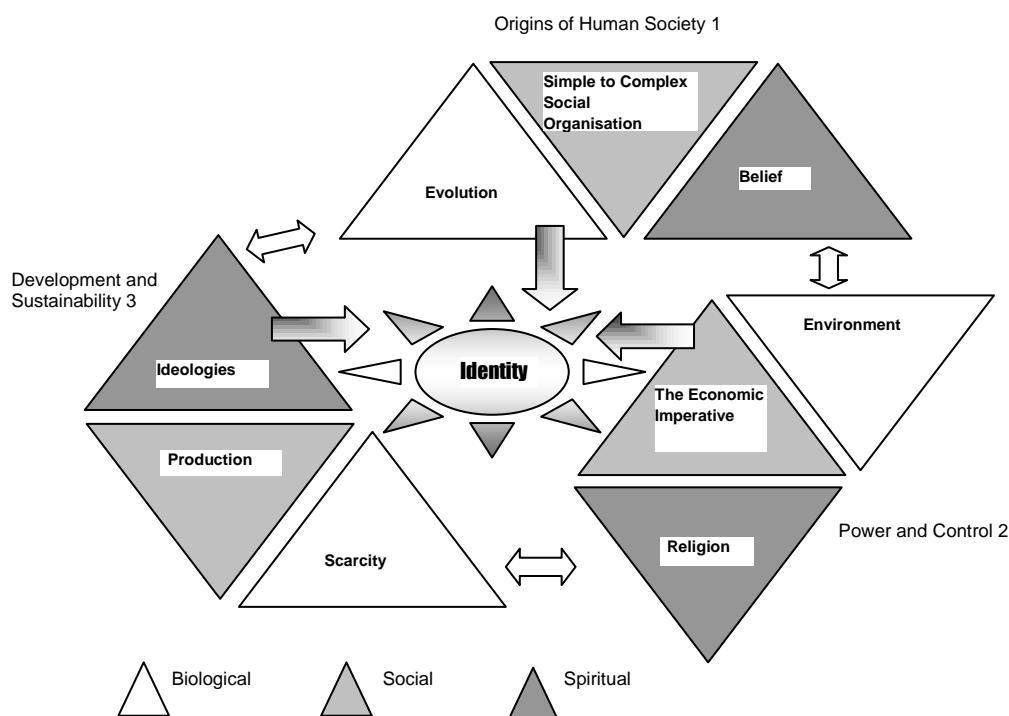
Framework 2

The Apprentice developed this model in an attempt to represent the spiralling

and connected nature of the concepts in relation to the centrally placed learner. The

course was viewed as a three year journey with biological, social and spiritual

threads. The nine concepts needed to be defined for the teachers so they could

facilitate the learning for the students. This defining process took several weeks of

discussions and input from the Master and others, and, drawing from earlier

statements, culminated in the *Humankind Core Concepts* document (Appendix G).

From this document essential understandings were later derived. This model and statements were used in the HKC class for the first year.

Figure 4.3: The Humankind Curriculum Framework 3, August 2006

Evolution

Adapting

Social Organization

Simple to Complex

Environment

Scarcity

Economic
Necessity
Production

Values

Beliefs
Religion
Ideologies
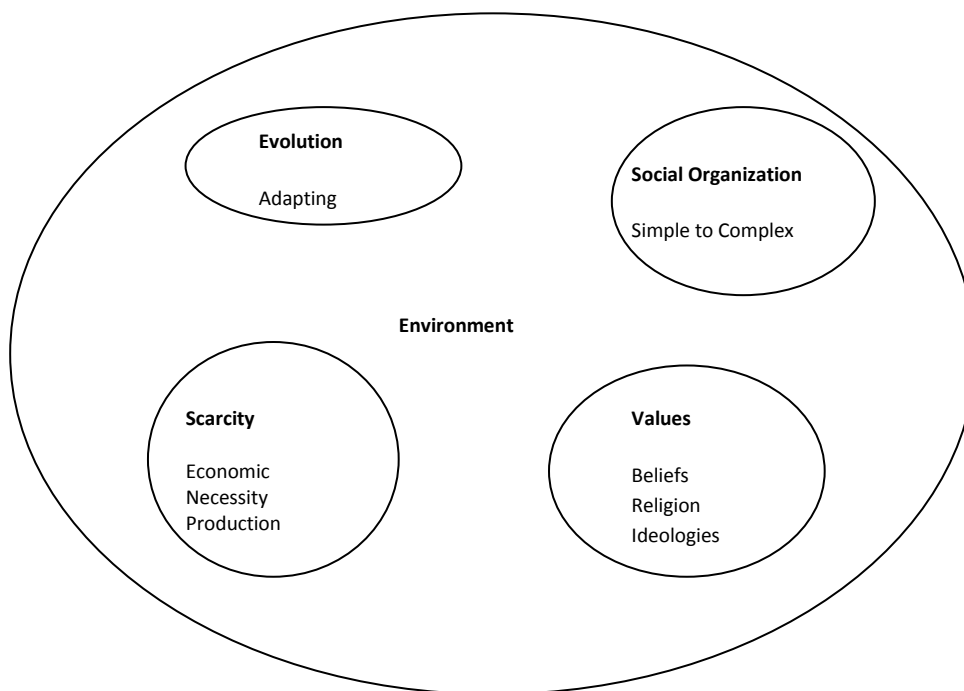
Framework 3

     After a year of using the nine concepts it was clear that something wasn't working. New ideas and understandings were emerging as the HKC teachers became more knowledgeable and experienced in working within this framework and the five concepts in Figure 4.3 became apparent as the fundamental considerations in the story of humankind. Environment was placed in the centre at this stage as it was considered integral in impacting human behaviour. The revised approach was to work through these five concepts across all year levels and across the three years, with a focus on one or two concepts for each case study that was used to illustrate the story of humankind. Figure 4.3 groups and presents the concepts in a more efficient

way without compromising the original nine ideas. This was quite a leap in

understanding and development of the curriculum. At the same time, the teachers'

year of experience working with these concepts allowed them to further delineate

each of the nine concepts as essential understandings:

Evolution: Organisms change in adapting to the environment.

Simple to Complex
Social Organization: Human beings organize and reorganize in order to survive.

Belief: Stories and myths help to explain beliefs about life. Beliefs reflect and sustain the values of human societies.

Environment: The environment directly affects the way human beings live. Human beings live in a changing relationship with the environment.

Economic Necessity: Trade creates a framework for cross-cultural exchange and the spread of ideas. Wealth impacts upon social and political organization.

Religion: Religions reflect the spiritual beliefs about the relationship humans have with the world around them.

Scarcity: Control of the Earth's resources provides political and economic power. The Earth has finite reserves of natural resources.

Production: Economic change accompanies social and political changes. Models of production change in their complexity.

Ideologies: Ideologies emerge from the desire to control.

Figure 4.4: The Humankind Curriculum Framework 4, October 2006
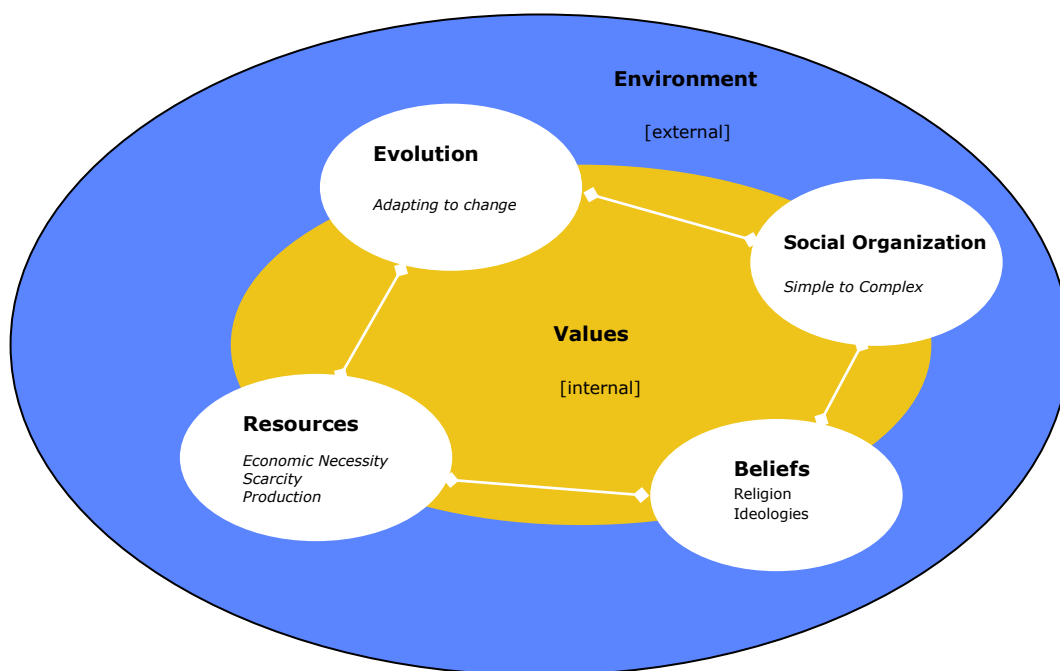
Framework 4

Another leap in understanding occurred soon after the circular model of Figure 4.3 was accepted and the model continues to evolve. Figure 4.4 gains sophistication with the inclusion of an internal sphere (values that shape a human internally) and the external sphere of the environment. Human values and the environment are influences on the other four fundamental concepts of being human, with the placement of these white circles overlapping both spheres attempting to represent this. The interconnectedness of these four is shown by the connecting lines.

Figure 4.5: The Humankind Curriculum Framework 5, Nov. 2006-Jan. 2007

Who am I?

Where did I come from?

Environment

[external]

Change
*Evolution/Revolution:
Biological, Technological,
Social, etc*

Social Organization

Simple to Complex

Values

[internal]

Resources

*Economic Necessity
Scarcity
Production*

Beliefs

Religion
Ideologies

What are my
relationships
with others?

Where am I going?
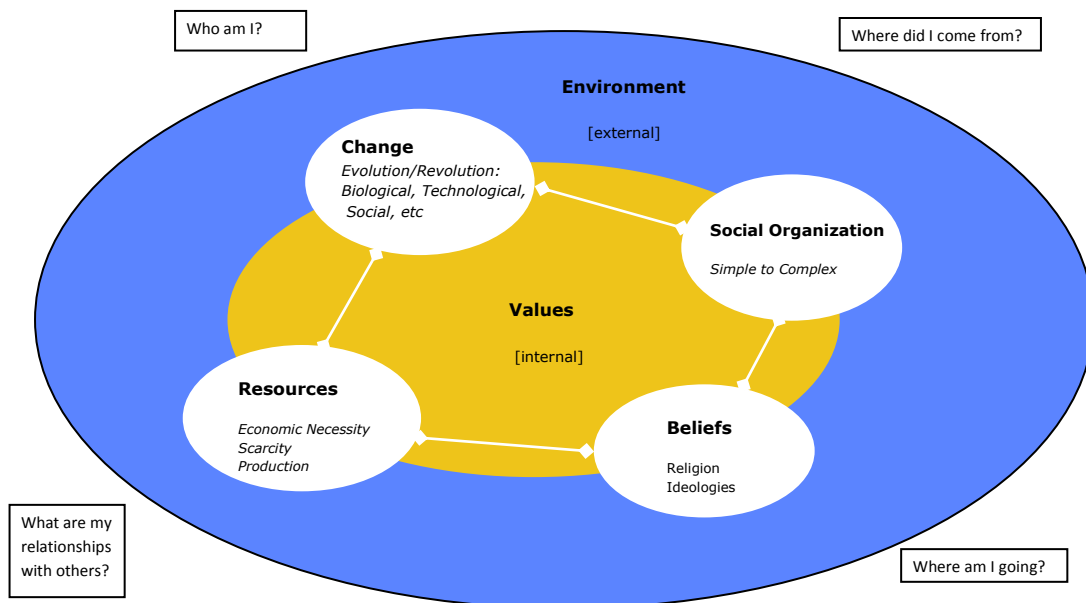
Framework 5

The development continues in collaboration with the Master and the HKC

teachers, with 'Change' replacing and encompassing Evolution as a fundamental

concept of being human and the four guiding questions shaping identity are included

in this framework. The sub-headings in each concept area are now considered as

pathways that define and illuminate the concept.

Figure 4.6: The Humankind Curriculum Framework 6, February 2007
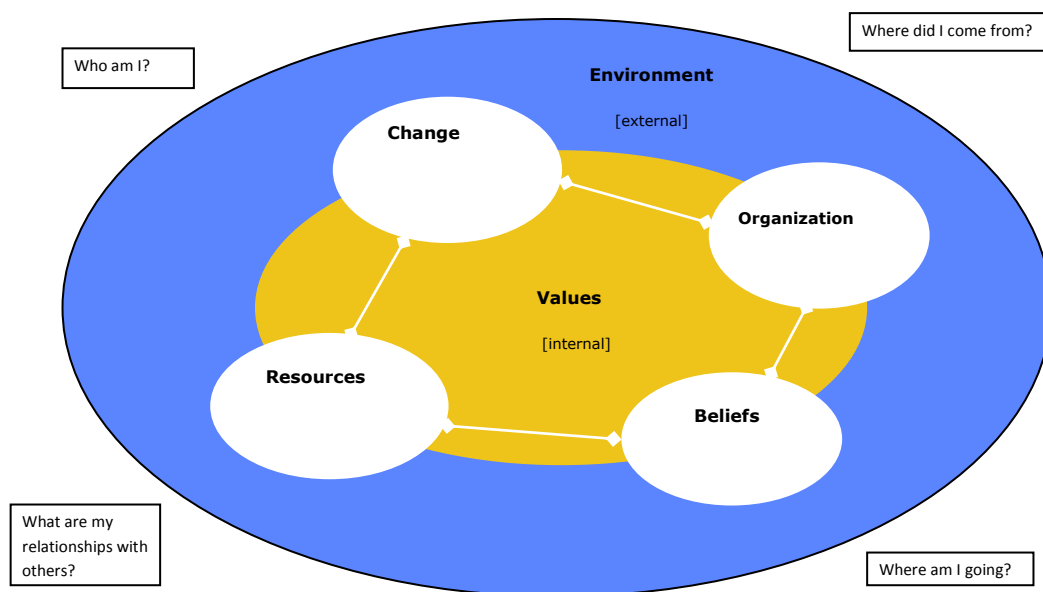
Framework 6

Upon discussion with teachers from other domains it was revealed that the subheadings included in Framework 5 above were only applicable to the Negotiated and Vitalic domains of the Humankind Curriculum (i.e. the HKC class). For other domains to be able to use this framework (e.g. Math, English, and Science) they would insert their own applicable subheadings. 'Social' was dropped from Organization to make it more expansive.

Figure 4.7: The Humankind Curriculum Framework 7, May 2007

Framework 7

The internal/external spheres are more clearly defined as 'Internal Self' – the intrapersonal experience as shaped by an individual's values and identity; and the 'External World' representing the interpersonal world as experienced by an individual's interactions with others, nature, and the environment in which they exist. The model shown is specific to the HKC class as it includes the negotiated pathways as explained in Framework 6.

Figure 4.8: The Humankind Curriculum Framework 8, May 2007

External World
Environment   Nature   Interpersonal

Change

Where did I come from?

Organization

Internal Self
Identity   Values   Intrapersonal

Where am I going?

Who am I?

Resources

Beliefs

What are my relationships with others?
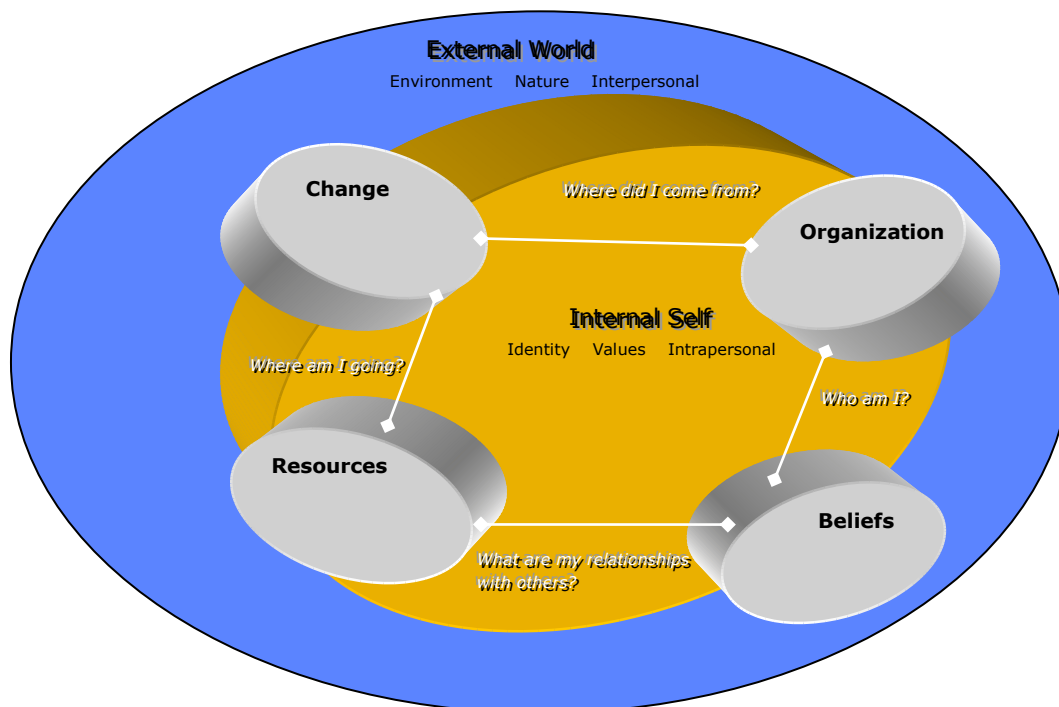
Framework 8

     The suggestion by one of the teachers to include the questions within the internal sphere was quickly adopted as it more accurately portrayed the focus the questions should have in shaping the student's identity. 3D graphics were also used to enhance the visual impact of the model. Figure 4.8 became the accepted framework of the Humankind Curriculum at this time. The following extract from *The Humankind Curriculum Draft V* (Appendix H) explains this Framework:

Internal Self and External World
Humans exist in 2 dimensions – the Internal Self and the External World. The External World in which we exist serves as a meeting point, an intersection of space and time, for the Internal Self to perceive and respond to the surrounding physical, social and cultural forces. The response of the Internal Self to the experience of the External World was guided by emotions which determine human values. Personal values give rise to who we are and can change over time; they evolve from deepening and enriching experiences with the External World. When these values become commonly held, they shape cultural, social and political identity.

Change
Being human implies the ability to organize, generate, create, prioritize, and adapt to the interactive experiences of the constantly changing environment in which we live. Physical, intellectual, emotional and spiritual changes are fundamental to being human.

Organization
In making sense of human experience the human brain, as a responsive, adaptive organ, reacts internally (relative to our values; in the conceptual and intellectual realm) and responds to external stimuli (relative to the environment; in the physical and spatial realm). Humans are social animals and the quest for community springs from some of the powerful needs of human nature; this was reflected in the way we organize ourselves.

Resources
Humans require the constant support and supply of resources to sustain and enrich life. The Internal Self was driven by well-being and seeks the means to a healthy body, mind and soul. The External World provides opportunities for utilizing and sharing the Earth's finite resources.

Beliefs
Humans rely on personal values to make sense of what was seen and experienced in the External World. The Internal Self's response to what was perceived but unknown in the External World was to create cognitive content that leads to a sense of knowing and control. Personal belief systems and societal belief systems are values based.

The 4 Guiding Questions

Human beings are essentially spiritual creatures because we are driven by a need to ask 'fundamental' or 'ultimate' questions; to find meaning and value in what we do and experience. The four 'fundamental' questions central to this framework provide the developing adolescent a 'way in' to explore his/her own identity. For the teacher, they provide a scaffold for focusing the learning on the student, making connections across concepts, and building identity. The questions relate directly to the framework as in these examples:

Who am I? → What does it mean to be human? What do I believe? What are my values? How have I changed? How have humans changed? How do I learn? Why am I different?

Where did I come from? → Who are my ancestors? What are my roots? What culture/s do I belong to? Why do I live like this? How was my life affected by the past?

What are my relationships with others? → How am I connected to other humans? How was my life organized? Why was it organized that way? What communities do I belong to?

Where am I going? → What was the future of humankind? What was the future of the Earth? How was the future connected to the past? How will I change? How may the present affect my future? How can I make a difference?

Alongside the development of this Framework, the Humankind Curriculum was also being formally documented. Given the urgency for documenting the curriculum now that the Master was to leave the forest, the Apprentice was granted four days over the period November 2006 to June 2007 to write a document that represented all that the Humankind Curriculum was about and that could be understood by a wider audience (such as new teachers, parents, and especially the new Headmaster). The Master and HKC teachers were consulted for input. The fourth Draft was finally shared with other middle school teachers, with Draft V (Appendix H) the result of feedback from other middle school teachers. At the conclusion of this study's data collecting period, this document was still a work in progress. Table 4.4 summarizes the process of this document's development.

Table 4.4: The Development of the *Humankind Curriculum* document

Draft	Date	Contents	Changes	Comment
I	Nov 2006	Includes Preamble, Philos-ophy, Aims, Structure; expert's comments on structure, Curriculum, and human learning		A collection of information that falls into the Contents headings
II	Jan 2007	As above + Framework added (#5 as shown above)	Views on curriculum included; Aims differentiated for MS community and MS student;	Most sections rewritten
III	March 2007	Framework unchanged, other sections cited and details assigned to Appendix	Wording edited for readability	Appendix uncluttered the flow of the document
IV	May 2007	As for III, Framework #7 added + *Framework Unpacked* section explaining the model	Glossary added, subsidiarity explained	Shared with MS teachers for feedback
V	June 2007	Same as IV; Bibliography added	Wording changed in *Structure* section ; multiple titles for *Prescriptive Domain* in light of teacher feedback; haven't' settled on what to name it	Accepted by Administration and middle school teachers

The third significant development during this school year was the documentation of the Content Overview for the HKC class. This was developed by the Apprentice over several months in conjunction with the evolving framework and in consultation with all of the HKC teachers (as they developed and implemented the program) and shared with the Master. In fact, this sequence of what should be covered in this class can trace its origins back two years to when the Master first presented his ideas for the content of this newly formed class in the middle school. The notion of one or two *Focus Concepts,* a *Pathway* and a *Case Study* as the parameters for framing the program also originated in early documents.

Figure 4.9: Grade 6 Content Overview for the HKC

Grade 6: The Story of Humankind 3.5 Million Years Ago to 10,000 Years Ago

Focus Concepts	Change Environment	Resources Organization	Organization Change
Pathway	Human Evolution	Hunters and Gatherers	Birth of Civilisation
Case Study	Hominids	Ainu	Mesopotamia
Timeline	-- 3.5 MYA --	-- 33,000 BCE--	-- 8000 BCE--

The Living Earth
Vitalic - My Journey So Far
Personal Reference – Own Culture
Local Reference – Yokohama

Figure 4.10: Grade 7 Content Overview for the HKC

Grade 7: The Story of Humankind 10,000 Years Ago to 400 Years Ago

Focus Concepts	Change Organization	Resources Organization	Beliefs Resources
Pathway	Birth of Civilisation	Early Expansion of Civilisations	Empires
Case Study	Mesopotamia	Silk Road	Roman and Spanish
Timeline	-- 8000 BCE --	-- 200 BCE --	-- 1500 CE --

The Living Earth
Vitalic - My Journey So Far
Personal Reference – Own Culture
Local Reference – Yokohama

Figure 4.11: Grade 8 Content Overview for the HKC

Grade 8: The Story of Humankind 200 Years Ago to 60 Years Ahead

Focus Concepts	Change Beliefs	Resources Organization	Beliefs Resources	Change Organization
Pathway	Revolution 1	Revolution 2	Conflict / Ideologies	The Future of Humankind
Case Study	Renaissance	Industrial Revolution	Vietnam War	Globalization
Timeline	-- 1600 CE --	-- 1800 CE --	-- 1960 CE --	-- 2067 CE --

The Living Earth
Vitalic - My Journey So Far
Personal Reference – Own Culture
Local Reference – Yokohama

By the end of the second year of implementation, the middle school curriculum was structured as the Humankind Curriculum, and represented as the *Humankind Curriculum Draft V* (Appendix H) providing the Philosophy, Aims and Structure (4 domains: *Prescriptive, Expressive, Negotiated* and *Vitalic*); operating within the framework provided in Figure 4.8; and with a developing pedagogical approach.

4.3.1 Asking the Budgies

The Humankind Core (HKC) Student Questionnaire (Appendix A) was developed and administered by this researcher as a means of surveying the students (Budgies) on the state of the soil and mulch, and the usefulness of the tree. The paper Questionnaire was administered twice to all middle school students (grades 6, 7 and 8) at the end of the first year of the HKC class (June 2006, 153 responses), and the end of the second year (June 2007, 160 responses). The Questionnaire's aim was to gather feedback from the students on various aspects of their experiences in the HKC class and to inform the curriculum reform process. This feedback from the students served two purposes: (i) to provide useful feedback to the teachers and the Master on student perceptions of this class; (ii) to provide valuable data for this study in the form of insights from middle school students as they participated in learning experiences brought about by this curriculum reform.

Students were asked to complete the Questionnaire during HKC class time in the last week of the school year. Names were optional and few chose to take up the option. No talking or sharing was allowed during the time allotted in order to ensure each student's own opinion. The Questionnaire was explained to all students before

commencement in order to ensure understanding of the task. Clarifying questions were allowed to be asked during completion. The students were encouraged to take the Questionnaire seriously and were informed that their opinions and comments were valuable and would play a role in shaping the future of the HKC class (which in fact they did). This researcher observed on both occasions a conscientious effort by all students to complete the Questionnaire to the best of their ability and is confident that the results represent a fair and accurate portrayal of student opinion.

Data from eight of the 16 questions is presented here based on relevance to this study and the value of insights offered. As it was observed that the results remained consistent across the two sets, data is selected and combined from both sets of responses and comparisons are made when considered appropriate. All figures in tables are percentages.

Question 6: How we did it: How helpful are these ways of learning for you?

Table 4.5: Question 6 – 2006 compared with 2007

Ways of learning	**Very helpful**			**Helpful**			**A little helpful**		
	All 06	All 07	+/-	All 06	All 07	+/-	All 06	All 07	+/-
Watching video clips	52	54	+2	40	35	-5	8	11	+3
Using web sites	30	38	+8	58	54	-4	12	8	-4
Simulations	47	57	+10	28	31	+3	25	12	-13
Using computers	39	38	-1	53	56	+3	8	6	-2
Reading printed materials	22	21	-1	48	47	-1	30	32	+2
Learning in groups	43	46	+4	39	37	-2	18	17	-1
Learning individually	20	28	+8	57	54	-3	23	18	-5
Doing research	36	37	+1	53	51	-2	11	12	+1
Writing reflections	1	6	+5	19	33	+14	80	61	-19
Guest speakers/Field Trips	57	65	+8	27	28	+1	16	7	-9

Table 4.5 presents the combined responses of all students in 2006, all responses in 2007, and a +/- comparison column (in percentages). Underlining indicates data is discussed below.

The 'ways of learning' presented in Question 6 were drawn from the approaches used in the HKC class during the year. Students were asked to rate each one according to how helpful they found it. 'Writing Reflections' was unpopular across all year levels in the first year (80% 'A little helpful') which prompted the teachers to take a different approach to reflective writing in the following year. A positive change in students' attitude was demonstrated in 2007 with a 19% shift to a more favourable 'Helpful' (+14%) or 'Very helpful' (+5%). Four other approaches received positive shifts of 8-13% (*Using web sites, Simulations, Learning individually,* and *Guest speakers/Field Trips*). *Watching video clips* (the mainstay of the teaching approach in the HKC), *Simulations*, and *Guest speakers/Field trips* are clearly indicated by the students as very helpful ways of learning for them and encouraged the teachers to maintain and build on these practices.

Questions 7 to 10 of this Questionnaire were open-ended and asked students to write out their responses. This data was collated and is presented in ways that best serve the nature of the results. Data was selected from both surveys that indicate the most common responses for each grade level.

Question 7: What other activities would you like to do to help you learn?

Table 4.6: Student Responses to Question 7, 2006, 2007 combined

Grade 6	Grade 7	Grade 8
Games	Games	Nothing / No answer
Simulations	Simulations	Simulations
Field trips	Field trips	Videos / Activities
Groups	Role plays	Projects / Guests/ Research
	Groups	

Consistent across the grade levels is the preference for learning experiences that offer a practical/doing component (e.g. games, simulations, and field trips) and support the results in Table 4.5.

Question 8: How is the HKC different to your other classes?

Students were able to clearly articulate how the HKC's 8 periods a week differs to the other 32 periods of their schedule. The following categories: Learning; Physical; Time; Activities; and Other emerged from the responses to this question. Direct quotes from student responses are shown in italics. The most common responses across all year groups were the variety of topics covered in the HKC class and the length of the class. Table 4.7 indicates that the HKC class was noticeably different to the other middle school classes.

Table 4.7: Student Responses to Question 8, 2006, 2007 combined

Category	Grade 6	Grade 7	Grade 8
Learning	Learn about totally different subjects / different things / many things Combined subjects *Don't learn this stuff in other classes.* *More writing, more games and more fun way of learning.*	We get to learn a mixture of things / different kinds of things / More and variety of subjects *You also learn about yourself and the learning method is very different since it is not cramming information into your head.* *We work with each other more often.*	Learn wide variety of things / different things / mixed subjects *Get a chance to work on things related to other subjects.* *More about how you learn than what you learn.* *Too laid back, too slow.* *Work more on personal learning and projects over a long span of time.* *HKC is trying to develop students creativity.* *It allows us to discuss a lot.* *We do things in different ways to find out what learning method is best for us.* *You have more freedom and you can state your opinions more.*

Table 4.7 continued

Physical	All the students work together in a big classroom with more students and teachers	Whole grade together in bigger room *Too many teachers.* *Its all 7th grade so I think it is a good place to hear other people's ideas especially if they are in a different class.*	Everyone is there / get to talk to people not in my class *We discuss, get to see other students we may not meet normally in classes and get to know them.* *More teachers so can talk to them more.*
Time	It's long /longer *Hard to keep my concentration going because too long.* *More tiring.*	Longer / too long	Longer / too long *Longer time spans of just learning and gets a bit difficult to concentrate.* *8 periods a week which is a bit much.*
Activities	Games Reflections Lots of field trips	More discussion *More discussions with teachers.* *More casual and the work is far more independent.* *Always something completely different to study.*	More essays / personal work *You get to move your body more than any other class.* *It lets you be more creative and lets you work as a group.* *More freedom in presenting.*
Other	*Everything is different.* *A whole lot more boring.*	*Boring.* *It is more sociable, not as strict, easier, less homework and kinda fun.*	*Don't get graded.* *Boring but a little fun.* *The feeling, 'mood' is very open.*

Question 9: What did you find challenging in HKC?

Table 4.8: Student Responses to Question 9, 2006, 2007 combined

Grade 6	Grade 7	Grade 8
Keeping concentration for 2 or 3 periods / paying attention / staying focused Writing the essay	Class time Writing essays Reflections	Class time Essays Content Nothing

The length of class time (triple periods which run for two and a quarter hours or a double period for one and a half hours) was clearly an issue for a number of students. This prompted the teachers to review the pace and scope of activities during the second year and to regularly have two short breaks during the triple and a longer

break during the double. The approach to writing research essays was also modified in the second year.

Question 10: What did you find enjoyable in HKC?

Table 4.9: Student Responses to Question 10, 2006, 2007 combined

Grade 6	Grade 7	Grade 8
Making the model	Watching videos	Simulation
Simulations	Friends / Socialising	Games
Being with friends	The topics studied	Videos
Working in groups	Guest speakers	The topics studied

Once again, activities that required a hands-on experience are considered more enjoyable. The social aspect of the HKC, with the whole year group together, offered fulfilment for many students.

Question 13: How you were assessed in HKC: How useful are these ways of assessing for you?

As the assessment practices in the class were more refined and developed in the second year of implementation, the results for 2007 are presented in Table 4.10.

Table 4.10: Student Responses to Question 13, 2007

Assessment Tools	Very useful				Useful				A little useful			
	6	7	8	All	6	7	8	All	6	7	8	All
Process Assessment	15	13	11	<u>13</u>	73	60	66	<u>67</u>	12	27	23	20
Self Assessment	18	15	3	12	56	34	53	48	26	51	44	40
Peer Feedback	48	33	25	35	41	48	43	44	11	19	32	21
Teacher Ratings	51	31	47	<u>44</u>	44	56	47	<u>49</u>	5	13	6	7
Teacher Comments	59	54	58	<u>57</u>	37	31	39	<u>36</u>	4	15	3	7
Self reflection	13	9	4	8	46	26	34	36	41	65	62	<u>56</u>
Sharing with parents	<u>22</u>	6	<u>9</u>	13	<u>64</u>	34	<u>30</u>	43	14	60	61	44
Grades (if used)	43	40	30	38	34	34	42	37	23	26	28	25

Teacher Comments stand out as being perceived by the students as the most useful form of assessment and equal *Teacher Ratings* at 93% 'Very useful' / Useful'. The value of *Sharing with parents* seemed to diminish with age, indicated by the drop from 86% ('Very useful / Useful') in grade 6 to 39% in grade 8. *Self Assessment* and *Peer Feedback* also appeared to be less enthusiastically perceived by the older students. A majority of students still considered *Self reflection* to be of little use (although 56% this year is an improvement from the 67% that was indicated in 2006 but not shown here.) *Process Assessment*, where a student is assessed on the process of learning during stages of a project, ranks highly (79% 'Very useful / Useful) and is a feature of the Humankind Curriculum. *Grades*, although not used in the HKC class but included in the Questionnaire as 'if grades were used', have the broadest spread of responses across the three ratings. This feedback validated the approach to assessment practiced in the HKC and encouraged the teachers to maintain this approach and to be mindful of the importance that students place on teacher comments.

Question 16: What are your suggestions to make HKC better for you?

This was an open-ended question and responses included:

More and longer breaks.

That we learn less material but actually remember it. I think we learn so much but only go over it once so there's no point.

Students would learn nothing if they chose everything themselves. I like HKC as it is.

I don't want more say because the thing I would like to do is not something that we would learn a lot from.

We should have more say in HKC. As [the Master] *stated in the Graduation, students must wonder through the garden wherever their heart, interest and enthusiasm takes them. This path is not necessarily the concrete road that teachers wish to pull them through.*

Question 17: Any other comments

The final open-ended question included the following responses:

I think HKC is a special and original class. It definitely helped me to get through middle school.

HKC is a very interesting form of learning and is a good way of wandering across the garden.

We went too much in depth into some topics and they eventually got rather boring ... I love the student-teacher interaction bit and the subject takes a lot of pressure off our backs as there are no grades.

The atmosphere in the HKC is great for learning.

4.3.2 Summary

The survey results provided formal student feedback to the teachers and were used to evaluate the program and to inform their practice. The results are encouraging and indicate that the Humankind Curriculum is having a positive impact on student learning. Some modifications, such as managing the length of the class, the approach to reflective writing and a more engaging research process, are required. Maintaining certain practices, such as providing practical/doing experiences and the assessment approaches, are encouraged. The insights gathered from middle school students as they experienced this curriculum reform adds another perspective to the story of middle school curriculum reform at BIS.

4.4 The Master Reflects

The Master was interviewed at the end of the second year of implementation and just before his departure (Headmaster Interview 2). This provided an opportunity to capture the Master's perspective on his experience of developing and

implementing the Humankind Curriculum over the past two years; and to follow up on concepts that were emerging in the process. His responses have been categorised in the frames of the three research questions: process, nature and significance, and the concept of trust as a dynamic of change that emerged out of the reform experience.

4.4.1 The process of curriculum reform

The Master reflects on the middle school curriculum reform process:

Researcher: We sat here two years ago in our first interview, it was in June 2005. Much has passed. In terms of our middle school reform, what do you think has happened?

Master: First of all I think that the Humankind Curriculum is established as part of what we do at the school. There are fewer objections about changing the nature of the curriculum. People are largely accepting it, most people as a good thing, that they see it as a new type of curriculum. So that's a positive.

The second thing is that it's been firmed up over the last two years. It was a fairly wide ranging framework when we started. As a result of experience it's been firmed up a little bit. Changed fractionally but I think that the fundamental principles are still there. So I see that as a good thing.

But in the interim two years we've also hired teachers who are middle school specialists and over the last year particularly these introduced specialists are demanding more and more say in the middle school because they were brought in to become partners in the middle school development and I'm not sure that they fully understand it as they should.

... I think they just see it as a different sort of content, a slightly different framework but don't understand the fundamental difference in the approach that's there. I think they're learning and I think their energies will demand that they become more involved in the developments of the Humankind Curriculum. My hope is that they do so from a point of view of we are willing to learn rather than we want to modify.

Researcher: Are you satisfied with the progress that the school has made over the two years?

Master: I thought the first year was very difficult. I think what I understand now about an approach like this is the need for the right sort of teachers and the right team. But you use what you have and I think that in most schools you use what you have. It's a big ask expecting four teachers to work that closely together. A bigger ask than I'd realised and I think that that is something that needs consideration.

I think that the teachers themselves need special training. I don't think you can just get ordinary teachers and this is why the new middle school teachers that we've brought in to the school don't fully understand and even the existing teachers they could have done with a two year training course on how to teach it, in fact they've had to do it on the job and that's a problem. We're talking about pedagogy …

The process of change was not easy, as was evident by the resistance

encountered, especially in the early years:

Master: Even within this school we've had teachers who have made no effort to understand what it's about. All they want to do is ridicule it because it's something that they don't understand.

Researcher: Not so much anymore I don't think.

Master: Not so much anymore. When it started . . . it's almost a feeling like don't touch what I'm doing because the way I do things is more precious than anything new coming in.

Researcher: But that's part of the teacher mentality, isn't it, shut the door and don't look forward.

Master: Sure. We knew that would be a problem and the fact that we've moved so far in two years is remarkable in an institution that is with a parent body the way that the parent body is here. The demands made on education and traditional education, I think we've done remarkably well.

Despite the apparent freedom in the international school context, each school

is faced with its own set of constraints inherent in the institution:

Master: There is an element of pragmatism in anything you do in a school and we've done it with the Humankind, we've done it with all things. We bring it to the middle a little bit. You're massaging things through . . . you're already historically in a place at a point in time, you're within an institution that's developed for the last couple of hundred years, you know, and

this one for the last almost a hundred now, 80 years. You're within a community that you've got no control over . . . So you're always stuck within a fairly rigid framework. . . And if there's one thing I'm fairly proud of here in my own time is that despite all of that we've been able to do some fairly innovative things. Despite all these constraints. And this is the thing that blitzes most educational innovations that the institution itself will close in on it or the people will close in on it so it doesn't happen.

... This is a huge change and I think it will be a change for the better but so many other things need to change around it to optimise its potential. If the stuff around doesn't recognise what's going on we have difficulty.

... What's so remarkable here is that we're mad enough to do it. Take walls down and try it.

Researcher: That's a credit to you of course and a credit to the trust you had with the board, wasn't it, really?

Master: It's very difficult to do that. I mean, it really is difficult.

4.4.2 The nature and significance of the reforms

The Master reflecting on the reform process of the past two years provided an

opportunity to revisit the nature and significance of the Humankind Curriculum in

light of new understandings.

Researcher: What do you see as the significance of the Humankind Curriculum?

Master: It's a challenge to start looking at how children really learn. It's a challenge to all the teachers to start thinking about how they really learn. If they really understood it. And I think that from the other point of view of approaching education, it's a good curriculum for the modern age.

... So in that sort of world where everything is available we really do need to understand what the driving issues about us being human are so then we can better place all that stuff into our conceptual basket. Without that conceptual basket we've got a problem.

... If you've engaged the student and they've done all the things that are necessary to engage, you've created those neural pathways, you've unleashed that potentiality and it's not going to disappear.

And at the level they're at in the middle school you want to keep their potentialities open. You don't want to close things off. Later on they're going to be closed off as we specialise for sure, but at this stage you want to just keep all those connections going and make them be creative about the links that they make. Fundamental links from understanding that we're human. Not artificial links because this syllabus and that syllabus can tackle water at the same time. That's just irrelevant, isn't it, really?

Researcher: What then of the concept of the Humankind Curriculum?

Master: Well, I see that [the Humankind Curriculum] as being almost part of the whole educational spectrum now. I think what we've learned, what I've learned through this journey is that there are certain things now that can be applied across, again not linearly, not just in a straight line, but there are certain key concepts about education. And I think that I began to fix in my mind a bit more about how we should be approaching things.

Because we're in a different age. We're in the technological, high tech age. We're not in the past now. We've got to understand we can't just keep teaching the same types of curriculum but just with more stuff because we've got technology. We've got to understand why that can free us up. But we mustn't lose site of the human component that's at the basis of it.

So it's in a sense freeing up what we've got, it's an information age, but rooting it in the fact that we are human beings with stone age brains playing with this incredible technological wilderness out there. So it's a combination. It's a new educational approach for doing it.

4.4.3 Trust as an emerging concept in the reform process

Trust emerged as an essential ingredient for successful reform in this international school.

Researcher: So what are your thoughts on trust in relationships in terms of the process of school reform? Because you've been very much

engaged in the whole thing, you've fostered the trust, you've built the relationships.

Master: . . . it's a fundamental. If there's one thing that I've found over the years that I've been here, the first three years I was not trusted . . . So it took two, three, four years. But as you're successful and you'll only get trust by success, if you just do nothing then people will start just to ignore you. If you are successful in certain little ways, little steps then more and more trust comes in your direction.

Fundamental is your relationship, a head's relationship and I think a teacher's relationship with parents and with the board and mine with the teachers. You have to be seen to be fair. Even when people disagree with what you're saying at least say, well, we know he's not trying to get one over us, we believe. Somebody said to me recently they're sorry to see me go, they haven't always agreed with me but I think always trusted me. And there's a difference between agreement and trust.

And that's important if you're going to run a school and try to make changes ... if you're going to be a teacher . . . The kids have to trust you . . . if you want to truly educate a child they have to trust you . . . This is a relationship you build up with the kids and you build up with your colleagues, you build up with the parents, you build up with the administrators.

We look at often in schools as if we're all trying to get one over on someone, you know, not anything that's there to do with trust. But there's a lot to do with trust ... And if you like that's part of the pedagogy. It's a pedagogy of trust. And the parents have got to put their child in your hands. They've got to trust that what you're doing is going to do well for their kids.

Trust is fundamental and I think in any head, if I was going to say what is the most important thing about a head in any schooling situation that head has got to be trusted by all the constituencies.

Now, it doesn't happen all the time and always but for the most part I do believe I've been trusted. Disagreements, sure, but trusted, I think. When it doesn't happen that's when things start to fall apart . . . And it's true in relationships all around. So trust is huge.

4.4.4 Summary

This data collected from the Master's second interview held after two years of implementing the curriculum reform provides insights into the reality of his experience. In terms of the process of the curriculum reform, he considers the progress made 'remarkable' considering the inherent restraints and the rigidity of the framework in which this reform was embedded. However, he also advises that special teacher training may be required and that change needs to be more widespread in order to optimise the initiative's potential. With refinement of the Humankind Curriculum having occurred over the years, the program is now established in the school and part of, as he puts it, 'what we do at the school', suggesting that reculturing is occurring. The effects of staff turnover is revealed in his comments about how new teachers may not be understanding the fundamental difference in the approach and that more effort is required on their part to understand what it is about.

The Master indicates that he has experienced growth and refinement in his own learning and understanding about education. The significant elements of this new educational approach include: teachers developing an understanding of how children learn; keeping the middle school learner's potentialities open; and building a conceptual understanding of being human. These will help prepare adolescents for the 'incredible technological wilderness' that awaits them. His comments on trust reveal the significant role trust has played in his capacity as a headmaster. He sees trust as 'huge', and as fundamental to the smooth operation of relationships across the social network of the school. He sees trust as coming from success and that trust allows him to run the school smoothly and to implement changes. This data provides

another reality and enriches our understanding of the middle school reform process at this headmaster's school.

4.5 Six Phases of Growth

The growth of the metaphoric tree, representing the curriculum reform experience at BIS, went through six phases that this researcher has identified in Table 4.11. This table identifies these phases with reference to the chapter section where each phase is most notably observed; the elements that define each phase; and illustrative examples from the data.

Table 4.11: Six Phases of the Curriculum Reform Process

Emerging Phases of the Reform Process	Defining Elements	Exemplifying Units of Data
Phase One *4.2.2 Finding the Ground*	Identifying the need and optimal time for action	Top and bottom ends sorted 'I knew that middle school needed to be tackled.' 'What is in place is not very good at all.' ... the time for sorting out the 'dreadful mess' of the middle school curriculum had come. '... I actually wanted a middle school that would reflect the needs of that age group.'
Phase Two *4.2.3 Preparing the Soil*	Sharing and creating knowledge and understanding in the organisation; shaping the school culture to facilitate the changes	The aim was to create a community that was aware of some of the ideas that were out there about effective schooling for all learners, and in particular for middle school learning. The Master wanted this spread of ideas to occur not just for teaching staff but for the whole community, particularly parents: 'It's feeding all this out into the community so when I start making steps people say oh yeah I know about this because because because … preparing the soil. It's been years of preparing the soil.' Drip feeding the community as a means of fertilising the soil and planting seeds continued. The aim was to share and disseminate information about the brain and learning in the school community ... This awareness was critical in understanding the emerging fundamentals of the Humankind Curriculum. His (Johnny Ausbrain's) presentations were very well received by a school community that was, at that stage, sufficiently immersed in learning about the workings of the brain, in particular the adolescent brain, and assimilating brain compatible content and approaches in the middle school curriculum and beyond.

continued on next page

Table 4.11 continued

Phase Three 4.2.4 Planting the Seed	Developing the core operational components of the initiative that engage the identified needs	The second document, *Aims for Consideration,* contained ten key points that remained in place throughout the process and contributed to the essential characteristics of the tree. Early April sees the circulation of two 'fertilising' documents.
Table 4.11 continued		Mulch keeps being added as required; part of the Master's 'drip feeding' strategy of sharing what he is thinking and where he wants to go with this. Essential characteristics of the initiative are formed (Table 4.1).
Phase Four 4.2.5 A Seedling Emerges	Providing focus and attention to promote growth/development	Assisting germination: '…If the ship's going in a different direction or if the engine's not working I've got to do something to kick start it or to turn the rudder a bit. And that's what I did.' Nourishing the soil as a continuous process: ... blessed with the timing and content of this conference ... and both validated key components in his proposal, effectively providing much sunlight and nourishment for the seedling. Small focus group established to continue to create and share knowledge: ... to assist germination and ensure the seedling was carefully tended was to create a small group to 'take the seedling indoors for a few months for nursing' in order to further the growth ... This was the most productive period of development ...
Phase Five 4.2.6 A Young Sapling: The Apprentice at Work	Implementation stage that requires flexibility in responding to emerging challenges and understandings; cultivating a new culture to accommodate the reforms	How it will in fact work, and how flexible the space will actually be with 55-60 students and 4-5 teachers, remained to be seen; but the Apprentice was confident and prepared for the challenges that lay ahead. This whole approach was supposed to be different to what the students had been experiencing so a 'new' learning culture would have to be cultivated. With five teachers (including the School Counselor) working together from differing backgrounds, experiences, and expectations, the challenges were apparent. ... they were constantly discussing and trying out different strategies for optimizing the opportunities and methods ... ... getting into something and doing it deepened our learning ... [taking] time to reflect on what had been achieved in the curriculum reform so far and where they considered improvements were needed ... *continued on next page*

Table 4.11 continued		Guided by the teachers' collective experience and shared reflection, they had identified areas that needed more attention and were becoming increasingly aware of what cultivated the sapling's development and, equally important, what could be seen as hindering growth.
		Time was needed to adjust to the changes ...
		Upon review of the [HKC questionnaire] responses, we decided that we must ...
4.2.7 A Developing Pole: Apprentice to Master		Three factors were identified as key to implementation: 1. Communication; 2. Knowledge sharing; 3. Managing time.
		It was critical to have a shared understanding of these concepts as they formed the framework ... The idea grew that we needed to reorganize the concepts in a more efficient and relevant way ... several structural changes were eventually made to the model without affecting the core principles... The unfolding understandings that developed out of their experience informed the refinement of the framework ... This model evolved into a schema that was better understood and potentially more operational ...
		[Content] was developed ... over several months in conjunction with the evolving framework and in consultation with all of the HKC teachers (as they developed and implemented the program) and shared with the Master.
Phase Six *4.3.1 Asking the Budgies*	Gathering and responding to feedback and reflecting on the process so far	The Questionnaire's aim was to gather feedback from the students on various aspects of their experiences in the HKC class and to inform the curriculum reform process ... to provide useful feedback to the teachers and the Master on student perceptions of this class.
		'Writing Reflections' was unpopular across all year levels in the first year [2006] ... which prompted the teachers to take a different approach to reflective writing in the following year. A positive change in students' attitudes was demonstrated in 2007...
		Consistent across the grade levels is the preference for learning experiences that offer a practical/doing component.
		The length of class time ... was clearly an issue for a number of students. This prompted the teachers to review the pace and scope of activities during the second year and to regularly have two short breaks during the triple and a longer break during the double.
		Process Assessment ... ranks highly and is a feature of the Humankind Curriculum.
continued on next page		*We went too much in depth into some topics and they eventually got rather boring ... I love the student-teacher interaction bit and the subject takes a lot of pressure off our backs as there are no grade.* (Student comment).

Table 4.11 continued

4.4 The Master Reflects		This [interview] provided an opportunity to capture the Master's perspective on his experience of developing and implementing the Humankind Curriculum over the past two years
		' ... the fact that we've moved so far in two years is remarkable in an institution that is with a parent body the way that the parent body is here.
		... we've been able to do some fairly innovative things. Despite all these constraints.
		. . . it's [the Humankind Curriculum] been firmed up over the last two years. It was a fairly wide ranging framework when we started. As a result of experience it's been firmed up a little bit.
		I thought the first year was very difficult. I think what I understand now about an approach like this is the need for the right sort of teachers and the right team.
		This is a huge change and I think it will be a change for the better but so many other things need to change around it to optimise its potential. If the stuff around doesn't recognise what's going on we have difficulty.'

4.6 The Apprentice's Reflection

This reform experience I was deeply involved in shaped my conceptualisation of middle schooling and curriculum reform in an international school. From the onset of this process I never expected I would play such a pivotal role in the process and the three years of my involvement have turned out to be a period of intense personal and professional growth. The following reflection attempts to further provide the reader with an insider's view of this process, to shed more light on the black box of international school reform, as experienced by this researcher, an integral participant in the process. Here is my vignette, my sketch of the apprentice as participant researcher.

I consider my involvement in Bay International School's middle school reform as commencing from February 2004, the time of my job interview. From that moment I felt the Master had planted seeds in my mind. I was taken by his

enthusiasm and commitment to the project and I was excited to be involved in something that harmonized with my personal philosophy of learning and teaching in international schools. I had already established respect and admiration for the Master from having filled in for several weeks at the school six months earlier. It was his charm and the positive feeling around the school that had urged me to leave my position at another international school and seek employment at his school. With both of us on solid and familiar ground, the interview clarified and formalised my suitability for the available position and my interest in sharing his vision for middle schooling. I was very much attracted to what had been explained to me at the time (in 4.2.3) and had confidence that my ambition to be involved in a worthy innovation at a prestigious international school would be fulfilled. I guess I was a true believer before I even got there!

I enjoyed a gratifying professional relationship with the Master prior to my full time employment there and this continued to develop. We shared a similar sense of humour, had a mutual respect for each other's intellect, and I sensed I had much to learn from him. I could aptly describe him as a charismatic and socially adept individual and a skilful and captivating public speaker. In my view, the school had a positive climate which could be attributed to the Master's efforts at making everyone feel welcome and valued. He was a visible headmaster who routinely chatted with students of all ages, had an open-door policy encouraging staff and students to pop into his office for a chat, often lunched with teachers in the canteen, and never failed to greet students and staff at any time of the day. He always attended staff morning briefings and meetings with at least an informative, if not inspirational, message to share. He was hands on, he was there. By no means perfect, he was certainly respected and, I believe, widely trusted by students, teachers, and parents.

As my involvement with the development of the Humankind Curriculum deepened, so did my relationship with the Master. This relationship became in many ways the driving force of the process and differing outcomes would surely have been realised in the absence of this enterprising partnership. I was a supporter of his vision from the start and did my utmost to embrace it and contribute to it. One of the first challenges we all faced was trying to understand what the Humankind Curriculum was about. Many hours of explanation, discussion, and learning were spent in his office in those early stages of development when that small group of us were trying to get it and develop ways to make it happen. The time and energy put into developing his vision into a workable framework for implementation created a bond within that group which, in my case anyway, strengthened my commitment to the project. We were enacting the concept of teacher as learner right from the start and this continued throughout the process.

The formal and informal conversations that I was engaged in during the whole process, and especially in the early phase, created a bank of knowledge that I was processing and assimilating. The Master was keen to share his knowledge and understandings, as was Lady Botany, and the discoveries I was making from my own reading and reflection, as well as the input from outside experts, created a synergy of learning in this small but vibrant community that I was a member of. Our collaboration and mutual respect for each other's ideas had generated a deep sense of collegial learning and purpose. The feeling of trust that emanated within this group allowed for our creativity to soar to higher planes. We were sharing beliefs and pushing boundaries; pushing the paradigm of how middle schooling had been approached, certainly at this school and perhaps in a broader context. In this creative process the trust grew from the understanding that we were all focused on what was

best for the students and the school. There was no 'road map' that we were following and the future was unknown. From the beginning we agreed that this reform was an emerging, unfolding process. It was a 'living' thing that we created and nurtured together, manipulated by the context in which it existed, and I was invested in its success and sustainability.

When we got to a workable understanding of what the Humankind Curriculum was about, the Nursery Assistant and I turned to the next question: How can we deliver this curriculum? With two new teachers joining us we promptly began the process of building their understanding and sharing with them the values and aims of the Humankind Curriculum. As I seemed to have a more confident understanding of it all, I naturally took on the leadership role within this group of four teachers who were to teach the Humankind Core component of the curriculum. The Master was taking a huge risk by implementing this innovation and he was dependent on us to make it succeed. In fact, we were all taking risks and being asked to take on new roles and practices that may or may not have worked, and inevitably some didn't.

Early in the process the Nursery Assistant and I realised the importance of the teachers' role in the successful implementation of this curriculum. It was the strength of our relationships that would be the determining factor in how successfully we could deliver this curriculum in the context that had been created. Four teachers and up to sixty students in one large room for two hour sessions seems like madness looking back but we survived as we defined and adjusted to the new and demanding roles we had to undertake. On reflection, it was the building of trust that was key to the success we experienced: (i) I believed and trusted that the curriculum was a significant improvement to student learning; (ii) I trusted that the Master would

support and guide us to overcome challenges; (iii) Despite my apprehension, I had to have faith and trust that the other teachers would meet the inherent demands of the program; (iv) I trusted the students would cooperate and benefit from the new class; (v) I trusted myself and my abilities to make it happen successfully; and (vi) the Master (and other teachers) trusted me to make it work. This trust took time, openness and a commitment to sharing, reflecting and discussion to develop. Working in this context, the interpersonal dynamics of the four teachers became like those of a family; we had been brought together without much choice and, on a daily basis, had to trust, respect, rely on, and interact harmoniously with each other for our mutual benefit and success.

Billy Amsun had the biggest impact on me of all of the experts that contributed to the process of building knowledge and consequent development of the Humankind Curriculum. He visited the school for five days of intensive consultation, provided a written report specific to the school, and maintained contact with me for some time during the process. His view of curriculum as a personal journey or path that focuses on and broadens the learner's connections and relationships to others and to the environment in which they live influenced me the most.

His focus on relationships shaped my thinking (I believe the Master's as well) and subsequently the development of the curriculum. His post-modern perspective on curriculum helped form an awareness of the paradigm that we were pushing into. I adopted his 'five C's of curriculum' and the associated concept that relationships form the ultimate reality in which we work, live and play. These concepts were later incorporated in the Humankind Curriculum documents that I produced.

These concepts harmonised with my personal values and teaching philosophy and I comfortably adopted the view that it (school, curriculum, life) is really all about relationships: the interpersonal relationships of the teachers to each other, to the students, to the school leaders, to knowledge; the relationships of the students to the teachers, to each other, to the knowledge being studied, to their experiences at school and beyond; the parents, the board, the community and so on. This reform process existed within a network of social relationships and this awareness directed my actions to fostering these relationships whenever possible. My observations and experience in this process shaped my belief that the perception and expression of trust were underpinning and enabling this network of relationships.

Shared beliefs and shared practices were built over time with the HKC teachers. On reflection, it seems that we were actually more engaged in pedagogical changes than I realised at the time. When we finally got what the Humankind Curriculum was about, it was relatively easy for me (and the other teachers) to adopt a concept based curriculum. The broad content parameters with which to explore these concepts was provided by the Master and (we eventually realised) just required better alignment and refinement that became clearer to us as we actually engaged in the curriculum.

However, formulating our approach, our pedagogy, was a much more demanding process. The Master provided some underlying principles for an appropriate approach to teaching in the international school context that we generally agreed upon and used as a starting point. The essential characteristics of the curriculum (the 'what') impacted on our pedagogy (the 'how') and key to this was engaging the students in relevant, appropriate, and contextualized learning experiences in which they could build their personal and cultural identity. Yet in the

early months of implementation, although the teachers were intellectually engaged in what we were doing and why, we were really just trying to survive the huge challenges to our practice that we were facing on a daily basis.

From that intense experience where our personal pedagogy was being challenged and scrutinised, both individually and collectively, we were later able to drift towards forming a shared pedagogy that was appropriate for our context. Feedback from the students was used to inform our practice and was collected in various ways (informally by observations, conversations, and written responses; and formally with the student questionnaire) and we made genuine efforts to respond to this feedback.

I was leading this group of teachers and my leadership was enabled by the trust that had developed within the group. This provided me with some degree of credibility and authority to advise and steer our continuous conversations about our pedagogical approach. By the end of the second year of implementation we had clearer principles underpinning our approach and a much greater understanding of what we were doing and why. Despite this growing capacity, we still had not reached the point where we could articulate exactly what our shared pedagogy was. A 'shared knowingness' is the best way I can describe it. There is still much to do in developing a pedagogy that hooks the curriculum and actualizes its aims, including the unfolding of a more negotiated approach to the curriculum that empowers the learner by shifting control from teacher to student (a key feature of the Humankind Curriculum, subsidiarity, which we are still grappling with).

As we progress and become better skilled at facilitating engagement we should be able to introduce subsequent layers to continuously enhance our approach

and enrich student learning. It is still a work in progress, and may always be so. Next year, with new students affecting the dynamics of each group, a new headmaster, and another new teacher joining the team, our pedagogy will undoubtedly adjust to the changing conditions in what could be a continuous and evolving process.

Ultimately what was going on was a reculturing of the middle school. The Master's proposal emerged from his dissatisfaction with what was being delivered in grades 6-8 and he was pushing for a different way of conceptualising and actualising middle schooling. His leadership in curriculum reform provided a catalyst for change, for a reculturing of the middle school. Structural changes were easily observable in the middle school, but changes in culture are more difficult to pinpoint. As a middle school teacher I certainly felt changes going on in my thinking, my conversations, my practice, and my relationships with the students and teachers. We were starting to see and do things differently and a new awareness of the needs of middle years learners had permeated around the school and especially with those involved in the middle school. Students were also responding positively to our efforts to cultivate a unique learning culture in the HKC class.

Initially, some students and parents (and in fact some teachers) perceived the changes we had implemented as a drastic leap that caused discomfort and it took time for them to adjust. This is indicative, I think, that reculturing was in fact occurring. In a school that is very letter grade-oriented (students receive letter grades A to D for four core subjects in the middle school and all subjects in the high school) the non-grading of the HKC class was perhaps the biggest adjustment that some students faced, especially in the first year. I agree with the Master that he would not have been able to proceed with dismantling the grading system across the whole middle school in the current conditions (a move he was in favour of). He knew how

far he was able to go. As the HKC class became increasingly integrated into the culture of the middle school, resistance to the changes dissipated. How successfully the next phase of implementation will evolve, with conceptual and pedagogical alignment in other subject areas and connections and relationships extending across the whole middle school curriculum, and the impact this has on the culture of the school, remains to be seen.

Reflecting on the role I played in the reform process, leads me to the realisation that the dynamism of this role was actuated by the emergence and transference of trust and the capacity of leadership that unfolded. The Master's involvement and leadership in the process diminished over time as my involvement and leadership role expanded, which was a direct result of the transfer of trust. As he entrusted me with leading the process, he was able to withdraw and attend to the other demands his position involved, knowing that 'his baby' was in trusted hands.

At the beginning of the reform process when he was directly involved in all aspects, building awareness and understanding of the issues, engaging and enabling others, sharing and refining his vision, building trust in the organisation, and shaping the culture (as depicted in the first four phases of the reform process, Table 4.11), he was demonstrating a different leadership capacity to that which was required at the implementation stage. Like a tag team partnership, my role had changed in an inverse way when I took to the ring (at the implementation stage), and began performing at a more engaged level of leadership, especially after I had received the appointment of Head of Humankind Curriculum. This made a difference to not only my status in the school but also to my own conceptualisation as a leader in the reform process.

In veritable ways the Master had given over to the Apprentice and this transition was sealed upon his departure.

4.7 Conclusion

This chapter presents the story of the process of a middle years curriculum reform that was experienced by a small group of teachers at an international school in Japan. After the introduction (4.1), the second section (4.2) of this chapter was told metaphorically in order to document the social processes and relationships embedded in the context and to capture the dynamic qualities of human interaction and experience. Section 4.2.1 to 4.2.7 tracks the experience of change and demonstrates how a local curriculum initiative was able to grow and develop over time with the care and attention of a committed headmaster and a small group of followers who were supported by a handful of external specialists in related fields. While engaged in a collaborative process, and learning and refining as they mapped out a course of action, they were able to and build the capacity to initiate, develop and begin implementation of their innovative middle years curriculum.

The second section of this chapter (4.3) presented data that was collected and analysed as the emergent design of this study unfolded and includes: the student surveys (4.3.1), which provided evaluative feedback to the reformers; responses from the second interview with the headmaster (4.3.2), capturing his perspective on the experience and revealing his own growth and development; the emergent phases of the reform process (4.3.3), which are elaborated on in the next paragraph; and this writer's detailed reflection on his experience as a pivotal actor and participant-observer in this study (4.3.4). This section serves to enrich the reader's vicarious experience by revealing more of the dynamics of a curriculum reform process in an international school.

The reform process that emerged in the collection and analysis of data is observable as the six phases represented in Table 4.11. These phases of curriculum reform can be summarised as identifying needs, creating shared knowledge and understanding, developing core operational components, providing focus and attention, and implementation of the curriculum by cultivating a new culture to accommodate the changes. Responding to feedback and reflecting on progress occurred throughout this process in an ongoing and recursive sixth phase.

This chapter illuminates the process of middle years curriculum reform in an international school and provides a rich source of material for the meta-analysis of the research questions that is conducted in the next chapter.

CHAPTER 5 DISCUSSION

5.1 Introduction

The aim of this study was to get inside the process of curriculum reform in an international school, a context distinguished by the phenomena of transience, diversity and host relations (as presented in the literature review), to shed light on what happened inside what may be considered a 'black box'. As presented in Chapter 4, in-depth tracking of multiple perspectives of the development and implementation of a locally produced middle school initiative, the Humankind Curriculum, reveals some of the contents of this box. These contents manifest as a journey and the story of this journey, as observed, experienced and retold by this participant researcher, provides a detailed and authentic account of middle school reform at an international school. The aim of this chapter is to address the three research questions that framed this study and act as windows, providing a view of this journey.

As the research unfolded, the multidimensionality and interconnectedness of what was happening at Bay International School began to emerge. Hence, the overarching question, *What happens when an international school reforms its middle years curriculum?*' encompasses the other two related questions, *What is the nature and significance of the reforms?* and *What are the emerging concepts that are illuminated during the reform process?*, far more than this researcher expected. While agreeing with Fullan's (2007) notion that innovation is multidimensional, this study takes the view of reform as a journey and identifies three slightly different dimensions. Each question acts as a window and thus focuses on one of the three

dimensions of reform that emerged in this study: process, product, and dynamics of change. These dimensions, or components, of the change process as experienced at BIS are bundled; they were mutually dependent on each other and, more significantly, on the context in which they operated. While appreciating the holistic nature of the phenomena, this discussion endeavours to unravel this bundle by responding to each of the questions (dimensions) separately.

5.2 The dimension of process: Research Question 1 What happens when an international school reforms its middle years curriculum?

Bay International School's middle school curriculum experienced a reform process that emerged and unfolded over a four year period as presented in Chapter 4. This researcher's inductive analysis of the phenomena that took place generated six identifiable phases (Table 4.11) that defined this change process, and are now conceptualised as Figure 5.1. Drawing from the tree metaphor, this model presents the process as a living, growing entity that is interrelated and dependent on each of the phases to ensure its development and sustainability.

The model depicts both linear dynamics, where each phase occurs in succession, and non-linear dynamics whereby events at one phase can feed back to effect decisions and actions at previous phases in a continuous and interactive way. For example, *Reflecting* is vital after the first five phases but also permeates throughout the process in varying degrees as a necessary function of each phase; similarly, building new knowledge (a key function of *Preparing*) is an ongoing operation. The proportion of each phase, though presented symmetrically in this figure, is fluid in its composition as it varies according to the focus and attention

applied throughout the process. References to the sections in Chapter Four (in parentheses) serve as a guide to where each phase is most readily observed and as a cross-reference to Table 4.1.

Figure 5.1: Model of Reform Process at Bay International School
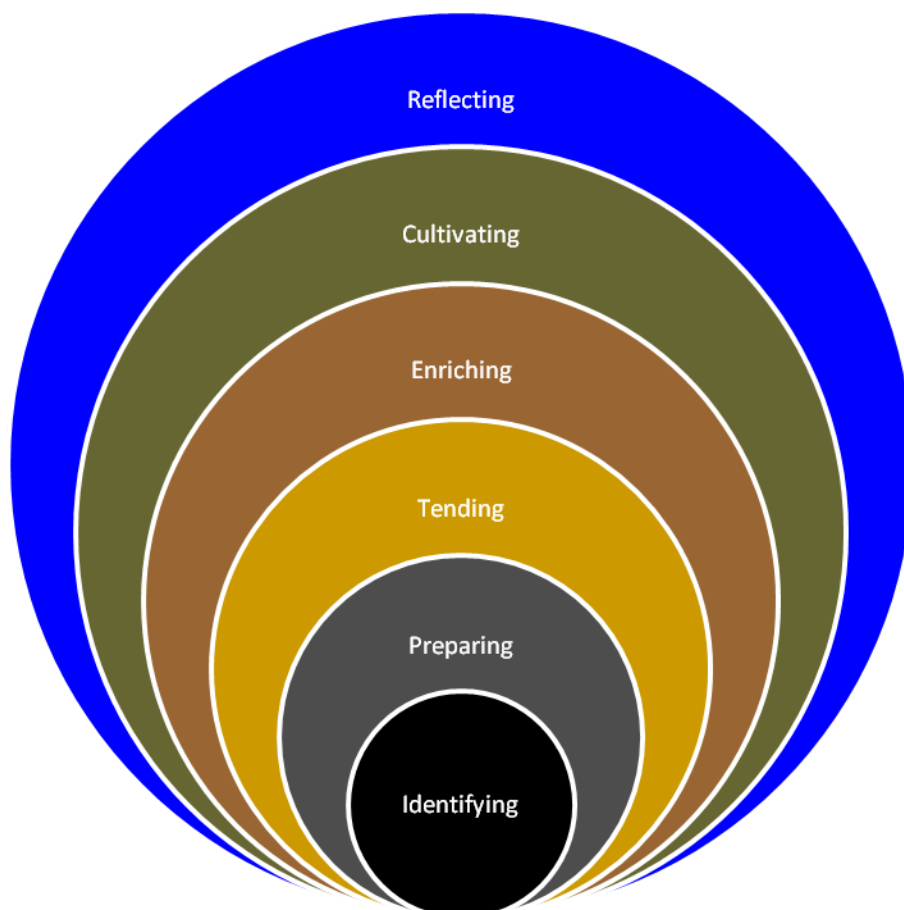
*Phase 1 **Identifying*** (Chapter 4.2.2) represents the finding of a plot as an ideal patch for the planting of the tree. Identifying a need, an area in the school that requires reform (and in this case the middle school curriculum was the 'dreadful mess' that remained to be sorted), and carefully choosing the optimal time for action are the key elements that presented in the data and characterise this phase. Timing

was crucial and the data indicates the headmaster acknowledging three key factors that facilitated the reform process at this initial phase:

(i) The advantage of his long tenure at the school. The headmaster was in his ninth year at the school at the beginning of the initiative and completed eleven years by the end of the second year of implementation. This is rare in international schools, where Hawley (1994) reported that 50 percent of heads remained on the job for only 2.8 years and that as many as 15 per cent leave after only one year.

(ii) A series of successful curriculum reforms during his tenure that gave him credibility and trust. The headmaster was credited with putting in place 'a rigorous, consistent and egalitarian curriculum across the school,' (4.2.2) that included a Social Emotional Learning Focus department, the Reggio Emilia program in the Early Learning Centre, the IBPYP for grades K-6, the IGCSE in years 9-10, and the IB Diploma for 11-12.

(iii) An awareness that changes were needed. The headmaster was acutely aware that changes were needed in the middle school program that was in place and with his interest in brain research and the social-emotional dimension of learning, was committed to developing a program that would reflect the needs of learners at this age and prepare students for the changing world.

*Phase 2 **Preparing*** (Chapter 4.2.3) was a lengthy period in this process that required leadership by the headmaster to initially share and create knowledge and understanding in the organization, and then to begin the process of shaping the school culture to facilitate the changes. This preparation of the school community

was an ongoing operation that took various forms and recurred throughout the process (the 'soil' needed to be regularly cared for and nourished in order to provide the required amount of nutrition to the 'tree'). The scope of these efforts varied and included:

(i) Tapping into external resources by networking and establishing relationships with experts that supported the vision. The headmaster instigated the school community conference (the GTB in the data) and invited acclaimed speakers from around the world to stimulate dialogue and provide opportunities for teachers and parents to reflect upon some of the issues facing the school. Ongoing relationships were also formed with at least two of these external agents.

(ii) Building knowledge that fed into a learning community. External agents continued to feed into the knowledge building process with the headmaster leading the way by developing and sharing his views in various formats (such as written documents, meetings, teacher and parent presentations). Teachers were also actively involved in this process of sharing and reflecting and were encouraged to undertake professional development opportunities both locally and internationally.

(iii) Creating awareness with not just professional staff but with the wider school community including board members and parents. The headmaster strategically went about 'drip feeding' the community in order to spread ideas and create awareness of middle schooling issues. His success is evident in the board of members' approval and the support of parents.

(iv) Initial shaping of school culture. Taking Schein's (1992) view that the most useful way to think about culture is to view it as the accumulated shared learning of a group, the headmaster's efforts at knowledge building is evident in the data and indicates initial steps in reculturing the middle school. Using Fiore's (2001) analogy of schools as a patchwork quilt and school culture as the binding thread, the headmaster had begun twisting the thread by promoting a vision of middle schooling.

*Phase 3 **Tending*** (Chapter 4.2.4) involved the development of the core operational components of the reform initiative that respond to and engage the needs identified in *Phase 1*. The idea of a curriculum that met the needs of middle school learners was initiated by the headmaster but he could not have progressed on his own so made genuine efforts to be inclusive and collaborative. The 'drip feeding' continued and became more focused as a steady output of documents that increasingly refined the ideas was released for discussion, reflection and development. These ideas were supported by one external agent in particular, who made significant contributions to developing the essential characteristics of the initiative. A coordinator's position in the school and a committee were also created by the headmaster to facilitate this phase. Shared learning was accumulating as teachers were starting to acknowledge the fundamentals of the vision for a Humankind Curriculum and the early stages of constructing a framework began to emerge (as represented in Table 4.1).

*Phase 4 **Enriching*** (Chapter 4.2.5) sharpens the focus and attention needed to promote growth and development of the initiative prior to implementation. Strategic techniques employed by the headmaster and the recruitment of several key players to

enrich the focus and attention on the initiative facilitated the accelerated growth

evident in this phase. These techniques included:

(i) Establishing focus groups of teachers to foster teacher efficacy.

When the headmaster became dissatisfied with the pace and direction that

the larger teacher committee was moving, he disbanded it and created a

small group to focus on the Humankind Curriculum. This group of five

teachers were directly involved with the reform, became key players in the

process, and emerged as a professional learning community (discussed in

5.4. later in this chapter).

(ii) Continuing the process of building knowledge in the community,

including further articulation of the initiative and envisioning implementation.

The 'blueprint' for the reform is released to the teachers detailing the

fundamentals of the initiative; ideas for implementation are now added to the

dialogue. At around the same time, guest speakers at the school's community

conference validate the philosophy and key components of the initiative. A

curriculum expert was brought in and made significant contributions to the

growth of the reform. The headmaster released further documents articulating

the conceptual and practical features of the curriculum reform.

(iii) Minimising the influence of adversaries. There were limited

outcries of opposition as the value of the reform was generally well shared

amongst the teachers. The Social Studies department were the most vocal in

their opposition to the reforms, considering the proposal to be radical in both

form and content. Critical questioning by staff was welcomed and often led to

new developments.

(iv) Planning for and resourcing structural changes to accommodate implementation. The Board of Directors approved the Humankind Curriculum and funded the structural changes which included increase staffing and works on renovating the three existing classroom into one open space. The focus group of teachers had significant input into the design and resources for the new classroom. The class was scheduled into the timetable.

(v) Ongoing efforts at moulding the school culture to absorb the changes favourably. Twisting the thread of school culture continued with the headmaster addressing each stakeholder group in turn. He initially focused on gaining teacher agreement and a willingness to proceed with the idea was generally shared. Convincing the Board of Directors to approve the reform and fund the proposal was an essential next step. Finally, presenting the changes to parents and seeking their support in order to 'minimise turbulence'.

*Phase 5 **Cultivating*** (Chapters 4.2.6 and 4.2.7) represents another phase of accelerated growth that occurred during the implementation process. Growth was promoted through action as plans were tried, tested and cultivated accordingly. This phase featured flexibility and adjustment in responding to the emerging challenges and understandings that implementation revealed, and the further cultivation of culture to accommodate the changes. The data presented in 4.2.6 and 4.2.7 captures the dynamics of the first two years of implementation and illuminates the experiences of a select group of teachers as they engage in a continuous process of shared learning and development in, and as a result of, the change process. Building capacity among the core group of teachers to deliver the aims of the initiative is evident in:

(i) The development of collegiality. In the preceding phase, this core group of teachers, led by the headmaster, experienced an intense period of interaction and cooperation with one another as they clarified and developed their shared understandings of the implied presuppositions, values and assumptions that underpinned the reform. In the implementation process, this collegiality continued with the four teachers as they worked collaboratively to realise the aims and features of the Humankind Curriculum. The timetable allowed for extended periods of time for this team of teachers to construct their shared beliefs and practices; a critical requirement for creating a shared reality essential for implementation of the curriculum.

(ii) The building (and transfer) of trust. Underlying this collegiality is the building of trust among this core group. Initially centred on the headmaster in the earlier phases, trust grew among the group and enabled the high degree of cooperation and creativity needed to succeed. The change in the leadership dynamics (as the headmaster and teacher leader merged roles) was facilitated by the transference of trust.

(iii) The deepening of shared understandings that resulted in and were enhanced by refining the properties of the curriculum. The curriculum framework evolved through eight stages (Figures 4.1 – 4.8) during this phase as the teachers gained new understandings and insights informed by their experience. The refinement of documentation was also undertaken that detailed and defined the Humankind Curriculum (Table 4.4 and Appendix H). Shared agreement on the nature and sequence of content (for the HKC class) had also been reached and was continuously reviewed (Figures 4.9 – 4.11).

(iv) Connecting pedagogy and curriculum by reflecting on experiences that impacted on their teaching practice. During the implementation process the core teachers designated a weekly meeting to reflect on their practice and formal discussions evaluating progress were held with the headmaster periodically. The pedagogical approach was being developed through reflective practice and responding to formal and informal feedback from the students. As the teachers' understanding of the curriculum grew, so did their practice. From the early challenges of surviving the new teaching context, the teachers progressed through an intense learning period to a place where they were able to better connect their practice to the curriculum and kept moving towards developing an appropriate and shared pedagogy.

Insights into the cultivation of the middle school culture were present in the reculturing of teachers (as new ways of doing things were created), students (as they adjusted to the changes of a new learning culture), and parents (as their personal perception of schooling caught up to the conceptual leap presented in the new curriculum). The way capacity for change was built and the effect on reculturing is discussed in detail later in this chapter.

Phase 6 **Reflecting** (Chapters 4.3.1, 4.3.2 and 4.3.4) is the reflective and evaluative phase where feedback was gathered and responded to, progress was reflected upon, and emergent deliberations were actioned. Informal feedback from students was gathered regularly (in the form of conversations, observations, and responses to assessment tools). Using the questionnaire (developed out of issues the teachers wanted student feedback on) to formally gather student feedback on how the changes have affected their learning experiences allowed the students to play an interactive role that informed the curriculum reform process. Availing the

headmaster, as designer of the initiative, with the opportunity to reflect on the process two years into implementation (4.3.2) provided insights into his own learning and development and set the stage for the future sustainability of the Humankind Curriculum. The Apprentice's Reflection (4.3.4) contributes valuable insights on the experience that can only be drawn with the advantage of retrospect. These insights serve the aim of this study as well as the researcher's continuing role as participant in the reform process.

The process of reflective thinking was an ongoing and intentional practice that enabled the participants to put their experiences into perspective, initiate new ideas and stimulate further focused, shared and creative thinking and action. This is evident throughout the process as indicated in *Phases 1-5*. Reflection permeates all the other phases and deliberately encompasses the model in Figure 5.1. This attests to the power of reflective thinking in adding value to all of the phases in the reform process and should not be underestimated.

5.2.1 Summary

These six phases capture the process dimension of curriculum reform that occurred at Bay International School and is conceptualised as an interdependent and dynamic phenomenon visualised as Figure 5.1. Insights into 'what happened' when an international school reforms its middle years curriculum are provided. The uniqueness of the setting, determined by the people and the circumstances, is a critical factor influencing the process; and the process itself forms the context for the interplay with the other two dimensions of product and dynamics of change.

5.3 The dimension of product: Research Question 2 What is the nature and significance of the reforms?

The dimension of product concerns the nature and development of the reform, The Humankind Curriculum, which evolved over time to culminate in the final document, *The Humankind Curriculum Draft V* (Appendix H). This document articulates the nature of the initiative and the theoretical underpinnings of the Humankind Curriculum and is used in this section as the basis for discussing the significance of the reforms at BIS. All excerpts in italics at the beginning of each section are directly quoted from this document. The aim of this part of the discussion is to answer the research question by identifying the core features of the reform and showing how they are connected to the authoritative literature as reviewed in Chapter 2. A case is made that the theoretical foundations and practices of the Humankind Curriculum are supported and validated by relevant literature and are thus significant.

Five core features have been identified by this researcher as comprising the essence of the Humankind Curriculum, which can be determined in the statement:

Addressing the Developmental Needs of the Adolescent within ***A Network of Connections and Relationships*** that ***Focus on Conceptual Understandings*** by ***A Pedagogy of Engagement*** in order to ***Prepare for a Changing World***.

5.3.1 Core Feature 1 Addressing the Developmental Needs of the Adolescent

The curriculum should provide and deliver an approach that supports and responds to the developmental needs of the young adolescent.

A strong and positive sense of identity is crucial to the social, emotional and intellectual development of the emerging adult, and this lies at the heart of the Humankind Curriculum.

Adults interacting with adolescents should have an understanding of the significant structural changes that occur in the brain at this time so that learning experiences can be aligned with the brain's complex structures and function.

By honoring the principle of subsidiarity, the curriculum offers adolescents critical stimuli for thinking, doing and reflecting, thereby providing the essential opportunity of learning to take responsibility for their own decisions and actions. Students will become masters of their own learning, not only of their emerging understandings, but also of their metacognitive ability of learning how to learn.

To develop approaches and practices that go with the grain of the brain (to embed scientific understandings of how the brain learns in the middle school's learning culture.

The imperative to address the characteristics and needs of early adolescence have been widely reported in the educational field (Abbott 2005; Abbott & Ryan 1999; Beane 1991; Chadbourne 2001; Hargreaves & Earl 1990; Hill et al. 2001; Jackson & Davis 2000; Lipsitz & Jackson 1997; Mergendoller 1993; National Middle School Association 2003; and Reay & Arnot 2004). The developmental capacities of learners at each stage of the life-long learning process needs to be understood by educators and provided for and, as many of these writers assert, this is critically important during the stage of adolescence. Hargreaves and Earl's (1990) list of adolescent needs as presented in the literature review can be summarised as: adjusting to profound changes; building self-esteem; and developing identity, independence, and values. The Humankind Curriculum appears aligned with the essential acknowledgment of these needs and characteristics and attempts to provide an educational structure that, as Hill and Russell (1999) suggest, provides 'the approaches, opportunities and experiences that enable young people to accomplish the developmental tasks they face, within their own social context, as a result of their expanding physical, social, emotional and cognitive capacities' (p. 5).

The burgeoning field of neuroscience provides educators, and especially middle school educators, with unprecedented insights into the functions, structures and capacities of the adolescent brain that should inform and be reflected in how

educators run their classrooms and schools. Wolfe (2001) suggests that 'the more we understand the brain, the better we'll be able to design instruction to match how it learns best' (p. 1). Smilkstein (2003) and Gunn, Richburg and Smilkstein (2007) have developed an extensive research based approach to using the brain's learning processes to create curriculum that is congruous with the brain's natural potential for learning. Going with the 'grain of the brain' is in fact one of the stated aims of the Humankind Curriculum and is drawn from the work of Abbott and Ryan (1999). This study's literature review is indicating that a new paradigm for learning is emerging (Abbott 1997, 1999; Caine & Caine 1997, 2001, 2006; Erlauer 2003; Feinstein 2004; Gunn, Richburg & Smilkstein 2007; Hardiman 2003; Jensen 2006; Nagel 2004; Smilkstein 2003; Sousa 2000; Strauch 2003; Wilson & Horch 2002; and Wolfe 2001). An understanding, or the very least an awareness, of how the brain learns is becoming an imperative for all educators, particularly in the middle years which has been identified as a critical phase for brain development.

The Humankind Curriculum is moving into this paradigm. It is responding to the calls in the literature for middle years educators to address the needs of the adolescent. The philosophical underpinnings and the commitment to brain awareness and learning how to learn, demonstrated by the engagement of a brain consultant and the development of a curriculum thread concerned with learning about the brain, validates the Humankind Curriculum as an appropriate approach to middle years teaching and learning. The prime function of schools, in any context, is in assisting student learning; any worthy school endeavour, therefore, must obviously be mindful of the developmental needs of the students involved. The critical point here is that middle years educators, when developing teaching and learning approaches for the

middle years, must access and consider new information about the adolescent brain that is constantly emerging.

5.3.2 Core Feature 2 A Network of Connections and Relationships

The Humankind Curriculum views 'curriculum' as having multiple dimensions. From this perspective, curriculum is embraced in a broad sense and is defined as a personal journey or path that focuses on and broadens the learners' connections and relationships to others, to knowledge, and to the environment in which they live.

Rather than a package of unconnected parts, the Humankind Curriculum is a total ecology of middle schooling that brings things together in a relevant and natural way. It is a combination of horizontal and vertical aspects that connect and interrelate across cultures and through time.

The networking of the four domains of the Humankind Curriculum will provide a process of weaving all the threads together towards the goal of integrating the middle school learning experience into a multidimensional, interconnected and seamless whole.

The Humankind Curriculum moves away from the traditional one-size fits all learning frame to a curriculum encompassing multiple frames, where variation and difference are positively utilized ... The four categorical frames of the Humankind Curriculum are the Prescriptive, Expressive, Negotiated and Vitalic Domains. Each has a complementary role in the student's life and each draws upon the student's values, background knowledge and skills. With their concomitant ways of operation, these domains continue to develop the skills and knowledge base needed for high school and beyond. Relationships between the domains are key.

To provide a rigorous, relevant and rich curriculum that joins things together through synthesis and analysis; uncovering hidden connections and emergent understandings.

The developmental needs of the adolescent are realised within the network of connections and relationships provided by the Humankind Curriculum. Humans learn within a social context; we need social interactions within a nurturing community. Everything revolves around relationships; the brain functions in patterns and connections and needs to see how things are related and connected. The

Humankind Curriculum attempts to disengage the limitations of the industrial model of linear, isolated schooling and provide a structure and approach that takes the time to provide opportunities for young adolescents to delve into discovering how everything is related and connected. They need time and space to look at the whole, to experience the totality of what is going on within them and around them. By acknowledging the multidimensionality of knowledge, this approach aims to facilitate a careful and recursive journey through the different perspectives that emerge out of the various disciplines of knowledge.

Fundamental to the aim of the Humankind Curriculum is to provide the opportunity for students to think freely, deeply and holistically and to appreciate the wholeness, and not just the details, of their learning. The student is placed at the centre of the curriculum. Relationships can then be built within and between the parts of the Humankind Curriculum (the domains that constitute the structure) and together with the knowledge that the student builds out of the conceptual framework (the learner's emergent understandings) creates a synergy that shapes the transformative experience for the student.

Support for this approach of integrating and synergising the middle school curriculum is evident in the literature review (Beane 1991; Beare 2001; Dickinson & Butler 2001; Doll 1993, 2002; Hare 2006; and Senge 2006). Although still a work in progress, the concept of a total ecology of schooling (Dickinson & Butler 2001) made up of interrelated horizontal and vertical aspects is emerging in the structure and philosophy of the Humankind Curriculum. Dickinson and Butler (2001) warn that 'an ecology cannot exist without all its elements in place.' (p. 10) So too the Humankind Curriculum is hampered by '*so many other things [that] need to change around it to optimise its potential. If the stuff around doesn't recognise what's going*

on we have difficulty' (The Headmaster's reflection, Chapter 4.3.2). William Doll (1993, 2002, 2005) has written extensively on the postmodern paradigm for curriculum. His vision defines curriculum as a 'personal journey' where relationships are placed centrally and create our ultimate reality. The Humankind Curriculum has demonstrable alignment with Doll's (2005) postmodern perspective where 'a matrix of connections (rich, recursive, relational and rigorous) emerge' (p. 55).

The holistic nature of the Humankind Curriculum is authenticated by the focus on connections and relationships, the cultivation of an integrated perspective of the student's internal and external worlds, and a dynamic and flexible structure aimed at weaving the threads of multiple frames into a multidimensional and integrated whole. This aligns with, and perhaps even extends, Hare's (2006) model of holistic education that is explored in the literature review. Developing personal values is a part of this holistic approach and Hare asserts that because schooling plays a formative role in the development of personal values, a facilitative framework should be provided for this in the middle years. Values, the development of personal identity, and intrapersonal and interpersonal awareness have always been placed at the centre of the Humankind Curriculum throughout its evolution (Figure 4.8).

Senge (2006) articulates the significance of keeping learning connected, relational and holistic throughout our lives in order to see the true and complete big picture. The importance of keeping the adolescent learner open to seeing the multiple perspectives of the big, interconnected picture is crucial. It provides the opportunity for them to see a 'true reflection' (Senge 2006, p. 3) of themselves and the world around them. In light of the process of synaptic pruning that occurs in the brain during this time (as neural pathways are reorganized and those not used are pruned) a

continuously fragmented view of the world may prune away their ability to see connections to the whole. The Humankind Curriculum attempts to bring the curriculum together with an overarching vision of the whole, while still acknowledging the uniqueness of the various parts, to create a system of relationships within the network. Perceiving and conceiving the relationships and connections between phenomena is vital in the human experience of learning. Hence, educators have the responsibility and obligation to provide structures and experiences that facilitate such learning.

5.3.3 Core Feature 3 Focus on Conceptual Understandings

The Humankind Curriculum focuses upon fundamental concepts that have determined the way that human beings have related to the natural world, and have constructed the human way of life.

Curriculum goals are open-ended and provide scaffolding for learning; they are process rather than product driven. Content goals are general and generative, providing the context for conceptual understandings and skill development, and allowing for and encouraging creative, interactive transformations.

To provide integration and depth – a spiralling and recursive curriculum where fundamental concepts are met repeatedly and in different contexts. Core concepts drive subject disciplines as seamlessly as possible.

Be highly engaged in learning as a consequence of thinking; actively seeking to acquire knowledge and understanding.

Develop transferable skills – the ability to learn something in one situation and then apply it in another, significantly different one.

Promote his/her intellectual development – to think creatively, to identify and solve meaningful problems, and to develop understandings and skills that are essential foundations for lifelong learning.

The network of connections and relationships of the Humankind Curriculum provides the context, to use Doll's terms, for a rich, recursive, relational and rigorous journey through the curriculum's five fundamental concepts – Change, Organisation,

Beliefs, Resources and the Environment (External World). These concepts evolved

and were refined during the reform process and still maintained the essential

intention of representing the fundamental and universal constructs of what it means

to be human. The concepts are generic enough to cross all disciplines and to create

rich and natural connections across the curriculum (as is intended in the next phase

of curriculum reform that had not yet been reached).

The value of building intellectual development and understanding by

orienting the curriculum towards big ideas, deep learning, and the ownership and use

of knowledge is documented in the literature (Abbott 1999; Erickson 2002, 2007;

Hill & Russell 1999; and Perkins 1995, 1998). Erickson (2007) considers the key to

intellectual development as the synergistic interplay between the factual and

conceptual levels of thinking and that traditional curriculum models fail to

systematically set up this intellectual synergy. Such fusion is what the Humankind

Curriculum strives for. Attaining these deeper levels of understanding and 'keeping

knowledge alive', where the main ideas are 'few and important' (Whitehead 1967,

cited in Doll 2004) allows for transfer of learning, where skills and understandings

can be applied in different contexts in and, more importantly, out of the classroom.

The conceptual understandings and skills derived from the learning experiences of

journeying through the Humankind concepts can and should be applied to other

learning contexts and real life situations to create rich and deep understandings of

what it means to be human. It is worth revisiting the excerpt from Jackson and Davis

(2000), which appears in Chapter 2, and articulates the significance of this approach

in the middle years.

> Essential questions, concepts and generalizations help students remember
> facts and topics, because these overarching motions help organize the
> seemingly trivial into meaningful patterns (Erickson, 1998, p. viii; Tomlinson,
> 1998, p. 5). Young adolescents are ready to seek out patterns, to make

connections, or to try to figure out the world around them and their place in it as part of their journey toward adulthood ... Concepts and essential questions focus on the big ideas that reveal patterns while deeply engaging students in the process of making sense of the world around them ... (p.44).

Another distinguishing element in the Humankind Curriculum is the notion that the curriculum goals are process driven – putting the focus on the process of learning – rather than just concerned with the final product. The significant role that process plays in learning is substantiated in the literature (Atkin 2004; Bransford, Brown & Cocking 2000; Caine & Caine 1997; Cook 1992; Doll 1993; Jensen 2006; MacGilchrist et al. 2004; and Wiggins & McTighe 1998). Doll (1993) defines curriculum not in terms of content or materials but in terms of process, an interdependent experience where the content is embedded in the process. Caine and Caine (1997) identify the experience of learning as a path that learners should actively pave for themselves (but not by themselves) in order to attain true understanding and self-empowerment. Although the provisions of process may not be as clearly operationalised at Bay International School as these authors articulate, the significance lies in the Humankind Curriculum's acknowledgment that 'process' is integrated in the student's learning experience and drives the curriculum goals.

Paralleling this was the shared view of the BIS reformers to untangle the constraints of the middle school curriculum by lightening the content load in order to allow time to explore concepts deeply and from as many perspectives as possible. This aligns with Howard Gardner's view on tackling the 'greatest enemy of understanding' by taking time to get students involved in knowledge so they can 'think about it in lots of different ways and apply it' (in Abbott 1999, p. 297). Students thinking about their own cultural context is also central to the approach of the Humankind Curriculum; the cultural diversity of the students plays a central role in unpacking the multidimensionality of knowledge and application of understanding.

With 'less is more' as a guiding mantra, the content of the *Negotiated Domain* of the Humankind Curriculum underwent its own evolutionary process (Figures 4.9 – 4.11). Tracking the story of humankind, the content focuses on the exploration of two concepts at a time, along three main pathways per year, scaffolded by a teacher led case study and leading to a student led negotiated inquiry. While the issue of content coverage has not yet been seriously addressed in the other domains of the middle school curriculum at BIS, the reformers may find direction in Hill and Russell's (1999) view of *securing the curriculum essentials* (as reviewed in Chapter 2.3.3) where they advocate for core knowledge and deep, autonomous learning as the forces for driving the middle years curriculum.

5.3.4 Core Feature 4 A Pedagogy of Engagement

Furthermore, an understanding of how humans learn (Appendix H:B) and in particular how middle school students learn (Appendix H:C) provides the foundation for emerging school-wide pedagogy. The middle school is committed to a constructivist, hermeneutical approach where students are actively engaged in constructing their own meaning and understanding.

The evaluation frame is in terms of engagement in the learning process, and the quality generated (where learners are encouraged to discover solutions for themselves); not in terms of deviation from a standard.

To develop approaches and practices that go with the grain of the brain (to embed scientific understandings of how the brain learns in the middle school's learning culture).

[Students to] *Be highly engaged in learning as a consequence of thinking; actively seeking to acquire knowledge and understanding.*

The journey through the fundamental concepts of the Humankind Curriculum and the acquisition of deep, meaningful understandings is driven by a pedagogy that engages students in the learning process in an active, relevant and meaningful way.

Effective engagement is obliged to providing opportunities for middle school students to meet their needs during this critical period by developing and stretching their personal, intellectual and emotional growth in appropriate ways. Transforming teaching and learning for the middle years is a necessary and challenging task that the Humankind Curriculum confronts.

Constructivism as an empowering paradigm for engaging learning is well documented (Brooks & Brooks 1999; Caine & Caine 1997; Glatthorn & Jailall 2000; Jackson & Davis 2000; MacGilchrist et al. 2004; Perkins 1995; Perrone 1994; Smilkstein 2003; and Windschitl 1999); and the Humankind Curriculum is rightly committed to a constructivist, hermeneutical approach. Abbott and Ryan (2000) clearly articulate the case for constructivism and validate this commitment.

> With a constructivist form of learning, each child structures his or her own knowledge of the world into a unique pattern, connecting each new fact, experience, or understanding in a subjective way that binds the child into rational and meaningful relationships to the wider world. This constructivist view of learning has been strengthened by recent findings emerging from the neurosciences. Rather than thinking of the brain as a computer, it is now seen as a flexible, self-adjusting, ever-changing organism that grows and reshapes itself in response to challenge, with elements that wither through lack of use. Constructivist learning is a dynamic interaction between the environment and the individual brain (pp. 20-21).

The challenges for the middle school teachers in adopting a constructivist approach at Bay International School are numerous. The literature offers little comfort with Windschitl (1999) demanding constructivism as an all encompassing culture; Piaget's dare that 'the best methods are always the most difficult ones' (cited in Brooks & Brooks 1999, p. 30); and Brooks and Brooks (1999) view of creating a constructivist framework as a necessary but formidable challenge. On a more comforting front, the reformers at BIS would have considered MacGilchrist et al.'s (2004) promise of the constructivist approach as a means to achieving their aims. The following excerpt from the literature review (2.3.3) is revisited here with

emphasis added to demonstrate the alignment of the Humankind Curriculum with the views of MacGilchrist et al. (2004)

> The construction approach acknowledges and respects learners' **engagement in the process** of their learning and **takes account of the inherent complexity of the process**. Learning happens in the process of coming to **new understandings in relation to existing knowledge**. The research literature suggests that this is an **active, collaborative process** where learners **take responsibility for their learning and also learn about themselves as learners** (p. 52).

Equally valid is MacGilchrist et al.'s (2004) 'co-construction model', which they present as an extension of the constructivist model. In this case a focus on the social interactions and dialogue between learners and teachers enhances the learning experience; a similar concept to Doll's (2002) 'curriculum as conversation' (pp. 48-50). The structure and practices of the *Negotiated Domain* of the Humankind Curriculum support this notion of teacher and student co-constructing learning, which includes: a high teacher/student ratio (four or five teachers with 50-60 students); an emphasis on collaborative group work; time and space for interactive dialogue between teachers and students; and an underlying assumption that teachers and students will learn about the concepts together. Student feedback recorded in the data (Table 4.7) indicates this experience:

> *Its all 7ᵗʰ grade so I think it is a good place to hear other people's ideas especially if they are in a different class.*
> *We discuss, get to see other students we may not meet normally in classes and get to know them.*
> *More teachers so can talk to them more.*

Caine and Caine (2006) present a convincing argument that 'Every student is biologically equipped to learn from experience – that is, each has the capacity for natural learning' (p. 50); and that students asking genuine questions focused on what matters to them (especially pertinent, as we know, to the young adolescent) invokes the natural decision making and learning capacities of the brain. They advise that the

best way to combine academic and natural learning is by creating safe, goal-directed environments in which students can pursue relevant questions. This approach is manifested in many ways in the Humankind Curriculum's *Negotiated Domain* which features experiential learning through simulations and a negotiated, inquiry-based environment where students negotiate the exploration of their own questions, preferably with some connection to their own culture and identity, within the conceptual and methodological framework.

The *Negotiated Domain* forms the core of the Humankind Curriculum (the HKC class) and its pedagogy is also informed by Boomer's (1992) framework for negotiating the curriculum. The significance of a negotiated curriculum has been reviewed in Chapter 2 (2.3.3), and this approach lies at the heart of the pedagogical practices developing in the HKC class. The learning theory that underpins the Humankind Curriculum is partly grounded in Cook's (1992) research based model of *Engagement*, *Exploration* and R*eflection* (pp. 16-26). Emphasizing deep, contextualised learning and empowering the student by placing control of learning in their hands create the engaging and transformative experiences that the Humankind Curriculum strives for.

The Humankind Curriculum recognises the multidimensionality and complexity of knowledge, signified by the dynamic network of four domains that positively differentiate and utilise the nature of knowledge within each category. Engagement in learning is the fundamental aim and constructivism is an effective means to achieve this aim. With negotiation featuring in the *Negotiated Domain*, perhaps a negotiated-constructive approach, 'nego-structive' to invent a new term, best describes what the reformers at Bay International School were trying to practice in the core class of the Humankind Curriculum. This appears to be an effective

pedagogical variation for this particular domain of the network; other equally

appropriate variations that engage students in different ways may unfold as the

reforms continue to be implemented across the BIS middle school.

5.3.5 Core Feature 5 Prepare for a Changing World

As the world of work is being transformed, we must prepare our students to increasingly higher levels of knowledge and skill, not just in the traditional subjects or even in technology, important as these are, but in the personal qualities that matter in the emerging knowledge society: How to be autonomous, self-organising, networking, entrepreneurial, innovative, and resourceful in redefining and learning necessary skills. Thus a curriculum for the changing world is required; one that engages in the present, connects to the past and prepares for the future.

Promote his/her intellectual development – to think creatively, to identify and solve meaningful problems, and to develop understandings and skills that are essential foundations for lifelong learning.

Develop transferable skills – the ability to learn something in one situation and then apply it in another, significantly different one.

Build upon the skills and knowledge of previous learning and develop a strong basis for future learning.

> The 21st century will be the century of change. More things will change in more places in the next 10 years than in the previous 100. Most countries aren't ready for this dizzying ride ... (Fareed Zakaria, *Newsweek*, 2006).

> Nation after industrialised nation is responding to the economic threats and opportunities posed to its culture and standards of living by the emergent forces of the global economy, by investing heavily in the intellectual development of youth. Brain power is at a premium: flexibility based on education is the essential requirement to meet the challenge of change (Abbott 1999, p. 222).

Considering Zakaria's less than optimistic prediction, and Abbott's solution

perhaps overly idealistic, the Humankind Curriculum is an attempt to respond to the

challenges of a changing world. The fundamental aim of all serious education,

according to Kress (2000), is to provide skills, knowledge, aptitudes and dispositions

that prepare students for their adult world. In today's rapidly changing and complex

world, the future for middle school students is more unknown than ever before. With Kress' (2000) predictions in mind for a global, unstable, virtual, multimodal world (as presented in Chapter 2.3.4), schools and curricula as we know them may well have served their purpose of servicing the modern, industrial age and must now become realigned with the demands and dynamics of the knowledge era. This was the core argument for curriculum change presented to teachers and parents by the Headmaster at BIS.

The Humankind Curriculum attempts to cultivate the growth of competent, flexible, autonomous, innovative, global citizens; it provides the opportunity for the student *'to emerge as an adult with confidence, kindness, courage, a strong sense of identity, an awareness of individual and social responsibilities, and an understanding of the world'* (notes from teacher's meeting documented in Chapter 4.2.7). Academic success alone is no guarantee that a young person is empowered to tackle the challenges of modern society successfully. Abbott's (1999) contrast between academic and real life practices presented in the literature review (2.3.4) outlines a convincing argument for reconsidering what we think is important in schooling. It's now about more than just academic success as defined by the industrial age of schooling.

Experts such as Abbott (1999), Beare (2001), Hargreaves (1999b) and Senge et al. (2000) propose valuing skills and knowledge that will help children survive in the ever-changing adult world that they will encounter. Skills that are required in the workplace, connected and relevant to the real world that they will be a part of in the future; not redundant skills and facts that are learnt in schools and have no value in the knowledge-intensive, globalised, changing world. School is just one of the places that young people learn; in fact less than 25% of their time is spent in school so

schools should arm them with transferable skills – tools for learning – that they can use anywhere and anytime. With the best intentions possible, the Humankind Curriculum is attempting to develop such 'tools for life' for middle school students.

According to Ellyard (2001) the key to success in a world of rapid change is learning. His call for the development of a new culture of learning for the twenty-first century includes new models of learning and pedagogy that embed the following elements: Life-long learning; Leaner-driven learning; Just-in-time learning; Customised learning; Transformative learning; Collaborative learning; Contextual learning; and Learning to learn. The emerging learning culture of the Humankind Curriculum is moving in this direction.

In conjunction with Ellyard, Atkin (2004) presents a useful list of practices and structures for developing learning that contrasts a 'conventional approach' with 'learning for knowledge era' (p. 6). Atkins' table presented in the literature review (2.3.4) is used here with a further column appendaged to compare the Humankind Curriculum. Based on this writer's experience, and evident in the data, all fifteen 'aspects' are apparent in varying degrees in the practices of the *Negotiated Domain* of the Humankind Curriculum.

Table 5.1: Alignment of the Humankind Curriculum with Learning for the Knowledge Era Practices

Aspect	Conventional Approach	Learning for Knowledge Era	The Humankind Curriculum (*Negotiated Domain*)
Topic	Imposed	Negotiated	Negotiated within curriculum framework/goals
Mistakes	Should not be made	To be learned from	To be learned from
Assessment	Exams	Authentic – various modes	Authentic Assessment: of, for, as learning; various modes; triangulated by self, peer, teacher (& parent as appropriate)
View of World	Right-wrong	Uncertainty / shades of grey	Uncertainty; multiple perspectives
Determined by	Central authority	Local needs in context of general / global framework	Local needs in context of framework: what it means to be human
Staffed by	Subject expert	Cross curricula team	Cross curricula collaboration team
Aim	Theory to practice	Practice to theory & theory to practice	Same + apply knowledge & skills in other contexts
Approach	Content driven	Process & content driven	Process & content driven
Focus	Teaching centred	Learning centred	Learning & student centred
Teacher role	Expert	Fellow learner / facilitator / sometimes expert	Fellow learner / facilitator / sometimes expert
Emphasis	Knowing that	Knowing how & why and how to find out	Same + learning how to learn
Student activity	Working alone	Working collaboratively and alone – independence and interdependence	Working collaboratively and alone – independence and interdependence
Ethos	Competitive against others	Striving for personal best against criteria & standards	Striving for personal best against criteria & standards
Student role	Passive / receptive	Active / generative. Metacognitive, reflective	Active / generative. Metacognitive, reflective
Learning experiences	Programmed	Flexible / opportunity guided by framework of outcomes and learners' interests / needs	Flexible / opportunity guided by framework of outcomes and learners' interests / needs

(Adapted from *Structures for Developing a Community of Learners*, Atkin 2004; p. 6)

The Humankind Curriculum attempts to embrace the new mindset needed for preparing young adolescents for the changing world and their unknown future. Calls for changes to school structures, curriculum imperatives, and learning culture, including Beare's (2001) argument for reworking the curriculum in light of the 'inexorable megatrends which impact on curriculum' (p. 144), have been heeded by the reformers at Bay International School. Acknowledging the need to shift the mindset of teachers, students and parents, and the success in implementation and practice achieved so far, while still very much a work-in-progress, is grounding the Humankind Curriculum in an appropriate paradigm for middle school learning in the 21st century.

5.3.6 An Overview

The significance of the reforms at Bay International School is further evident when considering the authoritative findings of Hill et al. (2001) as presented in *The Middle-Years*, the fifth chapter of 'one of the first large scale research and development projects that has specifically focused on innovation in schools, and one of the largest educational research projects ever undertaken in Australia' (p. v). Peter Cuttance (2001) and the Innovation and Best Practice Project Consortium (IBPP) provide an analysis and synthesis of the innovations and findings of 107 research projects produced by the participating Australian schools over a two-year period (p. v). Hill et al. (2001) put together what emerged as 'the outline of a paradigm shift in thinking about the nature of schooling in the middle-years and beyond' (p. 102). Their findings are congruent with the intentions and fundamental features of the Humankind Curriculum and these are discussed below in order to provide a synoptic overview of the nature and significance of the innovations at Bay International School.

The motivation for instigating change uncovered in Hill et al.'s (2001) findings, where in most cases the innovation was driven by the enthusiasm of a staff member or the principal (p.102), mirrors the experience at BIS. The most frequent changes the IBPP schools wanted to bring about in the middle years are also strikingly similar to the reasons for change evident in this study's data: improving engagement in and attitudes to learning; promoting identity, belonging and esteem; and developing students' capacity and confidence to function as autonomous learners in the new knowledge society (p. 102). Furthermore, the call for a reassessment of practices and arrangements, transforming teaching in accordance with a socially constructive view of learning that took into account the specific characteristics and needs of young adolescents in the modern information age, and the courage and fortitude needed for the feeling of stepping out on a limb (pp. 102-103) are shared with the reformers at BIS.

Hill et al.'s (2001) analysis of the experiences of the 33 middle schools in the IBPP and the nature of their innovations revealed seven common characteristics of which five are apparent in the Humankind Curriculum (the other two, transition programmes and curriculum for Year 9 students, are not relevant to the reforms at BIS). These common characteristics from Hill are:

1. *Alternative model of provision* (pp. 106-108). This is characterised in the IBPP data as: (i) Implementing a model that reflects a position between the traditional models of the primary and secondary schools. BIS was also seeking to build a bridge between the Primary Years Program and the demands of its high school curriculum. (ii) Making the curriculum less subject-oriented and more focused around projects, problems and themes that were multidisciplinary in nature. The concept based framework of the Humankind Curriculum and its focus on a holistic, interrelated

view of learning is evident. (iii) Another significant change was a move towards teaching in large blocks of time to reduce interruptions and allow opportunities for more in-depth learning. This was certainly implemented with the HKC class but was not yet extended to include the other middle school classes. (iv) Establishing teams of teachers to small numbers of students as indicated at the IBPP schools was manifested in the HKC class where the four teachers would collaborate to deliver the curriculum to a whole year level of between 55 and 60 students and be ultimately responsible for an allocated group of 12-15 students.

2. *Emphasis on generic skills* (pp. 108-110). A common response in the IBPP schools was a move towards 'an emphasis on generic skills underpinning learning across the curriculum and on those competencies that underpin life-long learning in the knowledge society' (p. 108). The Humankind Curriculum's position is clearly aligned with this view and is discussed in 5.3.5 above.

3. *Creation of middle schools* (p. 110). Creating a middle school with its own distinctive philosophy, curriculum and mode of operation or, as in BIS's case, the creation of a sub-school within a larger school is a shared aim between some of the IBPP schools and BIS. Similarly, and clearly documented in this study's data, is the experience where 'significant changes had been brought about in the beliefs and understandings of the staff and the wider school community as a precursor to the structural and organisational changes' (p. 110).

4. *Negotiated Curriculum* (p. 112). Providing students in some of the IBPP schools with a greater say in what and how they learnt encouraged greater involvement of students in negotiating the curriculum and promoting engagement in the learning process. This is a core feature of the Humankind Curriculum and discussed in 5.3.4.

5. *Cooperative learning* (p. 112). This characteristic was not widely shared in the IBPP schools (only 3 schools) however is a central feature of the HKC class as articulated in 5.3.2 and 5.3.4.

Hill et al.'s (2001) documentation of the nature of reforms in the IBPP's middle years schools demonstrated that 'significant improvements in the preconditions of student learning outcomes are achievable [and that these solutions] build on a solid research base and a deep understanding of the nature of adolescence and of how young people learn' (p. 121). Whereas they concede that there is 'no one best way' (p. 121) to pursue reform, the Humankind Curriculum is compatible with the paradigm shift in thinking and practice that emerged out of the IBPP synthesis and offers another model that demonstrates innovation and best practice for the middle years.

5.3.7 Summary

This discussion illustrates the nature and significance of the Humankind Curriculum. This initiative is substantiated by the close connections and alignment with a range of effective teaching and learning principles and practices for the middle years that exist in the current literature. The core features have been identified and validated and the reform is grounded in an appropriate paradigm for learning in the 21st century. Interestingly, the dynamics of the Humankind Curriculum appear to not only inform the paradigm shift but push the boundaries of the paradigm further. Insights into Beane's (1991) question of 'What should the middle school curriculum be?' (p. 10) are revealed in the Humankind Curriculum, and may be especially relevant for educators in the international school context. Perhaps Beane's emphasis on the curriculum is outdated. The Humankind Curriculum places its emphasis on the

student and certainly a more empowering question for the 21st century could be:

What should the middle school student be and how can the curriculum enable this?

Senge (2006) reminds us of the significance of learning and the

responsibilities we as educators, the facilitators or learning, are assigned:

Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves. Through learning we become able to do something we were never able to do. Through learning we reperceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life. There is within each one of us a deep hunger for this type of learning (p. 14).

Learning is an omnipotent and omnipresent human phenomenon. We need to

understand the true nature of how humans learn, how middle school students learn, to

tap into the unlimited potentiality of human learning, their learning. The reformers at

BIS are onto something. Further development of the curriculum and the inclusion of

an articulated learning theory that anchors their practice, is encouraged. The rapidly

changing and complex world that today's adolescence will face in the future requires

an unprecedented obligation for current educators to armour them for unknown

economic, technical, social and personal challenges. Those with the power to affect

change in improving the middle years experience must continue to make difficult

choices and decisions that require understanding and fortitude.

5.4 The dimension of dynamics of change: Research Question 3 What are the emerging concepts that are illuminated during the reform process?

The third research question provides us with a view of the final dimension of

reform, dynamics of change, as it manifested in the social setting of Bay

International School. As illuminated in the data, the dominant concept that emerged

during the reform experience is the professional learning community (PLC) and

within that conceptual arena, leadership, relationships, and internal/external

collaboration are identified as significant factors. Relational trust appears as the central force empowering these fundamental reform agents. The interactive operation of these agents had a synergistic effect on the school's capacity for change that impacted the reculturing experience in the middle school.

Figure 5.2 conceptualises these interactions as a network and presents an impression of the processes that were in operation at BIS as the experience of middle school curriculum reform unfolded. The green circle in the model depicts the PLC with the three aforementioned elements encased and relational trust placed at the core. Their interrelatedness creates a synergistic energy that drives the PLC's capacity for affecting change (indicated by the 'C' arrows) and which ultimately impacts on the reculturing process. The arrows that do not penetrate the blue circle indicate that capacity in itself does not always have a reculturing effect. The surrounding white circle represents the international school context in which this PLC is embedded; transience, diversity and host relations can have both an empowering and disempowering effect on the capacity for change, as was experienced at BIS. This model is placed in Yick's (2004) 'intelligence paradigm' and is conceptualised as a complex adaptive system that anticipates, responds to, and influences changes in the environment as it continuously learns, adapts and evolves.

The discussion of this model teases out the third dimension of reform in this study, dynamics of change, and serves as the response to this research question. It also probes Louis' (2007) queries, as cited in the literature review (2.4.3.4), on the limited understanding of the treatment of trust and change in education; how trust affects leadership and followers; and how the processes of trust act as an active ingredient for change in the educational context.

Figure 5.2: The Operation of a Professional Learning Community in an International School: A Network of Change Agents as a Complex Adaptive System
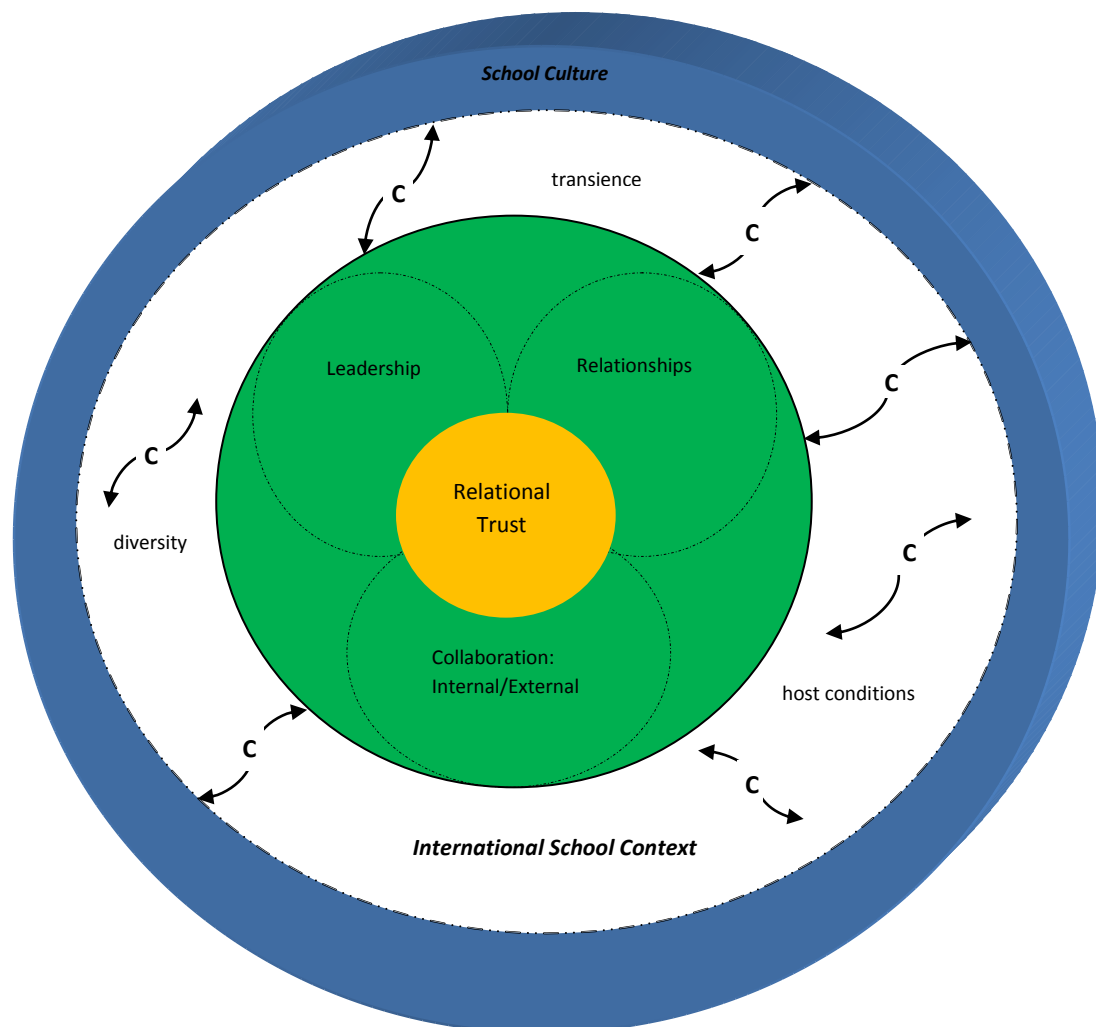
5.4.1 Professional Learning Community

This process of reform depicted the experiences of a small group of educators who, by sharing purpose and professional dialogue and collectively learning together, developed into a professional learning community. The purpose of a PLC is always to enhance student learning and the prime motivation for the Headmaster engaging in the reform of the middle school was to address the needs of the adolescent learner

and to engage them in learning. Stoll et al. (2006, pp. 226-227) present five key

characteristics or features of a PLC that intertwine and operate together to achieve

this aim: shared values and vision; collective responsibility; reflective professional

inquiry; collaboration; and promoting group and individual learning. Although not

school-wide as Stoll implies, these features are evident in the unfolding process that

occurred in the small focussed community of learners at BIS. Furthermore, Stoll and

Louis (2007) describe a PLC in terms that can be aptly applied to the BIS experience:

> an inclusive group of people, motivated by a shared learning vision, who
> support and work with each other, finding ways, inside and outside their
> immediate community, to enquire on their practice and together learn new
> and better approaches that will enhance pupils' learning' (pp. 5-6).

Hipp and Huffman (2007) suggest that creating and sustaining PLCs is a

journey; this study tracks a pathway, within the unique context of Bay International

School, that such a journey can take.

By drawing on their own knowledge and experience and uncovering new

knowledge and understandings from interacting with internal and external sources,

conversations, and personal encounters, this group of educators were able to

collaboratively construct a new conceptualisation about the middle years curriculum

that led to the development and implementation of the Humankind Curriculum. The

following excerpt from *The Apprentice's Reflection* (4.3.4) exemplifies this

experience:

> *The formal and informal conversations that I was engaged in during the
> whole process, and especially in the early phase, created a bank of
> knowledge that I was processing and assimilating. The Master was keen to
> share his knowledge and understandings, as was Lady Botany, and the
> discoveries I was making from my own reading and reflection, as well as the
> input from outside experts, created a synergy of learning in this small but
> vibrant community that I was a member of ... We were sharing beliefs and
> pushing boundaries; pushing the paradigm of how middle schooling had been
> approached, certainly at this school and perhaps in a broader context ... It*

was a 'living' thing that we created and nurtured together, manipulated by
the context in which it existed ... (Chapter 4.3.4).

With a transient population of families, board members and teachers, BIS was

constantly creating and consolidating knowledge – learning, adapting and evolving.

As a knowledge creating community, the building of knowledge continued

throughout the reform process and was often shared with the wider school

community. The story of reform indicates that this learning community evolved over

time and became more focused, as illustrated in Figure 5.3.

Figure 5.3: Evolution of the Bay International School Learning Community
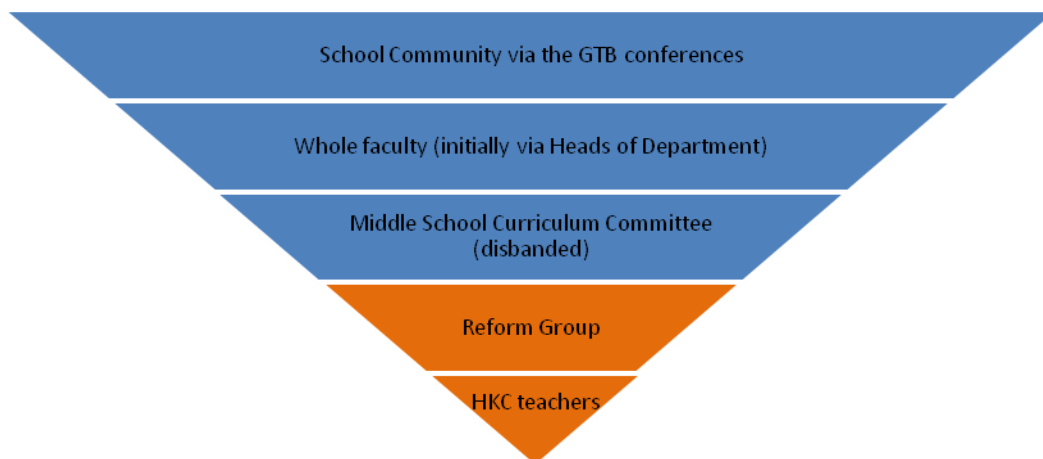
The last two phases (in orange) indicate the occurrence of a kind of 'social

network closure', a feature of social capital (Coleman 1988), that bonded these

individuals and facilitated a higher degree of interconnectedness and relational ties.

This allowed another property of social capital, 'trustworthiness', to develop within

the group (Coleman 1988, p. 107). The four teachers of the HKC class along with the

Headmaster (depicted at the tip of the inverted pyramid) became the core group that

implemented the initiative. As membership in this group changed, the socialization process continued:

> *With two new teachers joining us we promptly began the process of building their understanding and sharing with them the values and aims of the Humankind Curriculum* (Chapter 4.3.4).
>
> *A new teacher had joined the team ... The new teacher brought with her a new energy and enthusiasm for nurturing the tree* (Chapter 4.2.7).
>
> *Over 20 new teachers had joined the school, with six teaching in the middle school, so the Master spent some time filling all teachers in on what the Humankind Curriculum was about. The meeting climate was very positive and cooperative and the learning community seemed to be gaining force* (Chapter 4.2.7).

Acknowledging that there are many ways of conceptualising trust, this researcher adopts Louis' (2007, p. 3) definition of relational trust as: 'the inevitable result of repeated interactions with others in modern organizations. While personal relationships may be limited, individuals interact repeatedly with the same individuals, which leads to expectations specific to that individual or group.' With an image of the development of the PLC at BIS as having travelled along a pathway, relational trust built over time served as the tarmac for this pathway. From the early stages of 'lubricating' the school community to the Headmaster's proposal, the relational trust deepened at the *Reform Group* stage to become the 'connective tissue' that bonded the group of reformers and enabled them to accomplish all that they did. Trust is complex and difficult to pin down, as Tschannen-Moran and Hoy (1998) warn, however the following diagram attempts to illustrate the web of trust at BIS, as extrapolated from the data, and including all groups that had, at one time or another, associations with the learning community. The lines indicate the strength of the trust that was evident; with a solid line the strongest and a dashed line indicating weaker relational trust. Multiple lines indicate variations in the trust relationships.

Figure 5.4: A Web of Relational Trust in the Professional Learning Community
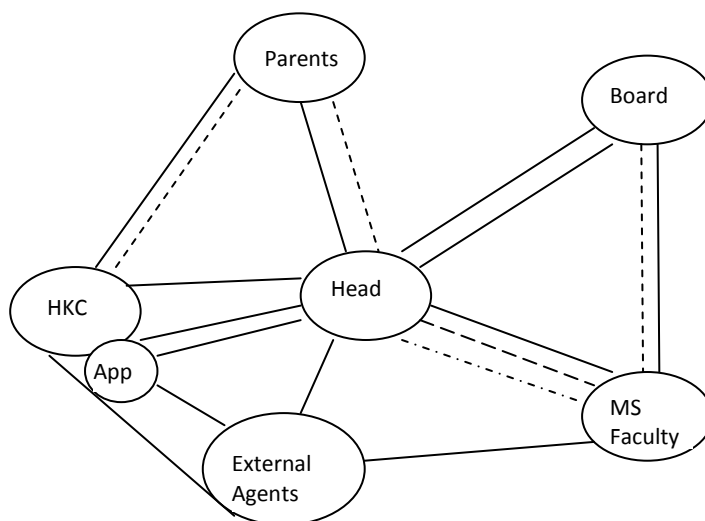
The Head thus enjoyed strongest relational trust with the Board and the Apprentice ('App' in the diagram) who is of course part of the HKC group but presented separately here as the trust relations differed between him and the rest of the group. This particular relationship is explored in the section on leadership (5.4.2).

The three varied lines connecting the Head to the MS (Middle School) Faculty indicate a range of relations with this group with some faculty members (such as the Social Studies department) having weak relational trust with the Head. 'Mixed' trust is indicated between the Head and the HKC group as relations with him differed (e.g. the Nursery Assistant had weaker relations; and the new teachers were at differing stages of developing trust).

A similar scenario is projected with the parents and the Head, and the HKC group and the parents. This is unsurprising considering the diversity and transience of the parent group and the affect this has on building trust. The Head was certainly aware of fostering good relations with the parents throughout this reform process in

order to 'minimise turbulence' (4.2.5). The trust dynamic between parents and board is not evident in the data so remains unknown. The external agents that had repeated interactions with the group had strong relational trust within the community.

The group of reformers at BIS were operating as a professional learning community that provided the strategies and actions for building capacity for change in the middle school. This view of building capacity is determined by Fullan's (2007) definition: 'a policy, strategy, or action taken that increases the collective efficacy of a group to improve student learning through new knowledge, enhanced resources, and greater motivation on the part of people working individually and together' (p. 58). In the BIS experience, capacity is actualised as the group's individual and collective ability to continuously develop the theoretical and philosophical underpinnings of the Humankind Curriculum with an aim to improve middle years learning. This includes the realisation of this Curriculum through implementation strategies that incorporate the development of resources, content, and appropriate pedagogical practice.

The concept of a PLC is based primarily on human relationships. These are intrinsically complex and diverse and this consequently embeds the PLC in an expansive and dynamic arena. Within this arena, relational trust empowered the three interconnected processes that have been identified as significant factors of the PLC in this study: leadership, interpersonal relationships, and collaboration. These processes are considered dynamics of change that enabled this PLC to build capacity and will now be discussed to illuminate the significance of relational trust and the process by which relational trust affected change.

5.4.2 Leadership

Leaders have a major responsibility for facilitating the development of PLCs (Stoll et al. 2007, p. 63) and, as documented in the reform process, the Headmaster at BIS played a critical role in initiating, shaping, maintaining, building alliances and energising the learning community. He is the most entangled in the web (Figure 5.4) and in many respects is the 'spider' who weaves the web (it is not difficult to imagine administrators as spiders with differing styles of 'web weaving' in schools, from the delicateness of the Daddy Long Legs, the deceptively harmless Red Back, to the fearful Tarantula). The dynamics of leadership can be difficult to detect within the complexity of human relationships that characterise the 'black box' of school reform (Hallinger & Heck 1996). Nevertheless, some light has been cast on the operation of leadership in this reform process.

Elements of Senge's (2006) multifaceted leadership roles of 'designer', 'teacher', and 'steward' (pp. 321-335) are evident and the Headmaster subsequently played a pivotal role in facilitating teacher leadership. The joint efforts of the administrators and teachers in the focus group and the experiences that unfolded can be likened to Crowther et al.'s (2002) concept of 'parallel leadership' where, 'teacher leaders and their principals engage in collective action to build school capacity. It embodies mutual respect, shared purpose, and allowance for individual expression' (p. 38).

Perhaps what best describes the dynamics of leadership evident during the curriculum reform process at BIS is Limerick at al.'s (1998) notion of 'multiple leadership roles' (p. 220) and 'role flexibility' (p. 226) as discussed in the literature review (2.4.3.1). As Limerick et al. suggest, leadership in the reform process was

fundamentally facilitating collective action towards the group's goals. In this sense, leadership behaviour is realised among all members of the group and, as is observable in the data, members of this PLC displayed differing leadership roles at various times that are compatible with Limerick et al.'s (1998) identification of three axes of role formation (process and content, convergent and divergent, task and maintenance). The Headmaster certainly played different roles as the context demanded, and the 'Apprentice' also experienced multiple leadership roles as the reform process unfolded. Although Limerick et al.'s work is contextualised in organisation wide theory, it can be seriously considered within the microcosm of this study's context.

The Headmaster at BIS knew that he couldn't do it alone. Leadership diversity was evident in the different stages of the PLC's development and the Headmaster, the Head of Social Emotional Learning ('Lady Botany') and this researcher (the 'Apprentice') took on multiple roles in varying degrees and at different times, depending on the circumstances, but all collectively towards achieving the shared goal of developing and implementing the Humankind Curriculum.

The reform experience indicates that the Head of Social Emotional Learning played an important facilitative role early in the process:

> *Lady Botany, who oversaw and nurtured several flora in her extensive garden, was playing an instrumental role in supporting other staff members with her understanding of the bigger picture, providing resources to the Master (a source of 'fertilisation' of the Master's mind over several years) and engaged in much debate and discussion on middle school issues. The Lady provided much sunlight and it is likely that the seed would never have survived without her efforts. Most certainly it would have grown differently without her attention* (Chapter 4.2.5).

This researcher's capacity for leadership emerged during the process:

> *Although group roles had not yet been defined, the Apprentice had naturally taken a leading role and the other three seemed comforted by that* (Chapter 4.2.6).

And grew as the process unfolded:

> *The Master's involvement and leadership in the process diminished over time as my involvement and leadership expanded ... he was demonstrating a different leadership capacity to that which was required at the implementation stage. Like a tag team partnership, my role had changed in an inverse way when I took to the ring (at the implementation stage), and began performing at a more engaged level of leadership, especially after I had received the appointment of Head of Humankind Curriculum. This made a difference to not only my status in the school but also to my own conceptualisation as a leader in the reform process* (*The Apprentice's Reflection,* Chapter 4.3.4).

Distributing leadership, such as enacting multiple and flexible leadership roles to produce more leadership as Limerick et al. (1998, p. 227) imply, may in fact be an effective, even essential, approach to curriculum reform in the international school context. Not only is distributed leadership considered a 'vital ingredient' in successful school reform (Andrews & Crowther, 2002), it may also utilise the benefits of international school diversity by tapping into the depth of teachers' experiences and backgrounds. Multiple and flexible leadership roles may also lessen the disruption of transience of staff in international schools as can occur when people with proven leadership capacity leave the school.

Relational trust was a critical resource that enabled the Headmaster to act as a catalyst for change. The Humankind Curriculum would not have developed without it. This trust had been built over his long and atypical tenure and it is evident that he had built a high trust environment supported by (mostly) quality social relationships. The Headmaster fares well in relation to Louis's (2007) implications for leaders as uncovered in the literature review (2.4.3.4). In summary, he paid attention to relationships with teachers; was supported by a 'reservoir of trust' which he needed given the nature of his reforms (the 'sensitive issues' of the school schedule and

assessment criteria were tackled); he enlisted teachers as 'co-constructors of trust' to be involved in the reform process; and he kept building trust amongst stakeholders throughout the process.

The Headmaster reflects specifically on trust in Chapter 4.3.2 and in this excerpt he acknowledges its importance:

> *If you are successful in certain little ways, little steps then more and more trust comes in your direction ... Trust is fundamental and I think in any head, if I was going to say what is the most important thing about a head in any schooling situation that head has got to be trusted by all the constituencies. Now, it doesn't happen all the time and always but for the most part I do believe I've been trusted. Disagreements, sure, but trusted, I think. When it doesn't happen that's when things start to fall apart . . . And it's true in relationships all around. So trust is huge* (Chapter 4.3.2).

The 'Apprentice' shares a similar view and provides some insight into how this trust was built:

> *In my view, the school had a positive climate which could be attributed to the Master's efforts at making everyone feel welcome and valued. He was a visible headmaster who routinely chatted with students of all ages, had an open-door policy encouraging staff and students to pop into his office for a chat, often lunched with teachers in the canteen, and never failed to greet students and staff at any time of the day. He always attended staff morning briefings and meetings with at least an informative, if not inspirational, message to share. He was hands on, he was there. By no means perfect, he was certainly respected and, I believe, widely trusted by students, teachers, and parents* (Chapter 4.3.4).

The dynamics of leadership at BIS and the way trust enabled leadership processes to unfold led to greater motivation, focus and productivity of the reform group. This enhanced the building and sharing of knowledge, beliefs and resources and cultivated strategies that positively enhanced the PLC's capacity for change in the middle school.

5.4.3 Relationships

With a focus on collective learning within the context of a community of learners, professional learning communities 'intentionally build webs of relationships around the collective work of the participants' (Lieberman 2007, p. 201). Sharing, interacting, participating, interdependence, mutual concern and meaningful relationships are core features of community (Westheimer 1999, cited in Stoll, 2007) and were all evident in the small BIS community that was under investigation. Two illustrative examples from the data:

> *The Nursery Assistant and I were clearly united on the importance of the four HKC teachers' relationships with each other* (Chapter 4.2.6).

> *I enjoyed a gratifying professional relationship with the Master prior to my full time employment there and this continued to develop ... This relationship became in many ways the driving force of the process and differing outcomes would surely have been realised in the absence of this enterprising partnership.* (*The Apprentice's Reflection,* Chapter 4.3.4).

The interpersonal relationships of the 'Apprentice' (the HKC leader), the 'Nursery Assistant' (a HKC teacher) and the Headmaster, all key members of the PLC, provide some insights into how trust was impacting on the process. They were all taking risks and collectively and individually building capacity for change in the middle school; trusting relationships helped, as Hargreaves (2007) suggests, to soothe the difficult emotions and anxieties that may emerge during a school's change process. The Apprentice and Nursery Assistant already shared a friendship and trusted and supported each other to overcome the challenges the reform process presented.

> *The Apprentice and Nursery Assistant were well and truly united in their struggle to understand what the HKC was meant to be and how they were going to realise it in the classroom in a few months* (Chapter 4.2.5).

However, they shared differing relational trust with the Headmaster. The 'Apprentice' was a true believer before he even started at the school, had an

optimistic view of the reform process, and shared a strong connection with the Headmaster. Whereas the 'Nursery Assistant' was less trusting of the Headmaster, the reform process, and the program and this lack of trust may have contributed to her eventual departure from the school.

> *The Nursery Assistant was less trusting about teaching a course that she barely understood herself and had taken some convincing by the Apprentice that they were going to be okay. She felt it was premature to implement such a large project when they had had so little time to develop and prepare* (Chapter 4.2.6).

Later in the process when the shift of leadership had begun, their views were still disparate:

> *'I am trusting you', said the Master to the Apprentice just weeks into the new school year, 'to deliver the Humankind Curriculum without me being too much involved.' Well the Apprentice was pleased but the Nursery Assistant wasn't. For him, this further heightened the sense of ownership that he was already feeling. But the Nursery Assistant was still unconvinced* (Chapter 4.2.6).

Despite this particular disparity, the relationships within this PLC could be considered a pocket of high relational trust in this group of like-minded teachers (Louis 2007). The way relational trust as a resource was placed within the group is represented in a similar way as the web in Figure 5.4. Figure 5.5 captures a moment in the reform process, placed at around half way through the first year of implementation, as perceived by this researcher and evident in the data. The same key as Figure 5.4 applies to the lines. HKC T1 and T2 refer to the other 2 members of the teaching group.

Figure 5.5: A Web of Relational Trust in the HKC Group
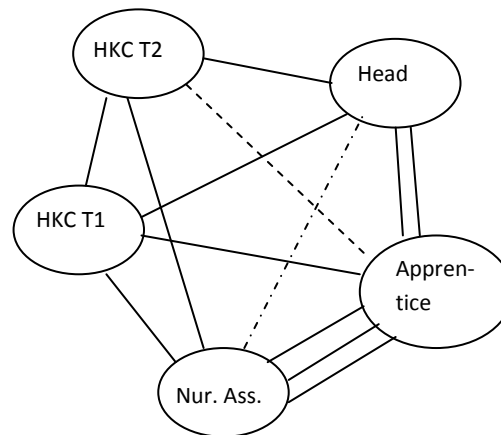
Unsurprisingly, the weakest relationship is between the 'Nursery Assistant' (Nur. Ass.) and the Headmaster, and the strongest between the 'Nursery Assistant' and the 'Apprentice'. Trust as a resource was not evenly distributed among the HKC teachers either, with the 'Apprentice' and one of the other teachers showing weaker relational trust than the rest of the group. The trust dynamics are complex and constantly evolving and the difficulty of pinning it down, as Tschannen-Moran and Hoy (1998) point out, is real. The web changes with the dynamics of the relationships and adapts to each new player that joins the community (as occurred in the second year when the 'Nursery Assistant' was replaced by a new teacher).

Human relationships are the very essence of schooling as a social enterprise; they are the spirit of school operations and the heart of school reform. The story of middle school curriculum reform at BIS is a story about people and relationships: the Headmaster's relationship with parents and faculty; the Apprentice's relationship with the Headmaster and the other teachers; and the external agents' relationships with the school. This community of learners, operating as a web of relationships interlaced by relational trust, continued to learn, adapt and evolve providing the context for the reform process to build capacity for change in the middle school.

5.4.4 Collaboration with internal and external agents

Collaboration features in the literature as a 'critical element' of the PLC (Kruse et al. 1994), a 'big idea' representing a core principle of the PLC (DuFour 2004), and as a component of the 're-imaging' of teaching (Andrews & Lewis 2002). Collaboration emerged as a significant operation in the creation of knowledge and collective learning in the reform process at BIS. Collaborative processes manifested in this PLC in two ways: (i) as an intentional and purposeful function of interpersonal relationships; and (ii) these relationships were differentiated as interactions within the localised group (internal), and extended to outside agents (external).

As the learning community became more focused and the enormities of the task became apparent, working collaboratively was no longer an option but an imperative: *'As a team, they were charged with developing and implementing this curriculum and their capacity to work collaboratively was crucial'* (Chapter 4.2.6). The Head of Social and Emotional Learning Focus ('Lady Botany') clearly articulates the role of meaningful, collaborative relationships in this reform process in this extract from her written response:

> *A group of people from a diversity of viewpoints, with a diversity of interests met to negotiate a curriculum, a path, which would be satisfactory to all. It wasn't always harmonious or easy but it soon became apparent that nothing would emerge if we didn't collaborate* (Chapter 4.2.4).

As the relational trust developed, this seemed to relax emotional and cultural barriers that enabled these teachers to collaboratively engage in sharing and reflecting on their practice and build individual and collective capacity for improvement. Collaboration within the group is readily observed in the story of the reform process and can be recognised in other parts of this chapter. Trusting

relationships enabled the collaboration to occur which in turn deepened the trust. The following extract from *The Apprentice's Reflection* captures the significance that collaboration had on the group:

> *The Master was keen to share his knowledge and understandings, as was Lady Botany, and the discoveries I was making from my own reading and reflection, as well as the input from outside experts, created a synergy of learning in this small but vibrant community that I was a member of. Our collaboration and mutual respect for each other's ideas had generated a deep sense of collegial learning and purpose. The feeling of trust that emanated within this group allowed for our creativity to soar to higher planes ... In this creative process the trust grew from the understanding that we were all focused on what was best for the students and the school* (Chapter 4.3.4).

On the external collaboration front, the school's annual community conference ('the GTB') provided an opportunity each year to bring in external agents that would contribute to the knowledge building and sharing processes that were underway. Along with other visitations, this ongoing input of external knowledge was enormously beneficial to the community as it often validated the curriculum initiatives and added credibility to their work. It made the reformers feel like they were creating something significant. The impact this had is evident throughout Chapter 4 and includes: the ongoing input from the international change agent for school reform ('Ambassador Greenforest') and his influence on the fundamentals of the Humankind Curriculum; the forming of a school-wide brain committee following the visits by the brain consultants; the impact on the teachers' practice by the progressive consultations with the Australian brain consultant ('Johnny Ausbrain'); and, most significantly for this researcher, the advocacy of the American Professor ('Billy Amsun') who *instilled confidence and direction in the reform process and his influence was long lasting'* (Chapter 4.2.5).

Sustained interaction with the external agents was necessary to allow relationships to form and trust to develop – essential elements needed to foster

effective collaboration and maximise usefulness to the school community. Single

visits, such as those by other conference presenters, had minimal impact on

collective learning. This external collaboration with international agents was

predominantly facilitated by the Headmaster, and in some ways supported by the

host conditions (in terms of the need to look overseas for English speaking agents

and the relatively easy access to and appeal of Japan), and contributed to the capacity

building process.

Collaboration was a critical function within this PLC and relational trust

helped to lubricate its operation; trust became the 'necessary ingredient for

cooperative action' (Louis 2007, p. 3). The strategy of nurturing ongoing

relationships with a select few external agents added value to the collaborative

process by providing new knowledge, resources and validation. By learning new and

better approaches to middle schooling, and drawing from inside and outside their

community, the reformers at BIS enhanced the PLCs capacity for developing and

implementing their initiative for improving learning in the middle years.

5.4.5 Summary

The work of the reformers at BIS developed into a small but effective

professional learning community that enabled them to collectively construct a

contextualised approach to middle years learning, the Humankind Curriculum. The

dynamics of change are conveyed as the interrelated processes of trust, relationships,

leadership and collaboration, as embedded in the concept of a professional learning

community, and utilised to build capacity for improvement. The operation of these

concepts is depicted in Figure 5.2.

Over time, the co-construction of relational trust by the Headmaster and teachers became a valuable and necessary resource that embraced, enabled and energised their interpersonal relationships and trust became the 'backbone' of this community. The imperative to collaborate in the internal domain, and the ability to capitalise on external alliances, enabled collaborative processes (including those of leadership), which empowered the reformers at BIS to build capacity for improvement and affect the reculturing of the middle school. Trust was used as a resource at BIS and its operation reveals insights that may inform Louis' (2007) queries, which were presented in the introduction of this section 5.4.

The conceptual framework discussed in this section emerged from data and illuminates the experience of curriculum reform in the unique context that existed at Bay International School at the time. The concepts are complex, dynamic, chaotic (in the sense that the details cannot be fully understood and there is no obvious global pattern), and tremendously contextual.

5.5 Conclusion

Curriculum reform at Bay International School was found to be a bundle of multidimensional manifestations of interconnected processes that interacted within the social context of the school and shaped the personal and collective experiences of the people involved. It was mostly about the people and the journey they travelled as they shared purpose, beliefs and meaning on the pathway to improving the learning outcomes for their middle school students.

Each of the research questions served as a window providing an inside view to the three dimensions of this journey.

Window One: The reform process provides insights into the complex and dynamic phenomenon of 'what happened' when an international school engages in curriculum reform.

Window Two: The nature of the reform indicates that the nature and significance of the Humankind Curriculum is substantiated by close connections and alignment with the literature on middle years curriculum and is well placed for the paradigm shift in approaches to middle schooling.

Window Three: Dynamics of change - the emerging concepts that illuminate the dynamics of change centre on relational trust and the way that leadership, relationships, and collaboration create a synergistic energy that drives a professional learning community's capacity for change and reculturing. Process, nature and dynamics of change are three dimensions of an interactive and mutually dependent whole that, like a hologram, create and are shaped by the context in which they exist.

The view of this journey is insightful but perhaps only offers a tip of the iceberg perspective of the complexity of the reform process in an international school. We must heed Fullan's (2007) discerning advice when he says, 'The number and dynamics of factors that interact and affect the process of educational change are too overwhelming to compute in anything resembling a fully determined way' (p. 64). The 'black box' on curriculum reform in an international school has been pried open and much has been illuminated, with still much left to determine in future research.

CHAPTER 6 CONCLUSIONS

This final chapter presents the conclusions of this study, a reflection on the literature, recommendations for practice in middle schools, areas identified for future research in the international school context and a final statement by the researcher.

6.1 Conclusions

The following conclusions are drawn from this study's context of what happened when an international school engaged in reforming its middle years curriculum. In doing so, these conclusions address the central research aim of shedding light on the 'black box' of curriculum reform in the international school context.

1. **A complex process** - The reformers experienced a bundle of multidimensional and interconnected processes as they paved a pathway to improving the learning conditions of their middle school students. This long and challenging journey ventured through identifiable phases (Figure 5.1) in a process of inherently linear and non-linear dynamics in a continuous and interactive learning cycle of building and applying knowledge. While the reform focused on a part of the middle years curriculum, more time is required to allow for the integration and implementation of the *Humankind Curriculum* across the whole middle years program.

2. **People matter** - Schooling is inherently a social enterprise, so it was the people – the teachers, the Headmaster and the external agents – who were central to developing and implementing curriculum reform in order to better serve the students and parents. Change was enabled by the dynamics of their social interactions, the dialogue, the collaboration, the sharing, the creativity, the learning and growing

together, the leadership capacities, and the building of trust that impacted the quality of their relationships to each other and to the work in which they were engaged. Human relationships create the spirit of school operations and were the heart and soul of this curriculum reform.

3. **Professional learning community** - With a professional learning community emerging as the catalyst for change, the interplay of relational trust, leadership dynamics, interpersonal relationships and internal/external collaboration interacted within the social context of the school and impacted the personal and collective efficacy of the people involved. With relational trust as the necessary resource, these processes while significant on their own, collectively created a synergistic energy that enabled the group's capacity for reculturing the middle school.

4. **Leadership is important** - The leadership capacity of the headmaster and teachers involved in the reform was a key determinant of the outcomes. Multiple leadership roles, leadership diversity and role flexibility are identified as the best descriptors of the leadership dynamics experienced in this reform process. This conceptualisation of leadership may be an empowering way to facilitate leadership in the international school context and is well worth consideration and further exploration.

5. **Shared meaning** - The Headmaster made a genuine and extensive effort to share his vision for reforming the middle years curriculum at his school. His initial 'drip feeding' of the school community provided him with the leverage to develop his idea of the *Humankind Curriculum* and to gain approval and resources for its implementation. Whereas many solutions came through the development of shared meaning (Fullan 2007) with a small group of teachers, not all middle school teachers

were engaged in the process. The continuing unfolding of this reform process will require extending the professional learning community to include all members of the middle school (as is intended in a second phase of reform) in order to achieve a broader and more sustainable reculturing of the middle school.

6. **An appropriate curriculum** - The middle school initiative, with its core features grounded in the shared understandings of effective middle schooling present in the literature, pushes the boundaries of a paradigm shift emerging in middle years education. The *Humankind Curriculum*, while still a work in progress, is designed to actively engage students in the construction of their learning and to build lifetime transferable skills, making it congruent with what is considered successful middle schooling. The aims and design of this curriculum are on a favourable path to preparing young adolescents for the future challenges they will encounter in a rapidly changing and complex world. This initiative grew out of the identified needs of middle years learners in the international school context and further development of the *Humankind Curriculum* is encouraged.

7. **The international school context** - The experience of curriculum reform at this international school suggests that the distinct features of transience, diversity and host relations in the international school context can impact the curriculum reform process both positively and negatively.

6.2 Researcher's Reflection on the Literature

Change in schools is a slow, intrinsically complex and challenging process that is highly contextual and requires collaborative intention, attention and action. Writers in the field are still attempting to come to grips with the uncontrollable complexity (Stoll 1999), the unknowableness (Fullan 1993), and the mysteries

(Andrews & Lewis 2002) of educational change. Patterns emerging in the literature indicate that people are the central figures and that constructing individual and shared meaning among participants in the reform process is fundamental to school reform (Andrews & Lewis 2002; Fullan 2007). Collaboration is key (King & Newmann 2001) and building trusting relationships is an essential resource (Bryk & Schneider 2002) for building the capacity for change that is needed for successful school reform (Stoll et al. 2006). Fullan (2007) sees change as a fusion of two domains – what to change and how to do it – and, as he puts it, there are no hard-and-fast rules just a set of suggestions, implications and guidelines.

Reflecting on the literature on educational change, this researcher finds that the process of curriculum reform that was illuminated in this study is grounded in these existing theories. The conclusions that arose out of the 'what' to change and 'how' it was attempted in this study are closely aligned with the conceptualisations of educational change described in the literature. Not only is the international school context acknowledged as having distinctive features but the significance that the local context plays in shaping the change process must never be underestimated. However, the alignment with the current literature suggests that the phenomenon of middle years curriculum reform in the international school under study shares fundamental characteristics with the research and theories on national schools reported in the literature.

By illuminating the 'black box' of reform and achieving the aim of this study, this researcher hopes that these findings can offer useful insights and suggestions that can in some ways validate, guide and extend our understanding of middle years curriculum reform in the international school context. The recommendations for practice and future research are drawn from this objective.

6.3 Recommendations for Practice

      1. **Knowing about the adolescent brain** - Middle school educators, when developing teaching and learning approaches for the middle years, should access and incorporate new information about the adolescent brain that is constantly emerging in scientific and educational literature. A learning theory grounded in how the brain functions during adolescence and how middle school students learn should underpin all curriculum initiatives in the middle years of schooling. Furthermore, a shared understanding amongst stakeholders of this articulated learning theory is essential.

      2. **A supportive structure for learning** - Awareness and understanding of the relationships and connections between phenomena is vital in the human experience of learning, and especially so for the middle years learner. Middle school educators have a responsibility, in fact an obligation, to provide structures and experiences that facilitate such holistic and natural learning. This requires a philosophical shift in the approach to middle school teaching and learning.

      3. **Trust is essential** - Relational trust emerged as the necessary resource for the initiation, development and implementation of this curriculum innovation. Building relational trust requires time for sustained interactions to occur within a stable population and this presents a serious challenge to international school leaders who must cope with transient administrators, teachers, students and parents. Induction for new staff, even students and parents, is essential when engaged in a reform process. Distributing leadership roles, collaborating internally and externally and fostering high trust relations in key places, especially where the reform is targeted, provides a strategic advantage for successful curriculum reform. The most valuable asset for curriculum reform in an international school may be a focused

group of committed, likeminded individuals of a workable size with strong interpersonal relationships.

4. **Sharing meaning** - The metaphor of a growing tree perhaps best illustrates the time, care and attention required to develop and implement a local curriculum initiative. Collaborative individualism (Limerick et al. 1998) is required and knowledge, understanding and meaning must be built individually and collectively with those involved. A core group of dedicated individuals can serve as the drivers of change in schools and sharing meaning with others, including parents and students, should be as inclusive as possible.

6.4 Future research

The growth of international schools worldwide is demanding a greater understanding of what is going on in these schools and this study raises various questions for future research.

1. **Is the process of curriculum reform in the international school context different to schools in other contexts?** This study provides a view into the 'black box' of curriculum reform in one pocket of one international school. While the process that emerged shared similarities with Fullan's (2007) change process, it is heavily contextualised and captures a particular moment in time in this particular school. More research into how other international schools experience the processes of change is required to continue unravelling the mystery and complexity of curriculum reform in international schools.

2. **How does school culture impact on the process of change in international schools?** School culture is a significant and powerful feature of schools. While this study provides some insights into the processes of reculturing,

very little is known about this concept in the international school context and it remains an open field for further research.

3. **How does transience, diversity and host relations affect the curriculum reform process in an international school?** Transience, diversity and host relations (political, economic, and cultural) play a role in all school reform processes, and are distinct features of the international school context. What role does each of these play in the curriculum reform process in an international school? How does the transience of staff affect the processes of building relational trust which require time and stability? How does the cultural and professional diversity of teachers impact the professional learning community? The dominant culture and conditions of the host country influence the school culture in various ways so how does this affect curriculum reform? Sustainability of a contextualised curriculum, an issue that goes beyond the scope of this study, must surely be affected by the high transience of students and staff and remains a question for further research. While the impact of transience, diversity and host relations were illuminated in some ways in this study, more focused research on the effect these factors have on curriculum reform in the international school context is required.

4. **Do international school students have different needs?** Does the transience of international school students generate differing needs to their peers in other school contexts? This curriculum initiative was attempting to address the needs of adolescents with a consideration of the transience of the middle school students (where an estimated 40% would not complete grades 6-8 at this school and a greater proportion would not complete grade 12). Should the middle school curriculum at international schools, as the *Humankind Curriculum* attempts to do, articulate a focus on the process of learning and the building of transferable learning skills? This may

allow these transient students to be better prepared for their continuing education and is an issue worthy of further research.

5**. Does the international school context require its own paradigm for approaching the middle years curriculum?** The paradigm shift in approaching the middle years curriculum requires further articulation. This study suggests that international school students require the opportunity to reflect on the curriculum through the lens of their own culture or background, and that the curriculum be framed with the student in the centre. Middle years curriculum reform in international schools may be better served by focusing on the student and not the curriculum. In section 5.3.7 the question is raised: *What should the middle school student be and how can the curriculum enable this?* This shift in focus may provide the lens for developing middle years programs that are better suited for international school students and better prepare them for their school life and their future in a changing world. This line of inquiry deserves further investigation.

6. **How does trust operate in the international school?** Relational trust in schools is complex, circumstantial, changeable, contextual and difficult to pin down. Yet it emerged in this study as a necessary resource for curriculum reform. The phenomenon of relational trust as a resource in the international school context is unexplored territory. The transient nature of these schools does not always provide the time necessary for the sustained social interactions required to facilitate the building of trust. How do the processes of trust operate in such unstable social networks? Trust is also dependent on cultural beliefs; this further complicates the role of trust in international schools which have diverse cultural populations living and working in a foreign host culture. How do these layers of multiculturalism in international schools affect the building of trust? Do outside organisations, such as

the International Baccalaureate Organisation with its expanding influence in the international school context, provide the stability and familiarity that somehow acts as a substitute resource for trust relations in international schools? This remains an open field for further research.

Further research into the middle years of international schools may start to unravel some of the dilemmas of what is the best way to approach middle schooling in this context.

6.5 Final Statement

By focusing on a phenomenon that has had little attention, the reform of the middle years curriculum in an international school, this study meets its aim of providing a detailed and authentic account of middle school reform that is meaningful and useful to educators in the international school context. While the findings contribute to the current body of knowledge on middle school reform in the international school context, they also provide direction for further discussion, exploration and research.

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APPENDICES

Appendix A HKC Student Questionnaire

HKC Student Questionnaire - Year 6   Date: Name: (optional) _____

Please answer each question in as much detail as you can. Your responses are valuable and will assist in the development of the HKC.

1. **What we did in HKC:**

		Not Enough	Enough	Too Much	Comment
Learning about the brain					
My Journey So Far	- Family				
	-Birthplace				
	- Food				
	- School				
	- Puberty				
Evolution - Hominids					
Hunters and gatherers					
Early Villages – Model making					
Domestication					
Maps (Asia, Middle East, etc)					
Rivers and Water					

2. What do you think Geography is about?

_____
_____

3. What do you think History is about?

_____
_____

4. What do you think personal development is about?

_____
_____

5. What would you like to learn more about in HKC?

_____
_____

6. **How we did it:**
How **helpful** are these ways of learning for you?

	Very helpful	Helpful	A little helpful	Comment
Watching video clips				
Using web sites				
Simulations (Forest, Village Game)				
Using computers				
Reading printed materials (E.g. books, handouts, etc)				

Learning in groups				
Learning individually				
Doing research				
Writing reflections				
Field Trips				

7. What other activities would you like to do to help you to learn?

_____
_____

8. How is the HKC class different to your other classes?

_____
_____

9. What did you find challenging in HKC?

_____
_____

10. What did you find enjoyable in HKC?

_____
_____

11. Would you like to have more say in what we do in HKC classes? Yes No
    Why or why not?

_____
_____

~~12.~~

13. **How you were assessed in HKC:**
How **useful** are these ways of assessing for you?

	Very useful	Useful	A little useful	Comment
Process Assessment				
Self Assessment				
Peer Feedback				
Teacher Ratings				
Teacher Comments				
Self reflection				
Sharing with parents				
Grades (if we had them)				

Any other comments or suggestions about assessment

_____

14. What would you like to see more of in HKC?

_____
_____

15. What would you like to see less of in HKC?

_____
_____

16. What are your suggestions to make HKC better for you?

_____
_____

17. Any other comments

_____
_____
_____

Thank you

Appendix B IDEAS Project Progress Rubric

IDEAS Project Progress Rubric   *Designed by Tom Tyndall (2002*)
Modified by Richard Scagliarini (2006)

	Non-Existent	**Emerging**	**Developing**	**Sustained**
Strategic Foundations	☐ School vision is not clear	☐ School vision is unfolding	☐ School vision is apparent	☐ School vision is clear
	☐ Leadership is with Headmaster only	☐ Leadership is with Headmaster and some others	☐ Parallel Leadership is with a number of people	☐ Parallel Leadership is very evident
	☐ School successes are not acknowledged	☐ School successes are sometimes acknowledged	☐ School successes are often used to promote school's identity and ethos	☐ School successes are used regularly to promote school's identity and ethos
	☐ Decision-making is not shared or visible	☐ Decision-making is partially shared or visible	☐ Decision-making is often shared and visible	☐ Decision-making is both shared and transparent
	☐ School's understandings of education are not promoted in the community	☐ School's understandings of education are sometimes promoted in the community	☐ School's understandings of education are often promoted in the community	☐ School's understanding of education are promoted in the community

	Non-Existent	**Emerging**	**Developing**	**Sustained**
Cohesive Community	☐ Community is not supportive of the school's vision	☐ Community is sometimes supportive of the school's vision	☐ Community is often supportive of the school's vision	☐ Community is supportive of school vision
	☐ Community is not involved in school planning	☐ Community is sometimes involved in school planning	☐ Community is often involved in school planning	☐ Community is actively involved with planning
	☐ Staff does not assume collective responsibility for individual students and outcomes	☐ Staff sometimes assume collective responsibility for individual students and outcomes	☐ Staff often assume collective responsibility for individual students and outcomes	☐ Staff assumes collective responsibility for individual students and outcomes
	☐ Contributions of individuals and groups are not recognized	☐ Contributions of individuals and groups are sometimes recognized	☐ Contributions of individuals and groups are often recognized	☐ Contributions of individuals and groups are recognized
	☐ There is a culture of "blame"	☐ There is sometimes a culture of "no blame"	☐ There is often a culture of "no blame"	☐ There is a culture of "no blame"

3D Pedagogy	☐ Teachers do not have a shared understanding of successful pedagogy ☐ Pedagogical priorities do not reflect school vision ☐ Teachers do not base their work in authoritative theories ☐ Student achievement is not measured against authoritative benchmark ☐ Communications between home and school do not help teaching & learning	☐ Teachers sometimes have a shared understanding of successful pedagogy ☐ Pedagogical priorities sometimes reflect school vision ☐ Teachers sometimes base their work in authoritative theories ☐ Student achievement is sometimes measured against authoritative benchmark ☐ Communications between home and school sometimes help teaching & learning	☐ Teachers often have a shared understanding of successful pedagogy ☐ Pedagogical priorities often reflect school vision ☐ Teachers often base their work in authoritative theories ☐ Student achievement is often measured against authoritative benchmark ☐ Communications between home and school often help teaching & learning	☐ Teachers have a shared understanding of successful pedagogy ☐ Pedagogical priorities reflect the vision ☐ Teachers base their work on authoritative theories ☐ Student achievement is measured against authoritative benchmarks ☐ Communications between home and school facilitate teaching & learning

Infrastructural Design	☐ Physical & human resources are not used to enrich school's identity ➢ School's use of time, space & technologies is not: ☐ conducive to quality teaching ☐ reflective of vision ☐ conducive to aesthetic environment ➢ School's curriculum frameworks are not: ☐ Reflective of vision ☐ Responsive to student needs ☐ Transportable into quality teaching ☐ Time is not available for reflective practice	☐ Physical & human resources are sometimes used to enrich school's identity ➢ School's use of time, space & technologies is sometimes: ☐ conducive to quality teaching ☐ reflective of vision ☐ conducive to aesthetic environment ➢ School's curriculum frameworks is sometimes: ☐ Reflective of vision ☐ Responsive to student needs ☐ Transportable into quality teaching ☐ Time is sometimes available for reflective practice	☐ Physical & human resources are often used to enrich school's identity ➢ School's use of time, space & technologies is often: ☐ conducive to quality teaching ☐ reflective of vision ☐ conducive to aesthetic environment ➢ School's curriculum frameworks are often: ☐ Reflective of vision ☐ Responsive to student needs ☐ Transportable into quality teaching ☐ Time is often available for reflective practice	☐ Physical & human resources are used to enrich school's identity ➢ School's use of time, space & technologies is: ☐ conducive to quality teaching ☐ reflective of vision ☐ conducive to aesthetic environment ➢ School's curriculum frameworks are: ☐ Reflective of vision ☐ Responsive to student needs ☐ Transportable into quality teaching ☐ Time is available for reflective practice

School Outcomes	☐ Student achievement is low	☐ Student achievement is improving	☐ Student achievement is at state average and/or continuing to improve	☐ Student achievement is high
	☐ School morale is low	☐ School morale is emerging	☐ School morale is developing	☐ School morale is high
	☐ Level of community pride and support for school is low	☐ Level of community pride and support for school is emerging	☐ Level of community pride and support for school is developing	☐ Level of community pride and support for school is high
	☐ School is not an effective learning community	☐ School is sometimes an effective learning community	☐ School is often an effective learning community	☐ School is an effective learning community

Professional Supports	☐ Professional learning initiatives do not reflect the vision	☐ Professional learning initiatives sometimes reflect the vision	☐ Professional learning initiatives often reflect the vision	☐ Professional learning initiatives do reflect the vision
	☐ Collaborative professional learning processes are not in place	☐ Collaborative professional learning processes are sometimes in place	☐ Collaborative professional learning processes are often in place	☐ Collaborative professional learning processes are in place
	☐ Physical/human resources are not available to support teacher's shared pedagogical priorities	☐ Physical/human resources are sometimes available to support teacher's shared pedagogical priorities	☐ Physical/human resources are often available to support teacher's shared pedagogical priorities	☐ Physical/human resources are available to support teacher's shared pedagogical priorities
	☐ Teachers external network/alliances do not contribute to their professional growth	☐ Teachers external network/alliances sometimes contribute to their professional growth	☐ Teachers external network/alliances often contribute to their professional growth	☐ Teachers external network/alliances do contribute to their professional growth

Appendix C IDEAS Rubric: Results and Discussion

IDEAS Rubric: Results and Discussion

The Research-based Framework for Enhancing School Outcomes (RBF) was used in this study as a way of constructing a holistic image of the middle school as an organisation. The RBF is constituted of five Contributory Elements (Strategic foundations; Cohesive community; 3-Dimensional pedagogy; Infrastructural design; and Professional supports), and an Outcomes Element (School Outcomes) and projects the alignment of these elements in the organisation. Respondents were asked to 'check statements that best represents your perception' of the components of the Contributory Elements as contained in the *Ideas Project Progress Rubric* (Appendix B).

This survey is used as a reflective tool to gather feedback from the middle school teachers and to illustrate patterns of organisational capacity and thus provides insights into the state of the context under investigation. A total of 13 responses were collected from the 13 middle school teachers invited to participate in the survey. The survey was taken in November 2006 during the second year of the reform's implementation. Pie graphs have been chosen as the most suitable way of presenting this data, with a corresponding table for each element showing items where responses with an emphasis (clear majority) were indicated.

Strategic Foundations

Figure AC.1: Strategic Foundations Pie Graph

Strategic Foundations: the overarching values of the school and associated strategies for making those values explicit in the school and the wider community.
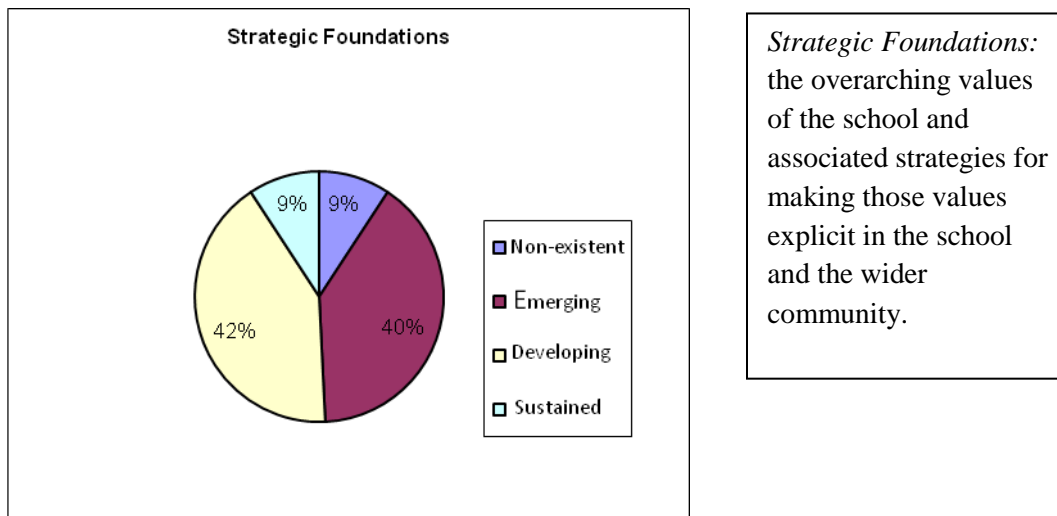
Table AC.1: Strategic Foundations Criterion Indicators

Contributory Element	Criterion	Indication
Strategic Foundations	Leadership is with headmaster and some others	54% Emerging
	Decision-making is partially shared or visible	62% Emerging
	School's understandings of education are often promoted in the community	54% Developing
	School vision is not clear / School vision is unfolding	54% Non-Existent or Emerging

Overall, it appears that the school's strategic foundations, where a school community has a clear sense of vision, direction and distinctiveness, are not firmly in place. Distributed leadership is regarded as only *Emerging* by the majority. This is supported in other data presented in Chapter 4 where, despite attempts to be inclusive in the development of the middle school curriculum, in the end the Headmaster resorted to containing the reform amongst a small, chosen group and the ensuing process was not widely shared. The data for decision-making also supports this notion (62% *Emerging*

for partially shared or visible decision-making). Similarly, school visioning may not be considered a serious and deliberate process as the results indicate that 54% perceived the vision for the middle school to be *Non-Existent* or *Emerging*. Certainly no data has emerged in this study that indicates a strong, articulated, and shared middle school vision that is shaped by the Humankind Curriculum.

A *Developing* perception of the school's conceptualisation of education promoted in the community is supported by the success of the Bridging the Gap Conference (a well-attended and successful annual event for the school community) and the Headmaster's efforts to share his beliefs about middle schooling with the parent body.

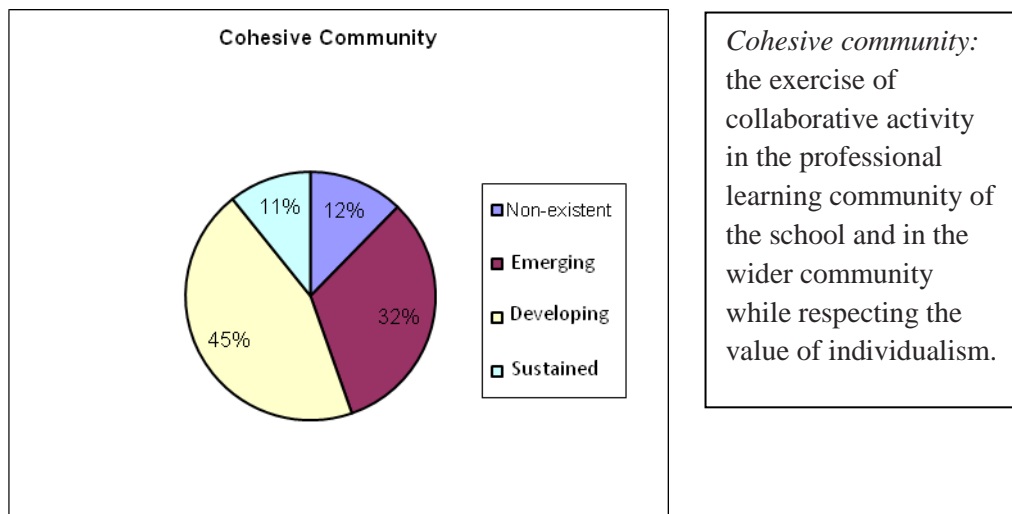**Cohesive Community**

Figure AC.2: Cohesive Community Pie Graph

Cohesive community: the exercise of collaborative activity in the professional learning community of the school and in the wider community while respecting the value of individualism.

Table AC.2: RBF Cohesive Community Criterion Indicators

Contributory Element	Criterion	Indication
Cohesive Community	Community often supportive of school vision	62% Developing
	Staff often assume collective responsibility for individual student outcomes	62% Developing
	Contributions of individuals and groups are sometimes recognized	54% Emerging
	Culture of blame	31% Non-existent, 31% Emerging, 31% Developing

'Cohesive community' has been found to be a basic ingredient of successful school reform and the school fares mixed results in this Element. Overall, a slim majority of 56% is in the *Developing / Sustained* domain but a disturbing 12% appears as *Non-Existent*. Furthermore, one can only speculate as to the reasons for the dispersion in responses to the item concerning 'Culture of blame' (the only item among a total of 31 that scored with such disparity). Perhaps, the intention of the item was not clear enough and thus remained open to multiple interpretations.

Alternatively, the results in this Element could be a reflection of the high level of individualism amongst the teaching staff and that the 'glue' for binding a collaborative and cohesive community is weak. Certainly, the middle school reform experience as presented in this chapter indicates the lack of a school wide dynamically collaborative culture. However, the results also indicate community support for school vision (64% as *Developing*) and this is also evident in the support that the Headmaster initially received for his middle school initiative. Additionally, the Board of Directors had a reputation of being supportive as was evident, for example, in their willingness to fund the Humankind Curriculum. The relatively high score for this item seems incongruous with

the earlier indication of a weak perception of school vision. Perhaps the condition is an unclear or unfolding vision that is nevertheless still considered by the teacher respondents to be supported by the community.

The nature of international schools, and this school in particular which operates in a non-English environment in a host culture of inclusive and exclusive group relationships and other unique community dynamics, may require a special type of 'glue' to adhere the unique challenges of developing and sustaining a cohesive community.

Three Dimensional Pedagogy

Figure AC.3: Three Dimensional Pedagogy Pie Graph

3-Dimensional pedagogy: the integration of schoolwide pedagogy, authoritative pedagogy and personal pedagogy in school practices.

Key:

1 = Non-Existent
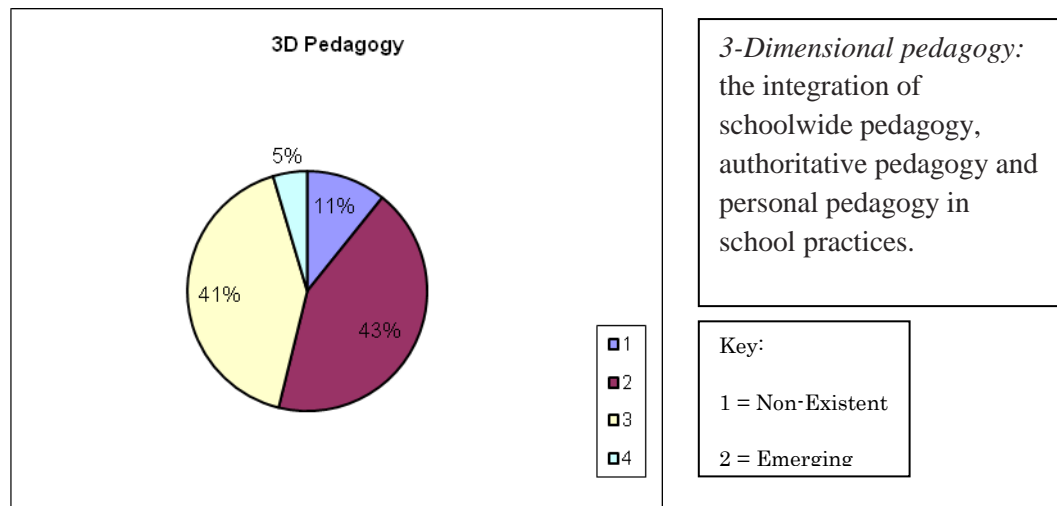
2 = Emerging

Table AC.3: Three Dimensional Pedagogy Criterion Indicators

Contributory Element	Criterion	Indication
3D Pedagogy	Teachers sometimes base their work in authoritative theories	54% Emerging
	Communications between home and school often help teaching & learning	54% Developing

The overall indication of 54% in the *Non-existent* and *Emerging* domains, and only 5% as *Sustained* (the lowest score of all the Contributory Elements) is no surprise given the evident lack of focus on pedagogy in this curriculum reform process. The integration of the three dimensions of pedagogy as suggested by the RBF may have only occurred in certain 'pockets' within the school (such as the Humankind teaching team) but there was no evidence that it existed school wide. The relatively strong indication of 54% *Developing* for 'Communications between home and school …' may have reflected the systems the school had in place for sharing information with parents (e.g. electronic access to assessment grades, regular newsletters, and quarterly reporting practices). Communicating with parents was a key feature of the Humankind Curriculum yet to reach its potential would require more support than what was provided by existing practices.

Infrastructural Design

Figure AC.4: Infrastructural Design Pie Graph

Infrastructural design: the usage of the 'real' (or 'concrete') characteristics of the school, particularly time, space, technologies and curriculum frameworks.

Key:

1 = Non-Existent

2 = Emerging
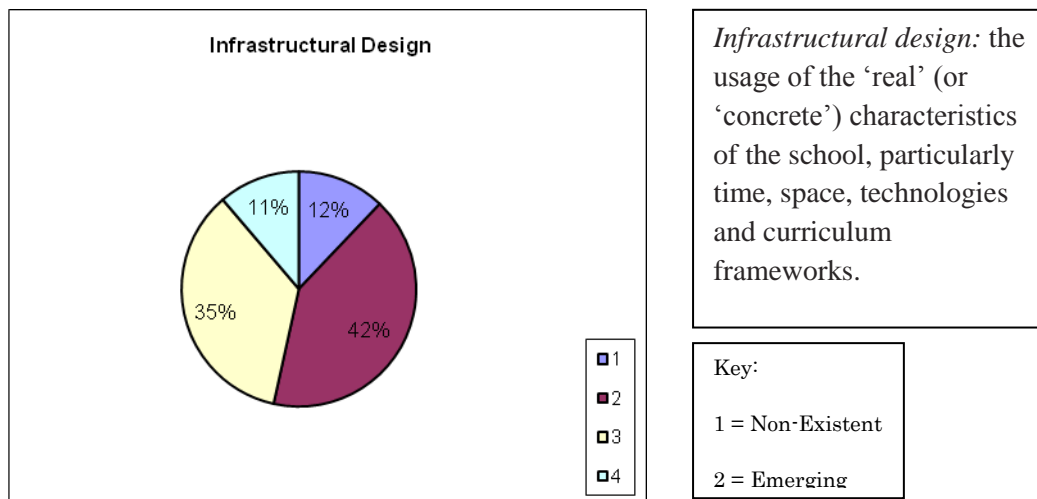
Table AC.4: Infrastructural Design Criterion Indicators

Contributory Element	Criterion	Indication
Infrastructural Design	Physical and human resources often used to enrich school's identity	62% Developing
	School's use of time, space & technologies is sometimes conducive to quality teaching	70% Emerging

Space was at a premium at this school and this was reflected in the opinion of 70% of the respondents who perceived the use of time, space and technologies to be only sometimes conducive to quality teaching (i.e. Emerging). The Humankind Centre, with its unique space and integrated technology, stands out in the school for its value-addedness in comparison to other classroom spaces.

The majority of 54% of respondents in the overall *Non-existent / Emerging* domain suggests that enhancements were required in the infrastructural design of the school.

Professional Supports

Figure AC.5: Professional Supports Pie Graph

Professional supports: internal and external learning opportunities that focus on pedagogy and encourage creation of new knowledge.

Key:

1 = Non-Existent
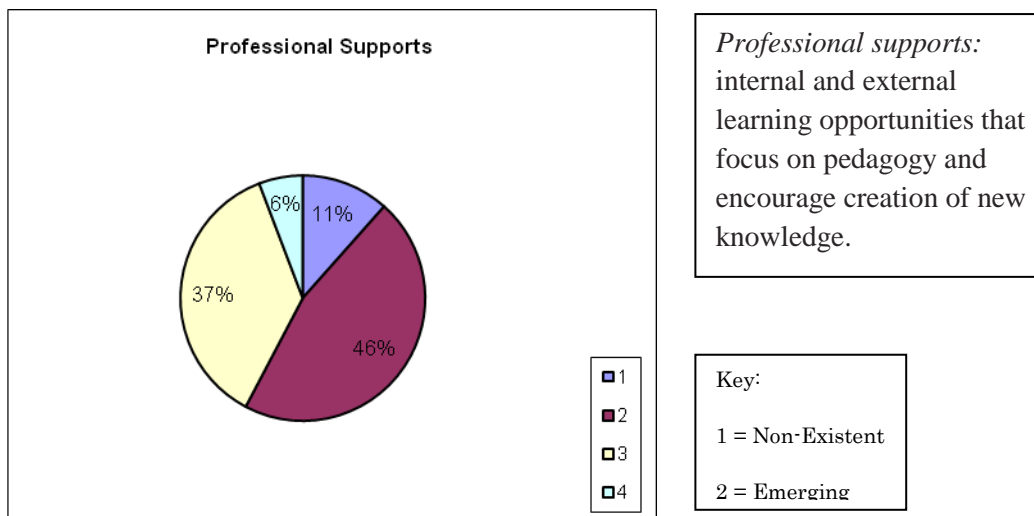
2 = Emerging

No table is presented here as there were no items with clear majorities recorded. Scores were clustered in the middle (*Emerging / Developing*) for 3 of the 4 items.

Once again, a majority of responses lie in the *Non-existent / Emerging* domains in the overall picture perhaps, in this case, reflecting the difficulty international school teachers have in accessing external learning opportunities. However, an even split for 'sometimes' (*Emerging*) or 'often' (*Developing*) for the item pertaining to 'teachers external networks/alliances contributing to professional growth' suggests that teachers are receiving beneficial external learning opportunities. Similarly, 'collaborative professional learning processes in place' is also split closely between 'sometimes' and 'often'. This researcher's observations are that the school is divided quite strictly by academic departments and that professional support, learning and collaboration occurs much more readily within these departments than between them. This was also evident in the HKC 'department' which had experienced extensive internal learning opportunities and these teachers had formed on-going relationships with external agents.

School Outcomes

Figure AC.6: School Outcomes Pie Graph

School Outcomes

2%
21%
27%
50%

Key:

1 = Non-Existent

2 = Emerging

School outcomes: the school's achievements in four criteria: namely student learning; the creation of new knowledge, skills and dispositions within the professional learning community; school–community relations; and the alignment of Contributory Elements.
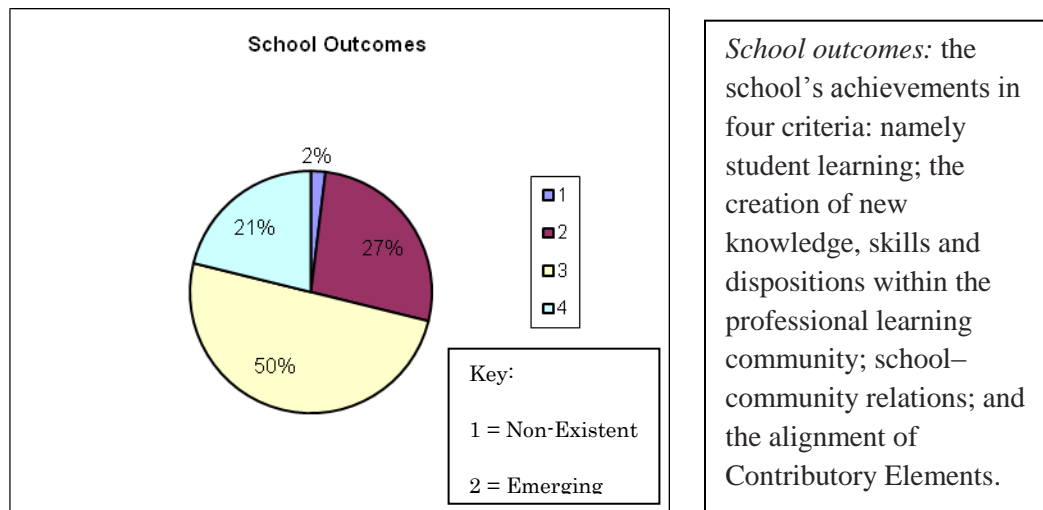
Table AC.5: School Outcomes Criterion Indicators

Outcomes Element	Criterion	Indication
School Outcomes	School morale is developing	54% Developing
	School is often an effective learning community	54% Developing
	Student achievement	77% combined Sustained (31%) + Developing (46%)
	Level of community pride and support	77% combined Sustained (31%) + Developing (46%)

This Outcomes Element indicates the most positive inclination of all the data with the largest proportion recorded in *Sustained* (21%) and a massive 71% in the *Sustained / Developing* domains.

Two of the four elements received very high scores as shown in the table above. Student achievement is in fact statistically high at this school (such as when comparing International Baccalaureate Diploma scores worldwide) and non-academic successes in sports and the arts clearly add value to the level of community pride and support. Such positive outcomes may have contributed to the Headmaster's 'trust in the bank' that allowed him to implement his innovations in the middle school.

The other two items (morale and learning community) are equally distributed at a healthy 54% *Developing*. When combined with *Sustained* at 15%, 'Effective learning community' rises to 69% *Developing / Sustained*, which is supportive of the evidence already presented indicating the important role the learning community played in the development and implementation of the Humankind Curriculum.

Despite only representing the views of 13 teachers, this data offers useful insights into the organisational capacity of the middle school at Bay International School. While capturing the alignment of organisational elements, the data indicates that some of the Contributory Elements are emerging while others are showing positive signs of developing. None of the RBF's Elements indicated a strong position in the realms of Non-existent or Sustained.

Appendix D Ethics Documentation

Please submit this application to the *Postgraduate & Ethics Officer,* Office of Research and Higher Degrees.

THE UNIVERSITY OF SOUTHERN QUEENSLAND

ETHICS COMMITTEE APPLICATION FOR

ETHICS CLEARANCE FOR INVESTIGATIONS INVOLVING

HUMAN RESEARCH

Psychological and Sociological Research

1. Attach a plain English outline of your research project (approximately 1 page) to the Application for Ethics Clearance. **[See page 9]**

2. A copy of any questionnaires and/or consent forms to be used, should be included with your application. **[See page 7 and 8]**

3. Define and explain all technical details, terminology and acronyms in terms which can be readily understood by an informed lay person.

4. If a section is not applicable, write N/A in the section.

5. Typed applications are preferred but if this is not possible, please print legibly. **Please ensure that each page is numbered and the document is secured *with a clip* (not stapled).**

6. Please note that on the electronic version of this application proforma, the questions are presented in a **bold** font. DO NOT USE A BOLD FONT FOR YOUR ANSWERS. Length of answers and spacing between questions is at your discretion.

7. Please forward your completed application and an electronic copy in Microsoft Word (with
attachments) to the *Postgraduate & Ethics Officer* **- Office of Research and Higher**
Degrees.   Email: bartletc@usq.edu.au

Name of Chief Researcher: __Richard Scagliarini_____

Address for Future Correspondence: _Mast Life Bashamichi 605, 2-13-1 Motohamacho Naka-ku, 231-0004 JAPAN__

Title of Project: __Reforming the Middle Years: A Naturalistic Inquiry_____

Funding Body:
___N/A_____

Other Principal Investigators:
__N/A_____

Is this a postgraduate research project? Yes

If 'yes' name Supervisor: __Dr Dorothy Andrews_____

Indicate the principal methodology to be employed in this research project:

☐ **Anonymous Survey**
☐ **Identified Survey**
✓ **In-depth Interviews**
☐ **Human Experiment**
✓ **Other (please specify)** Participant Observation

1. In plain language give a brief explanation of the study and the importance of the study (approximately 100 words).

This single case study involves the tracking of the reform process of the middle school at my place of employment, XXX International School. Reforming the middle years of schooling is receiving renewed attention in recent years, with changes in thinking emerging about the nature of schooling in this important learning period. Despite the growth and status of international schools, very little research is available about the nature and processes of school reform in this context. The initiation, development, implementation and outcomes of curriculum and pedagogical innovations in the middle years program of an international school in Japan is the central focus of this study. By using qualitative research methods to collect and analyse data, this study

aims to develop a conceptualisation of middle school reform that can validate, guide and extend the current body of knowledge and, more significantly, is meaningful and applicable in the international school context.

2.   Describe the study's stages, processes and instruments.

This study involves 3 stages:
(i) Collect and analyse archived records and data relevant to the study's focus (prior to   August 2005);
(ii) Engage in the method of participant-observation for one school year (August 2005 – June 2006). This involves the ongoing analysis of data collected from interviews, observations, documents and artifacts. It is anticipated that between 5 and 7 participants will be involved in this process. Triangulation of data, peer debriefing and member checks (i.e. sharing constructions with respondents) will be conducted to achieve negotiated outcomes with the respondents.
(iii) Write the case report (July 2006 – June 2007).

This study is closely guided by the principles and processes of Naturalistic (Constructivist) Inquiry as proposed by Lincoln and Guba (<u>Naturalistic Inquiry</u>, 1985), and Erlandson, Harris, Skipper & Allen (<u>Doing Naturalistic Inquiry</u>, 1993).

2(a).   How will the participants in your study be recruited?

5-7 volunteers with consensual agreement to participate will be recruited from the teaching staff. It is expected that the participants will be closely involved in the middle school reform process and final selection of individuals will become more apparent after the first stage of data analysis when patterns and directions begin to emerge. Individuals will be informally invited to participate voluntarily.

2(b).   Do you have written permission to recruit participants from the relevant organisation(s)?

Verbal agreement has been obtained from the Headmaster. Written permission will be obtained – see "Permission to Conduct Academic Research" consent form (Page 7)

3.   Specify any psychological and other risks to the participants.

There are no risks as data will be checked and validated before use – see 4 below

4.   Justify the study in terms of the risk to, and imposition on, the participants.

Continuous checking with the participants throughout the data collecting process allows participants to check and test interpretations and conclusions thus minimising the risk of misunderstanding. The 'principle of no surprise' will be applied. By the time the culminating case report is released, all content aspects will have been reviewed multiple times with the respondents.

5.   What steps will be taken to ensure protection of the participants' physical, social and psychological welfare?

This researcher will proactively initiate ethical standards into the research process, as they are the essence of what this research is about. Regular renegotiating and expanding the basis for informed consent will occur as new opportunities for collaborative activities emerge. The researcher is already a partner in the team leading the reform process and this partnership will be maintained and strengthened as a participant-observer. All outcomes are to be negotiated with respondents prior to reporting and respondents are free to engage with the researcher at a level they are most comfortable with.

6.   Does the study involve deception? If so, explain why it is necessary and justify.

No deception involved

7.   How will the study benefit the participants?

The study should be empowering and educative for participants as they may gain deeper insights and understanding of themselves and the processes they are engaged in.
The growing understandings reached by the researcher will be shared with the participants throughout the research process.
The school will receive a copy of the final report as a professional development resource.
A mutually beneficial relationship will be established between researcher, institution, and participants.

8.   Will the aims of the study be communicated effectively to the participants? How will this be done?

Yes, the aims of the study will be presented to all staff at a faculty meeting at the commencement of the research period. Participants who are involved in the middle school reform process will be presented with the aims at the time of written consent. Explanation will include the following points:
(i)   This is doctoral research approved by the University of Southern Queensland
(ii)   The aim is to collect and analyse data in order to develop a conceptualisation of middle school reform that can validate, guide and extend the current body of knowledge and is meaningful and applicable in the international school context.
(iii)   Data collection will include observations, interviews, documents and artifacts collected during the 2005-2006 academic year.

9.   What steps will be taken to ensure informed consent of the participants/guardians?

This study is based on the premise of a collaborative and fully informing research process.
Written consent to conduct research at the site will be obtained – see 2(b)
Written consent for participants will be obtained – see "Consent to Participate in Academic Research" consent form (Page 8)

10. Will the participants be assured that they may withdraw from the study at any time without any fear of the consequences?

Yes, and they choose to what degree they wish to participate.

If the answer is NO, please explain.

11.   What steps will be taken to:

(a) provide feedback to subjects?

Feedback will be provided to participants as an ongoing and required process.

(b) debrief participants?

Debriefing is an integral step in the process of member checks and negotiated outcomes.

12.   Describe the measures which will be taken to ensure the confidentiality of the participants. If confidentiality is not ensured, justify.

Coding will be applied in the data base and pseudonyms used in the report.

13.   Explain how you intend to store and protect the confidentiality of the data.

All data collected will be stored in a locked filing cabinet in my home and kept for a period of eight years.
Respondents will not be identified by name.

14. **Do you certify that the persons undertaking the administration of the study are suitably qualified?**

Yes

If NO, explain.

15. **Do you certify that you will administer the project with due regard to recognised principles for the ethical conduct of research?**

Yes

16. **Date by which it is anticipated that the research project will be completed**

Data collection and analysis – by August 2006
Report writing – by June 2007

After this date you will be requested to report to the Committee certifying that the research was conducted in accordance with the approval granted by the Ethics Committee for Research Involving Human Subjects.

Signed: _____   **Dated:**   _____

Please add information (if necessary)

Richard Scagliarini
USQ Doctoral Candidate
Mast Life Bashamichi 605
2-13-1 Motohamacho
Naka-ku 231-0004
Email: richard@zab.att.ne.jp

The aim of this doctoral study is to use qualitative research methods to collect and analyse data in order to develop a conceptualisation of middle school reform that can validate, guide and extend the current body of knowledge and is meaningful and applicable in the international school context.

PERMISSION TO CONDUCT ACADEMIC RESEARCH

I grant permission to Richard Scagliarini to conduct academic research at XXX International School.

I understand that this research is for the purpose of completing a doctoral thesis and involves collecting data using methods that include observations, interviews, and analysing documents and artifacts.

I understand that the teachers and school will not be identified in the final report and that both the teachers and the school can withdraw at any time.

Signed: _____

Name (in print) _____

Position: _____

Date: _____

Any concerns regarding the implementation of this project can be directed to the Secretary, USQ Human Research Ethics Committee on +61-4631-2956.

Richard Scagliarini
USQ Doctoral Candidate
Mast Life Bashamichi 605
2-13-1 Motohamacho
Naka-ku 231-0004
Email: richard@zab.att.ne.jp

Dear Colleague,

I am undertaking the Doctor of Education course at the University of Southern Queensland, Australia, and will be conducting research at XXX International School during the 2005-2006 school year.

The aim of this doctoral study is to use qualitative research methods to collect and analyse data in order to develop a conceptualisation of middle school reform that can validate, guide and extend the current body of knowledge, and is meaningful and applicable in the international school context.

This research will involve collecting and analysing data by my participation in and observation of the middle school reform process at this school. This will include documents and artifacts relevant to the middle school, and interviews with you discussing the middle school reform process. Confidential interviews will be arranged with your consent and at your convenience. I will be checking my interpretations and conclusions with you as I write my case report in order to validate my findings.

You are invited to participate in any activities voluntarily. This research will have minimal impact on your personal and professional life and I hope your participation is a rewarding experience.

With thanks,

Richard Scagliarini

CONSENT TO PARTICIPATE IN ACADEMIC RESEARCH

I understand that this research conducted by Richard Scagliarini is for the purpose of completing a doctoral thesis and involves collecting data using methods that include observations, interviews, and analysing documents and artifacts.

I give permission for this data to be published and understand that neither XXX International School nor I will be identified in the final report. The school and/or I can withdraw at any time and I can withdraw any data collected from me.

I understand the nature of this research and declare that I am participating voluntarily.

Signed: _____

Name (in print) _____

Date: _____

Any concerns regarding the implementation of this project can be directed to the Secretary, USQ Human Research Ethics Committee on +61-4631-2956.

Ethics Committee Application – One page outline of the research project

Reforming the Middle Years: A Naturalistic Inquiry
Richard Scagliarini

This single case study involves the tracking of the reform process of the middle school at XXX International School, a K-12 co-educational, independent school founded in 1924 and situated in a central location in XXX City, Japan. Reforming the middle years of schooling is receiving renewed attention in recent years, with changes in thinking emerging about the nature of schooling in this important learning period. Despite the growth and status of international schools, very little empirical research is available about the nature and processes of school reform in this context. The initiation, development, implementation and outcomes of curriculum and pedagogical innovations in the middle years program of an international school in Japan is the central focus of this study. This project aims to describe and explain these innovations and is guided by the following research questions: What happens when an international school reforms the middle years curriculum? What is the nature and significance of the innovations? What are the emerging outcomes? What are the organisation wide dynamics of change that are illuminated during the reform process?

> By using qualitative research methods to collect and analyse data, this study aims to develop a conceptualisation of middle school reform that can validate, guide and extend the current body of knowledge and, more significantly, is meaningful and applicable in the international school context. The methodology is based on the principles and processes of Naturalistic Inquiry (recently known as Constructivist), and is closely guided by the works of Lincoln and Guba (1985) and Erlandson et al (1993).

Data will be collected and analysed in an ongoing, interactive process during the 2005-2006 school year using participant-observer techniques, including interviews, observations, documents, artifacts and journal writing. Inductive data analysis will be applied in order to 'make sense' of the data using constant comparative method including unitising and categorising. All outcomes will be checked and validated with respondents before the final case report is written.

Erlandson, D. A., E. L. Harris, B. L. Skipper, S. D. Allen. (1993). <u>Doing Naturalistic Inquiry</u>. Newbury Park, Sage Publications.

Lincoln, Y. S. and E. G. Guba (1985). <u>Naturalistic Inquiry</u>. Newbury Park, Sage Publications.

<u>Appendix E Headmaster's clarification email</u>

An email from the Master after the meeting clarifying/consolidating his position
[Emphasis added by researcher; names changed for anonymity]

Date: Fri Apr 16, 2004
To: All Staff
Subject: Middle School Curriculum

Dear All,

I would like to thank those of you who managed to attend the meeting with Ambassador Greenforest yesterday **I would like to sum up my own position as Head of the school with regard to the future deliberations about curriculum development in the Middle School, and in keeping with the request to keep the whole school informed of, and involved in, the developments.**

I will try to keep my points as succinct as possible.

1. The Age Group

The few years following Elementary are a time of physical and emotional turmoil, as the body and brain of the child undergoes profound changes. From my own direct observations of classes and even my own children, this difficult period begins at around 11 or 12. **It is crucial that a middle School Curriculum responds to this fact**.

Children at this age ask more profound questions of themselves and the world, and their relationship with it (they certainly seem to agonize more) At this age they are trying to discover who they are, and why they are They also have an urge to be in control — this does not bode well for any authority figures, whoever they may be They also question (if this is not too mild a word) what school is all about. We must offer more than grades and the hope of paradise (a good university)

2. The Brain

Using brain-friendly teaching strategies, as well as understanding what contributes to a healthy brain are also vitally important considerations in the teaching/learning process. **The school and the teachers must have an appropriate response to our developing understanding of how the child (indeed, all of us) learn**. Just applying 'brain-friendly' strategies to the existing curriculum does not, in my opinion, go far enough to serve the interests of the child

3. Content

The brain learns by responding to relevance It is a primitive response, and the basis for learning. If something is not relevant it will not be learned. Which means that **either the content that we use as the basis of our curriculum should be perceived to be intrinsically relevant by the student, or that we as teachers make it so**. It seems to me that in the Middle School, children are questioning who and what they are, where they come from, and why If the curriculum goes some way to answering these questions, then there will be intrinsic interest. The acquisition of good grades, to enable entry into University stretches relevance a wee bit for some of our students

4. The Holistic Curriculum

If this is important, and personally I think that it is, then each student must experience this through a curriculum that is designed to make this apparent. **Rather than look for connections between the subject disciplines, I think that a major theme or central idea should drive the subjects disciplines** — almost seamlessly. In a sense, the disentangling of subject disciplines would be a natural progression, and help students realize why such disciplines have evolved, or have become necessary to make sense of the world

5. The Brain 2

Students **need to understand as much as they can about how they learn, and what makes them healthy in mind**. This, I believe, is an important content element, perhaps even central to the whole curriculum

Some further points for consideration

At BlS we can expect a relatively high turnover of staff. Any curriculum that is created must be **clearly understood by teachers entering the school**. In fact I would like to be able to give prospective teachers the Big Idea, or the philosophy as well as the Content prior to their arrival. Which means that I do not want a curriculum built around individual teacher preferences, I rather that we create something that will make sense to those who will later inherit the curriculum — teachers and students.

As Headmaster I am responsible and accountable for the curriculum I have to believe in it. It can be imperfect only if these imperfections are identified and are being addressed. I have to justify the 'why?' and the 'what?' to the community. If I am unable to do this, I should not be doing this job.

Finally, if we change nothing at all in the Middle School, **I need the 'philosophy' behind what we are doing, and a justification for the content and approach.**

I look forward to receiving the ideas of the working group.

Appendix F Excerpt from BIS Curriculum Handbook 2005-2006

Excerpt from BIS Curriculum Handbook 2005-2006 CD distributed to all parents

INTRODUCTION TO MIDDLE SCHOOL

History of the Middle School
Leading up to the academic year 2002-2003, grades 7 and 8 formed the Junior High section of the school, which, as its name suggests, carried out the function of a 'mini' high school. This meant that we had specialists teaching across the age ranges from grades 7 to 12. What was not overtly taken into account was the necessity for a curriculum that, by its approach and content, matched the social, emotional and academic needs of the students at this crucial stage in their lives. The 6th grade was introduced into the Middle School in 2002-2003. While the curriculum content and pedagogy of the 6th grade was not significantly altered from an elementary style of education, this grade was administratively fully included in the Middle School and in the academic year 2005-2006 the curriculum evolved to be consistent throughout the Middle School, and is called the Humankind Curriculum.

Reasons for the Humankind Curriculum
There are many reasons for the creation of our Middle School curriculum, but the overriding feature is to provide what the students need, and in a manner that will best suit their learning, *at this stage in their lives*. However, some distinct aspects have been taken into account as the curriculum has evolved:

1. Physical and Emotional Development
Much has been learnt about adolescence over the years. This has generally focused upon the physical and psychological changes that occur during puberty. Adolescence is a time when students begin questioning their values, beliefs and their environment. Over the last decade or so, there have been great strides in our understanding of the human brain, and during adolescence a period of synapto-genesis occurs, where the brain 'prunes' the connections that it finds irrelevant. Making the curriculum relevant for the individual student has been a major factor in its development.

2. *Drawing upon the PYP and preparing for High School*
The International Baccalaureate Primary Years Programme caters for the needs of the Elementary students through an inquiry-based curriculum. In this, research of topic areas is achieved through personal investigation and reflection. In the High School the examining boards of the IGCSE and the IB, by and large, set the curricula, which demand both rigour within each subject area, and an understanding of links between the subjects. A significant role of the Middle School is to provide a continuance of inquiry based learning through to the requirements of external examination curricula.

3. An Understanding of International School Students
The curriculum aims to provide the opportunity for some grounding and understanding of the individual's background, ethnicity and culture.

4. An Open Curriculum
Traditionally, school subjects work backwards from a series of desired outcomes and goals. This leads to a closed curriculum where the content to be covered is known in

advance and variation from this is difficult to implement. This suits many subject areas well, as it allows for clear planning, structure and rigour. However life tends not to be so organized or deterministic, and certain curriculum domains should provide an opportunity for the student to explore areas of particular interest following negotiation with the teacher.

The Middle School Humankind Curriculum
The Middle School Humankind Curriculum for has been developed with the above points held in mind.

Distinct subject areas need different approaches and, by their nature, their expectations will also vary. However, there are common features between certain subjects, and we have placed these into four Domains:

1. The Prescriptive Domain

Subjects that require a degree of linearity in their content and teaching methodology are included in this domain. These subjects are Science, Mathematics and the Languages and these differ from other subjects in that they build upon previously covered work. By their nature, these subjects will be assessed through grades, receive traditional homework assignments and will be taught by specialist teachers using a style suitable for this age range.

General Science is taught with an emphasis placed on experimentation and is therefore taught in laboratories. Three equal mixed ability groups are formed for each year group and grades 6,7 and 8 receive 4 periods of science per week.

Mathematics classes are also taught in mixed ability groups for grades 6 and 7. In grade 8 two levels of mathematics are created, with the accelerated students following the first year of a two year International General Certificate of Secondary Education course. There are 5 periods per week for mathematics.

English embodies both literature and language and is also taught in mixed ability groups. Texts will be chosen to complement other areas of the curriculum and there will be 5 periods for grade 6 and 4 periods for each of grades 7 and 8.

French or Spanish or Chinese or Extension English. This is the first of three options. Students will be allowed to select one of the three courses, but some students will be required to take the Extension English option if it is felt that the general curriculum is not being accessed well enough due to the level of English. For French, Spanish and Chinese, the course begins in grade 6. Extension English aims to help all levels of the language and provide additional support for all – this course is non-graded. The subjects are assigned 3, 4 and 5 periods for grades 6, 7 and 8 respectively.

Japanese (or German in grades 7 and 8). Native to beginners levels are available throughout [BIS] at each grade. In grade 6 students have 4 periods of Japanese. In grades 7 and 8, students may opt for German (the second option), and classes are taught daily. An emphasis will be placed on spoken Japanese, especially at the beginners level.

2. The Expressive Domain

Subjects in this domain include:

Art, Drama and Voice. Students take a 5-week intensive (4 periods per week) course on each of these subjects. They will rotate through the subjects allowing for 2 sessions in a year on each of the disciplines. In Art, a variety of different mediums will be examined, including 2 and 3 dimensional work. In Drama, students will study different motifs and social situations using improvisation, mime, and other movement skills. In Voice, the London Academy of Music and Dramatic Arts (LAMDA) examinations are taken in all

the Middle School grades, with aims of producing confident and coherent speakers that can communicate their ideas succinctly.

Physical Education has 3 periods assigned per week, which includes a double period where the field at YCAC is used when appropriate. P.E. provides a medium through which sports and sportsmanship are examined while the students are engaged in their activity.

Music in the Middle School encompasses 3 periods in grade 6 and 7 and two periods in grade 8. The third and final option is made here with either Japanese Music Ensemble, Band or Music Technology being chosen. World Music and Cultures will also be covered. An emphasis is placed on performance, and concerts will take place during the year.

3. The Negotiated Domain

In this domain are subjects that lend themselves readily to a pedagogical style that is open-ended and interpretive. Subjects that could be included in this domain include History, Geography, Philosophy, Anthropology, Culture, Ethnicity, Religion, etc. Students will bring their own personal experiences and backgrounds into the learning situation, thereby creating a forum to examine cultural differences. While homework will not be assigned in the traditional sense, students will be expected to take responsibility for completing individual assignments in the given time, and will be asked to discuss the issues at home. Narrative assessment will focus upon the process followed rather than the content covered.

4. The Vitalic Domain

Having healthy students must be one of the fundamental aims of any school. Here at [BIS] we plan to foster positive energy for both physical and mental health through our Vitalic domain. Topics that could be included here are Spirit; Body; Health; Brain; Sex Education; Emotions; Relationships; Meditation; Sleep; Drugs; Yoga, etc. Enquiry into this domain will focus on areas that impact upon the body and the soul – however we conceive this to be! This will be a non-graded domain, with any assessment being narrative.

The Humankind Core Curriculum

Eight periods of the school week will be dedicated to the Negotiated and Vitalic Domains. The time will be blocked into two 3-period sessions and one 2-period session at which the school counselor will be available. The programme will be process driven, though not at the expense of certain topics that are deemed necessary. The process will involve:

The Opening: at which a major issue is presented and discussed;

Creative Activity: where students in groups will focus in on the issue introduced and tease-out areas for feedback;

Negotiation and Question Framing: The student groups will report back to the class as a whole. From the discussions key questions will be framed and negotiated.

Individual Inquiry: Students will then select a question or (questions) which will be examined from their perspective, and by bringing in their own cultural background. Teachers will act as guides or mentors, and will be available for discussion throughout.

Group Collaboration and Reporting: After the inquiry students will form groups to compare and contrast responses to the questions, examining each of their individual perspectives. These groups will then report their findings. A record of the findings will be maintained throughout the year.

Personal Reflection: Each student will then reflect, in writing, upon the topic that has been reviewed. This will form a major part of the student's portfolio.

The content covered in the Humankind Curriculum is not set prior to the course starting, however there will be a structure based upon concepts, where:

Grade 6   *Origins of Human Society*:
Evolution Theories: Simple to Complex Social Organisations: Belief.

Grade 7   *Power and Control:*
Environment: The Economic Imperative:
Religion

Grade 8   *Development and Sustainability:*
Scarcity: Production:
Ideologies.

Social and Emotional Curriculum

The [BIS] values provide a clear framework for social interaction and social-emotional development of students. The Social Emotional Learning Focus (SELF) team provides a support structure to ensure the well being of the students with regards to health, social-emotional growth and English language proficiency. The team is made up of: the school counselor; language learning specialists; learning specialists; health educators and the nurses. Close liaison with teachers, tutors and parents means that students can be carefully monitored and catered to.

The tutor has an important role to play in the pastoral role of the students, and the small tutor groups give the opportunity for a strong bond to form between the student and the tutor. For 10 minutes before school each day, and a period for each of grade 6 and 7, students will be given time to reflect on their learning, enjoy the small group and discuss issues that may arise.

Weekly Periods Breakdown

Grade 6	Grade 7	Grade 8
Art, Drama, Voice (5/6 week blocks)	4	4	4
English	5	4	4
French or Spanish or Chinese or Extension English	3	4	5
Humankind Core Curriculum	8	8	8
Japanese (or German grades 7 and 8)	4	5	5
Mathematics	5	5	5
Music	3	3	2
Physical Education	3	3	3
Science	4	4	4
Tutor Period	1	0	0
Total	40	40	40

Humankind Core Concepts, May 2005

Humankind Core Concepts
EVOLUTION:

Human beings are biologically adaptive organisms.

SIMPLE TO COMPLEX ORGANIZATION

Human survival and development arises out of social interaction and cooperation, which has grown more complex as growing populations create more complex solutions to issues of well-being and resource management.

BELIEFS

Human beings assign value to ideas, actions and resources; out of values arise belief systems, which may differ between human groups.

ENVIRONMENT

The environment directly affects the way human beings live; sustain themselves; make sense of the world; develop values.

ECONOMIC IMPERATIVE

An economy is a system within which human beings satisfy their need for well-being and wealth creation; such systems impact upon social and political organization.

RELIGION

A formulized belief system concerning creation and values, and passed across generations (and often cultures) provides the basis for the development of formal religion.

SCARCITY

Scarcity and control of the earths natural resources, have created wide social and economic differences between cultures and nations.

PRODUCTION

Industrial society has been shaped by the control of factors of production, and by the creation and development of market forces.

IDEOLOGIES

As human beings exert greater control over the forces of nature, and create differing systems for the creation and distribution of wealth, justification in the form of ideologies are developed.

Bay International School

The Humankind Curriculum

Draft V

Prepared by Richard Scagliarini

June 5, 2007

The Humankind Curriculum

<u>Preamble</u>

The school curriculum includes all those student activities, academic and non-academic, for which the school takes responsibility since they have an impact on student learning and development.

During the Middle School Years (Grades 6-8), the bodies and minds of young adolescents undergo enormous growth and change. Adolescence is a significant stage of life in its own right and as such has its own characteristic elements and challenges. Young adolescents are a particular group undergoing rapid physical, social, emotional and cognitive development. This development is complex, variable and interactive. There is a desire, indeed a biological imperative, for increased autonomy; for control. Values and beliefs are questioned and reformed. The brain undergoes synaptogenesis as neural pathways are reorganized and pruned. The amygdala, the emotional 'control centre' in the brain, grows considerably affecting emotional responses and behavioral patterns. Hormonal changes affect metabolism, sleep patterns and moods. A new and more independent identity is developing and this demands a new orientation to the environment - home and school in particular, and to the world in general. Relationships to peers, family, teachers, and most significantly to oneself, are in a constant state of readjustment. Young adolescents are ready to find answers, seek out patterns, and to make connections to try to figure out the world around them and their place in it as part of their journey toward adulthood.

Middle School students have a range of developmental needs which may be regarded as developmental tasks to be accomplished. These tasks include:
• adjust to profound personal changes: physical, social, emotional and intellectual
• grow towards independence
• gain experience in decision making and accept responsibility for these decisions
• gain positive self-confidence through achieving success in significant events
• develop a sense of identity which incorporates a set of personal values
• establish their sexual identity
• gain acceptance, support and respect of their peers of the same and opposite sex
• develop their capacity for reflective and abstract thinking
• become more aware of their social and political environments and become more skilled in their interaction with those environments
• establish and maintain relationships with particular adults who can provide support and act as role models. (Hargreaves, 1990)
School culture, particularly one which is local in origin and global in interconnections, provides the values, beliefs, habits, and frameworks in which our adolescents can interact and learn. In an international school, such as YIS, the students benefit from the added dimension of greater cultural complexity and interconnectedness and consequently there exists an exceptional opportunity to interact and learn. Schools must prepare children to face uncertainty, change, instability and difference in their lives. Every member of our school community is on a boundary, at a point of meeting with the unfamiliar and the different. The international school thus becomes a place for

discussion, debate, compromise, consensus, acceptance and understanding. Our school curriculum brings us together on a personal, experiential journey that focuses on and broadens our connections and relationships to others and to the environment in which we live. In a post-modern frame, curriculum needs to be created and self-organized by those with the most at stake, the classroom community.

In the emerging, complex and connected world, there seem to be few certainties and the process of change seems to be accelerating. Within this context, adolescents seek answers to fundamental and urgent questions about their identity and purpose. A strong and positive sense of identity is crucial to the social, emotional and intellectual development of the emerging adult, and this lies at the heart of the Humankind Curriculum.

As the world of work is being transformed, we must prepare our students to increasingly higher levels of knowledge and skill, not just in the traditional subjects or even in technology, important as these are, but in the personal qualities that matter in the emerging knowledge society: How to be autonomous, self-organising, networking, entrepreneurial, innovative, and resourceful in redefining and learning necessary skills. Thus a curriculum for the changing world is required; one that engages in the present, connects to the past and prepares for the future.

Philosophy

The Humankind Curriculum is a significant component in the process by which young adolescents are equipped to face and prepare for the challenges posed by a complex and changing world. A key element in an individual's search for meaning and purpose is the unique journey offered through the curriculum. Such a belief imposes certain obligations on the part of the school and is guided by the following principles:

The Humankind Curriculum views 'curriculum' as having multiple dimensions. From this perspective, curriculum is embraced in a broad sense and is defined as a personal journey or path that focuses on and broadens the learners' connections and relationships to others, to knowledge, and to the environment in which they live. The curriculum is a continual, ongoing, transformative process that includes both the past and the future and is intimately connected to the learner. The journey is an interactive process, promoting life as a journey of self discovery and learning, which moves the learner through systems of relationships within a community dedicated to care and critique. (Appendix A)

Adults and students embrace this curriculum as an 'open system' – a system that constantly interacts with the environment, changing, growing, and evolving. The Humankind Curriculum focuses upon fundamental concepts that have determined the way that human beings have related to the natural world, and have constructed the human way of life. Curriculum goals are open-ended and provide scaffolding for learning; they are process rather than product driven. Content goals are general and generative, providing the context for conceptual understandings and skill development, and allowing for and encouraging creative, interactive transformations. The evaluation

frame is in terms of engagement in the learning process, and the quality generated (where learners are encouraged to discover solutions for themselves); not in terms of deviation from a standard. This transformative curriculum allows for, encourages, and develops humans' natural capacity for complex organization; and through this process of transformation the curriculum continually regenerates itself and those involved with it.

Adolescence, the period of transition between childhood and adulthood, is a stressful and turbulent period of profound changes. The curriculum should provide and deliver an approach that supports and responds to the developmental needs of the young adolescent. Adults interacting with adolescents should have an understanding of the significant structural changes that occur in the brain at this time so that learning experiences can be aligned with the brain's complex structures and functions. Furthermore, an understanding of how humans learn (Appendix B) and in particular how middle school students learn (Appendix C) provides the foundation for emerging school-wide pedagogy. The middle school is committed to a constructivist, hermeneutical[1] approach where students are actively engaged in constructing their own meaning and understanding.

With the student at the centre of the Humankind Curriculum, the central purpose is to nurture the holistic development of the student's identity: intellectual, social, emotional, spiritual, and ethical. By honoring the principle of subsidiarity[2], the curriculum offers adolescents critical stimuli for thinking, doing and reflecting, thereby providing the essential opportunity of learning to take responsibility for their own decisions and actions. Students will become masters of their own learning, not only of their emerging understandings, but also of their metacognitive ability of learning how to learn. Each student is a valued and contributing member of a heterogeneous group, able to draw upon personal experiences and cultural background in the pursuit of knowledge and understanding, and to reflect upon the context in which all human life and cultures have developed. Both students and teachers are actively engaged in their roles and both assume greater responsibility in participating in the educational process.

Rather than a package of unconnected parts, the Humankind Curriculum is a total ecology of middle schooling that brings things together in a relevant and natural way. It is a combination of horizontal and vertical aspects that connect and interrelate across cultures and through time. The networking of the four domains of the Humankind Curriculum will provide a process of weaving all the threads together towards the goal of integrating the middle school learning experience into a multidimensional, interconnected and seamless whole.

1 interpretive, explanatory; learning through guided investigation and discovery
2 The concept of subsidiarity underpins the Humankind Curriculum approach. In essence, this means that nothing should be done on behalf of anyone if they are capable of doing it themselves. This is particularly relevant to the relationships within the learning community.

Humankind Curriculum Aims

For the middle school community:

To articulate the middle school curriculum as a continuum of learning from elementary to high school; that the Humankind Curriculum is clear, distinct and precise in terms of its purpose and relation to the other parts of the k-12 continuum

To provide integration and depth – a spiraling and recursive curriculum where fundamental concepts are met repeatedly and in different contexts. Core concepts drive subject disciplines as seamlessly as possible

To provide a rigorous, relevant and rich curriculum that joins things together through synthesis and analysis; uncovering hidden connections and emergent understandings

To develop approaches and practices that go with the grain of the brain (to embed scientific understandings of how the brain learns in the middle school's learning culture)

To provide relevant and meaningful content that focuses on what it means to be human – the essence of humankind – that is timeless and common to all

So that the middle school student can:

Be highly engaged in learning as a consequence of thinking; actively seeking to acquire knowledge and understanding

Develop transferable skills – the ability to learn something in one situation and then apply it in another, significantly different one

Develop as an inquiring, reflective and creative learner, who is learning how to learn

Develop as an effective communicator who can use the full range of symbolic systems

Develop the capacity to function as an autonomous, self-directed and ethical human with wisdom and compassion

Promote his/her intellectual development – to think creatively, to identify and solve meaningful problems, and to develop understandings and skills that are essential foundations for lifelong learning

Build upon the skills and knowledge of previous learning and develop a strong basis for future learning

The Structure of the Middle School Humankind Curriculum

The Humankind Curriculum moves away from the traditional one-size fits all learning frame to a curriculum encompassing multiple frames, where variation and difference are positively utilized. This curriculum emphasizes a dynamic structure that is complementary, flexible and stable. A good structure needs just the right amount of tension between flexibility and stability. This essential tension provides the energy for this open system of curriculum to organize, generate and create.

The four categorical frames of the Humankind Curriculum are the *Prescriptive*, *Expressive*, *Negotiated* and *Vitalic* Domains. Each has a complementary role in the student's life and each draws upon the student's values, background knowledge and skills. With their concomitant ways of operation, these domains continue to develop the skills and knowledge base needed for high school and beyond. Relationships between the domains are key. (Appendix D) The *Humankind Curriculum Framework* (see below) provides the conceptual framework for the domains to come together and actualize the middle school curriculum.

1. The Prescriptive / Progressive / Axiomatic / Building / Domain

This domain encompasses the notion of proceeding in stepped objectives and continuing steadily by increments. Science, Mathematics and the Languages require a degree of linearity and a building blocks approach in their content and skill development so are included in this domain. These are distinct from other subjects in that they rely fundamentally on the development of measurable linear steps that are not subject to interpretation and/or opinion. Understanding relies intrinsically on a personal construction and alignment of knowledge against set rules and axioms. Often assessment is based upon the student's demonstrated position on a competence scale and is therefore more readily served by a grading system. These subjects receive regular homework assignments, are taught by subject teachers using the appropriate pedagogical approaches, and are assessed through letter grades.

2. The Expressive Domain

Art, Drama, Voice, Music and Physical Education are the subjects in this domain. These subjects require specialist equipment, environments and approaches. Knowledge and development of skills is constructed and demonstrated both personally and communally through performance and/or portfolio. Aside from practicing skills, homework is generally not given. Assessment is based upon criterion and provided in narrative reports.

3. The Negotiated Domain

This domain includes disciplines that lend themselves readily to interpretation and explanation. Subjects included in this domain are History, Geography, Sociology, Philosophy, Anthropology, Ethics, Culture, Ethnicity, and Religion. Personal and communal constructions of knowledge as well as hermeneutic and negotiated inquiry are features of this domain. Boomer et al's (1996) model of negotiating the curriculum is used to inform the pedagogy in this domain. The story of humankind is explored across cultures and through time and this domain thus forms the core of the Humankind Curriculum. Homework is assigned as required. Narrative assessment focuses upon the process followed as well as the content covered.

4. The Vitalic Domain

The two components of the Vitalic domain, awareness of self and awareness beyond self, reflect the two fundamental aspects of human identity. With a focus on building identity, the explorations in this domain include: Spirit, Body, Health, the Brain, Sex Education, Emotions, Meditation, Drugs, and Relationships. Focusing on process, this is a non-graded domain with any assessment being narrative, and homework assigned as required.

The Humankind Curriculum Framework
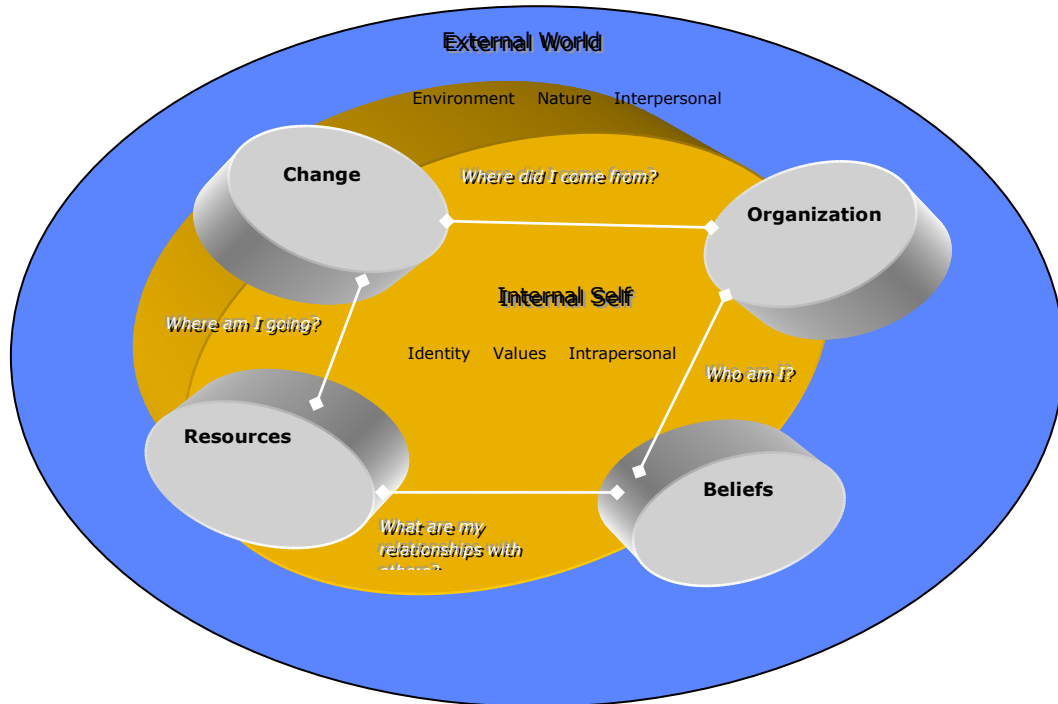
The Humankind Curriculum Framework Unpacked

Internal Self and External World
Humans exist in 2 dimensions – the Internal Self and the External World. The External World in which we exist serves as a meeting point, an intersection of space and time, for the Internal Self to perceive and respond to the surrounding physical, social and cultural forces. The response of the Internal Self to the experience of the External World is guided by emotions which determine human values. Personal values give rise to who we are and can change over time; they evolve from deepening and enriching experiences with the External World. When these values become commonly held, they shape cultural, social and political identity.
Change

Being human implies the ability to organize, generate, create, prioritize, and adapt to the interactive experiences of the constantly changing environment in which we live. Physical, intellectual, emotional and spiritual changes are fundamental to being human.

Organization
In making sense of human experience the human brain, as a responsive, adaptive organ, reacts internally (relative to our values; in the conceptual and intellectual realm) and responds to external stimuli (relative to the environment; in the physical and spatial realm). Humans are social animals and the quest for community springs from some of the powerful needs of human nature; this is reflected in the way we organize ourselves.

Resources
Humans require the constant support and supply of resources to sustain and enrich life. The Internal Self is driven by well-being and seeks the means to a healthy body, mind and soul. The External World provides opportunities for utilizing and sharing the Earth's finite resources.

Beliefs
Humans rely on personal values to make sense of what is seen and experienced in the External World. The Internal Self's response to what is perceived but unknown in the External World is to create cognitive content that leads to a sense of knowing and control. Personal belief systems and societal belief systems are values based.

The 4 Guiding Questions

Human beings are essentially spiritual creatures because we are driven by a need to ask 'fundamental' or 'ultimate' questions; to find meaning and value in what we do and experience. The four 'fundamental' questions central to this framework provide the developing adolescent a 'way in' to explore his/her own identity. For the teacher, they provide a scaffold for focusing the learning on the student, making connections across concepts, and building identity. The questions relate directly to the framework as in these examples:

Who am I? → What does it mean to be human? What do I believe? What are my values? How have I changed? How have humans changed? How do I learn? Why am I different?

Where did I come from? → Who are my ancestors? What are my roots? What culture/s do I belong to? Why do I live like this? How is my life affected by the past?

What are my relationships with others? → How am I connected to other humans? How is my life organized? Why is it organized that way? What communities do I belong to?

Where am I going? → What is the future of humankind? What is the future of the Earth? How is the future connected to the past? How will I change? How may the present affect my future? How can I make a difference?

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Appendix A (Appendix H:A)

The Humankind View of Curriculum

William Doll informs the Humankind conceptualization of the multiple dimensions of curriculum. From this perspective, curriculum is viewed in a broad sense and is defined as *a personal journey or path that focuses on and broadens the learners' connections and relationships to others and to the environment in which they live.* The curriculum is a continual, ongoing, transformative process that includes both the past and the future and is intimately connected to the learner. The journey is an interactive process that moves the learner through a sequenced system of relationships.

The journey moves through Doll's five C's of curriculum where relationships are accepted as the ultimate reality in which we work, live and play. Curriculum is viewed as having multiple personalities – currere, complexity, cosmology, conversation, and community as some of these personalities:

Curriculum as Currere: curriculum in its verb form (Latin "to run the course/race") broadens the meaning of curriculum to the running of the course as a personal experience. The transformative process begins with the personal experiences of the individual (the runner) and asks that individual to reflect on what is happening personally as the running (or moving through the curriculum) progresses. Simple probing questioning (such as What does this mean to you?) reframes the educational experience as it moves from that of being molded or controlled by others to that of dialoging with others. This shift means seeing the curriculum as a process or method of negotiating passages between teachers and the text, between teachers and students, and among all three. In a broad sense, we need to look at curriculum as a transformative, personal experience as we – students and teachers – reflect, autobiographically, on our journey.

Curriculum as Complexity: Nature embraces complexity; it is time for curriculum to adopt this spirit. The key idea is that nature, life, organization all occur when there is a sufficient but simple level of complex interactions and that from these complexly simple interactions new and more complex levels of nature, life, organization arise. Complexity has a type of simplicity embedded within it, where complexity and simplicity form a union and self-organization and emergence become the central activities around which this union is built. Therefore, curriculum is viewed as a complex and dynamic web of interactions evolving naturally into more varied interconnected forms.

Curriculum as Cosmology: To bring curriculum to life, to recapture the energy of all life, our task as educators is to keep knowledge alive – or to give it life by combining the logical and scientific with the aesthetic and storied. Curriculum should combine the rigorousness of *science*, with the imagination of *story*, with the vitality and creativity of *spirit*. We need to draw on and combine three traditions – 1. science, logic, reason; 2. story, culture, narrative; 3. spirit, vitality, wonderousness. "Let the main ideas which are introduced into a child's education be few and important, and let them be thrown into every combination possible." (Alfred North Whitehead)

Curriculum as Conversation: Curriculum is seen from a more personal view: as a conversation. Conversation is one of the human activities that we do as humans. In conversation lay our hopes for both convergence and transformation; it is a process of coming to an understanding. The goal is to have teachers and students respect, honor, understand their own humanness, the 'otherness' of each other of which the self is made as well as the 'otherness' of the texts studied and the ways of thinking inscribed in them (an integrated and multifaceted approach). Teachers are to respect the 'otherness' of the students and to encourage students to have "conversations" about what they study.

Curriculum as Community: In some ways community is the most important as it is the organizing glue which holds currere, complexity, cosmology, and conversation together. Experience needs to be reconstructed or transformed via public interaction which occurs in a community dedicated to both care and critique. Doing and reflecting – the nature of experience lies in the transformative interaction between these two. Where education is transformation, community is the vehicle through which this transformation occurs. Human communities are part of larger ecological and cosmological communities. Communities can be "nested" within one another – the human within the cultural, the cultural within the ecological, the ecological or natural within the cosmological. We must realize our place and role within this nested hierarchy. However we envision community, it is important to realize that community is the vehicle by which we transform and transcend ourselves. The new alliance humans must have with nature will depend on our establishing a sense of community with ourselves, our environment, and our cosmos.

Appendix B(Appendix H:B)

<u>How Humans Learn</u>

Learning is essentially a social activity – it relies upon knowledge construction more than knowledge transfer.   John Abbott

John Abbott's "Four Essentials of Learning" provide us with an understanding of how humans learn that can help inform our pedagogy.

All life is dependent on a constant process of adaptation and change. The human brain has evolved over vast periods of time to become the most complex and finely tuned organism known in the universe; in its structures and process it exactly reflects the natural complexity inherent in all living systems. The human mind is both empowered by the experience of its ancestors, as well as constrained. People consistently under-perform when driven to live in ways that are utterly uncongenial to their inherited traits and predispositions.

Learning gets to the heart of what it means to be human. The brain is driven by curiosity, and the need to "make sense" of all its many experiences. Learning is essentially a reflective activity that enables us to draw upon past experience to understand and evaluate the present, so as to formulate deeper understandings and more effectively shape our future. To deny the validity of the ongoing continuous personal learning is to

destroy both individual identity, and our ability to contribute to the generative process of life. People become what they learn!

Learning is essentially a social, collaborative, problem-solving activity.
People learn best through interactions with others, and these interactions strengthen both community and individuals. The work of the world gets done in groups. We form our own understandings through a multiplicity of interactions, and draw continuously upon the thinking of countless earlier generations. A concept of collective intelligence, collective knowledge, and the value of shared minds is emerging and beginning to replace the cult of the individual, and its twin - the over emphasis on specialisation - that has blurred people's confidence in seeing issues in their entirety.

In earlier periods of predictable and manageable change, the transfer of culture and the development of a prescribed range of skills, habits, and attitudes evolved from the experience of earlier generations led to forms of education that created communities based on constants, uniformity and efficiency. In periods of rapid and punctuated change, these same dynamics inhibit human learning, and subsequently spawn social and economic stagnation. The challenge now is for communities to begin building new organisations for learning that handle both the skills of the past, and enables the understanding and coordination of constant change, life-long learning, diversity, and complexity.

Appendix C (Appendix H:C)

How Middle School Students Learn Best

The following extract from Boomer et al (1992, pp. 16-18) is expressed from the middle school learners' point of view and offers insights that can shape our approaches and practices.

Engagement

We learn best when we intend to learn, when we become personally engaged and interested in the learning we are to do. Our learning should be purposeful, and *our* purposes are more important to us than those of the teacher. So we need to know *what* we are to do, and *why* we are to do it. We need to sort out the what and the why, so that a clear sense of direction emerges for us. But we would like our intentions to mesh with our teacher's purposes, so that as much as possible we are all thinking along the same lines.

Given that we respond better to internal motivation (ie intention) than to external motivation (eg exams, fear, or our teacher's enthusiasm – though these also may be powerful), our intention to learn becomes engaged when we become curious or puzzled by the things we are to learn. We need to recognize the problematic and it must matter to us (not just our teacher) that we resolve our puzzlements and find satisfactory solutions to our problems.

We want relevance. Our new learning should relate to what we already know, so that we can grow from where we are now and draw on our experience to relate to the new understandings we are struggling with.

Exploration

But we need it acknowledged that we are not all equal in experience or in what we know and can do. So we need learning experiences to be as individualized as possible, to cater for our differences in starting points, needs and interests, abilities, preferred ways of doing things and purposes for doing them.

While we may need to work together, and while it helps if we have purposes in common, we also need the teacher to open up the range of options and modes for our learning. The style, amount, kind, timing and order of things may need to be as variable as we are individual.

But either way we need to bring our learning means to bear, especially our language, and most especially our talk. We need to inquire, speculate and hypothesise; to test our ideas and engage in trial and error; to learn by doing and by finding out, rather than by being told or having ideas inflicted on us. This means that we need to be active participants in real learning experiences, not passive recipients of our teacher's knowledge and experience. We understand best when we can do things for ourselves and arrive at new knowledge by discovery, by trial, application, and often reshaping and reapplication.

In our learning we often need to work with, and relate to, both other learners and our teacher. We need individual, paired, small-group and whole-class structures and learning situations, depending on such factors as the work's purpose and context, its stage of development, its audience and individual needs or preferences. But the small group is our preferred base, because it gives us the greatest involvement and flexibility. It allows us to learn together and from each other as we go. We can use each other as sounding boards and generators, as an audience; we feel most secure when working with our peers.

We need help from out teachers, but not dominance by them. We want a supporter and facilitator, not a dictator. We need to take risks in struggling for new understandings and skills, and we will only take those risks in a supportive and conducive environment – one in which we are challenged, but encouraged; can feel the tension of the struggle, but not fear, can strive to get things right, but not feel shame if we get them wrong; and can make mistakes, but know the teacher will help, not punish us.

Besides this supportive role we want the teacher to be available to work with us when and as we need help. This need usually arises individually or in small groups, rather than in all of us at once. We don't want to be bored, insulted or confused by the teacher's telling things to all of us in the class together, if in fact some of us already know what is being explained, or are hopelessly lost because we don't know enough to understand, or if the timing simply is not right for some of us to be given that input. Anyway, in the whole-class situation too often we can't ask real questions, or respond

thoroughly or talk it through; and we need to so these things when the need arises, not simply when we are told to do them.

Reflection

At the end of our learning experience, we want to feel that we have achieved something worthwhile to us. We need to come up with products that mean something important to us and that will please the audience we are preparing for. We like to share what we have found, and in fact the sharing can often be a way of testing ourselves how well we have learnt. We need to reflect, both individually and collectively, on our learning and its consequences and implications for us, and to ask where we have arrived. Out of this reflection, sharing and presentation we often find that useful new questions, challenges and directions emerge. Thus we can continue to grow and learn.

Appendix D (Appendix H:D)

Boolean Network for the Humankind Curriculum
The dynamic structure is based on relationships: "The real thing are relations."
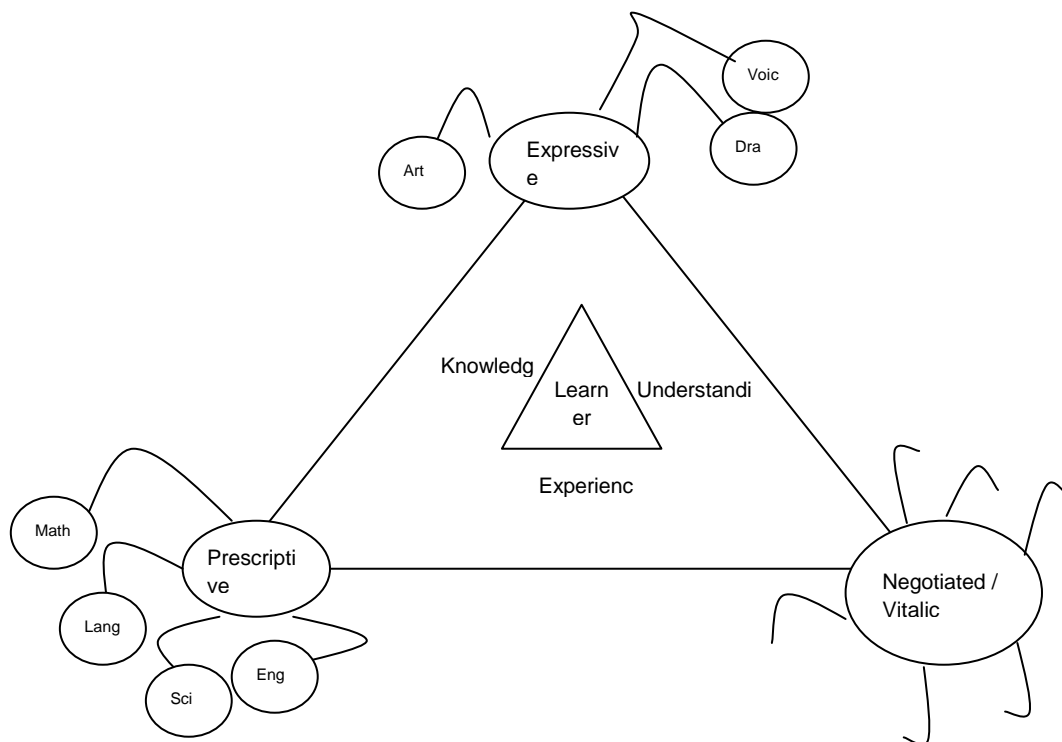
Key Points:
Students and teachers are in touch/contact with all 4 domains.
They all need each other; look to each other; complement each other
Need all 3 interacting with each other.

Knowledge, understandings and experiences will emerge in context – deeper, broader, and richer.
Boundaries / structures are permeable, flexible and stable