We Grow in the Shade of Each Other:

A study of Connectedness, Empowerment and Learning in the Middle Years of Schooling

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Submitted in partial fulfilment of the requirements of the degree of Doctor of Education

November, 2005

School of Education

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ABSTRACT

Learning is enabled in an environment that promotes connectedness. This belief led me to an exploration of connectedness and the discovery that connectedness has more than one connotation in the literature. For some it means making connections within curriculum areas, which is closely associated with the understanding that connectedness means teaching and learning within a community of learners. Another body of literature understands connectedness as a person's sense of belonging within the family, school and wider community. Embedded in all these understandings of the term is either implicit or explicit reference to empowerment.

An exploration of learning necessarily involves an exploration of students and teachers perceptions of effective learning. The exploration of learning focuses on:

- teacher and students understanding of learning
- student expectations and achievements within the classroom
- the opportunities for participation and contribution.

The various understandings of connectedness, empowerment and learning are linked in the exploration of the following themes within the classroom:

- 1. Building caring relationships
- 2. Setting high and achievable expectations and
- 3. Providing opportunities for participation and contribution (Bernard, 1991; 1997; MindMatters, 2000).

The context is the middle years of schooling as the last 10 years has produced research that delivers findings asking teachers in the middle years to negotiate a curriculum that is based on people. Effective teaching and learning is essential if students are to achieve their potential, should be cooperative and be fostered within a reflective community atmosphere.

Relationships are to the fore in all concepts of effective middle schooling and this case study explores relationship as they exist at Garden College in year seven. It is these relationships that promote a sense of belonging to and empowerment within the learning community, thus enabling learning. If schools are to "expedite the development of effective middle schooling" (Schools Council, National Board of Employment, Education and Training, 1993, p. 65), by addressing the issues highlighted above, I believe the concepts of connectedness, empowerment and learning must be fully explored by the community of learners in each school.

DECLARATION

This is to certify that

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

Mauricette A. Hamilton November, 2005

ACKNOWLEDGEMENTS

There are many people whose contributions were integral to the completion of this study. I would particularly like to acknowledge:

The students of year seven, Garden College, 2004 who taught me so much about connectedness, empowerment, learning and 'stuff'.

The teachers of the HCEL program who so willingly shared all aspects of their professional lives with me and provided me with so many deep insights.

The principal, curriculum coordinator and year seven coordinator of Garden College, who so actively supported my study.

The Director of Catholic Education in the Ballarat Diocese, Larry Burn who encouraged and supported me.

My two supervisors: Caroline, whose deep understanding, discussion, expertise, ability to challenge, friendliness and patience supported me throughout the entire process; and Phil whose ability to challenge me to investigate alternative perspectives I very much appreciated.

Ray, whose general encouragement, and support, through expert proof reading and culinary pursuits assisted me to maintain equilibrium.

Kevin and Sue, friends and fellow students of mine, who were always ready to discuss and encourage.

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CHAPTER 1

INTRODUCTION

Title of the Thesis

This thesis explores connectedness, empowerment and learning. The understanding of growth that permeates the key concepts of connectedness, empowerment and learning led me to develop a title for my thesis that encapsulates this: hence the title of this study: We grow in the shade of each other: A study of connectedness, empowerment and learning in the middle years of schooling. Anyone who gardens understands this aspect of growth implicitly; plants that might fail to reach maturity when they stand alone, succeed well when placed in the shade of another and then can thrive alone if that other plant is removed. Similarly, other plants fail to grow for some time then suddenly grow and bloom when least expected, because the conditions are right for them at that particular time. Vygotsky (1978) translates this image to human cognitive development as he describes the manner in which the learner is gradually enabled to think and act as a mature member of a community. His description of his Zone of Proximal Development, as focusing on "the "buds" and "flowers" of development, rather than (only on) the "fruits" of development" (Vygotsky, 1978, p. 86) encouraged me to understand the school as a garden, where there are many varieties of plants, all of whom develop in different ways and at different times, according to the conditions of growth that exist and their reactions to these conditions. This section of the title, We grow in the shade of each other, becomes an extended metaphor and I refer to it at various points in the progression of my work. The metaphor continues in the pseudonym I have chosen for the school, in which my study is situated, is Garden College.

My Personal Journey

Learning for me has always happened in environments where I have had a strong sense of belonging to the community in which the learning occurred. The learning communities I remember most involve my family, the formal educational institutions I attended, including school and higher educational institutions and the communities in which I learnt dance and tennis. It was the sense of belonging, developed within and through caring relationships, that empowered me to develop the

confidence to learn and take risks in the learning process. It also presented me with the opportunity to develop resiliency when learning became difficult. Reading for this study reinforced these understandings, as I delved into the areas of social constructivism, especially Vygotsky, in the 1970s, and connectedness, as expressed in the resilience literature of the 1990s. Here I discovered a language to articulate these understandings. My wish to conduct this research project emanated from these experiences and understandings and, in addition, a particular teaching situation that had a profound effect on me.

My background as a teacher of dance in the 1980s and 1990s, in a co-educational secondary school enabled me to articulate very clearly the links between experiencing a sense of belonging, empowerment and learning. An arts subject, by its very nature, requires students to learn and consequently, create. For students to learn and create they must be empowered to do so. To be empowered to create in a group situation, requires a high degree of connectedness, as each must feel a belonging to the group. For a group to realise its full creative potential, the relationships among the members must be caring. Of relevance too, was my preferred approach to dance, which was stylistic. I very quickly, however, adapted to the realisation that my students did not share this preference. The success of my dance course appeared to be that we learnt from each other and grew as artists and people as a consequence of this learning. The students came to appreciate stylistic dance, as I came to appreciate their development of technical skills, individual movement vocabularies and interpretations of ideas, through the use of the elements of dance. I also encouraged able students to co-choreograph with me, as this was a powerful learning tool for all of us. My general experience of the school in which I was teaching, was that it provided a connected learning environment for the majority of students. Since then, I have been fortunate to have a role that enables me to access many schools. This has allowed me to witness different approaches and people and confirm my belief that each school, while being part of a system, exhibits individual traits that render its context somewhat unique. I think it advantageous, therefore, for a school to research its own scenario in order to generate relevant data that may be of use in enhancing its operation as a learning community; hence my interest in this research project that involves the concepts of connectedness, empowerment and learning in a specific context. The story told in the thesis is one of growth and the unfolding of the story forms an "iterative spiral" (Creswell, 1998).

Purpose of the Research

The purpose of my research is to explore teachers' and students' understandings of connectedness, empowerment and learning in year seven in a specific situation. This exploration develops a rich picture of the classroom as it presents in year seven at Garden College, a coeducational college in country Victoria. It identifies ways in which teachers and students foster caring relationships within their classroom communities and enable learning through participation, contribution and the setting of high and achievable expectations. The focus of my thesis, therefore, is the relationships between teachers and students in year seven and the reflection of these relationships in the teaching and learning strategies in the classroom and in student learning. It also focuses on relationships between teachers.

I am interested in exploring teacher and student understandings of connectedness, empowerment and learning in year seven, in a particular context, in order to better understand this context and the generalisability of the findings of the Middle Years Research and Development Project (MYRAD) findings (Russell, Jane & MacKay, 2001; 2003). These findings stated that change in teaching and learning approaches recommended by extensive middle years' research was slow to happen at the classroom level and that students' sense of belonging to school, attitudes to learning and their relationship with their teachers tend to be very positive in year five and from there decline until they reach their lowest point at year nine. Therefore to focus on the classroom teachers and students and their practices enables an exploration that is relevant because it identifies:

Factors that enable or impede:

- the connection of students and teachers within a learning community
- the ability of students and teachers to experience a sense of belonging at school
- the empowerment of students and teachers
- student learning.

Research Problem

Literature emanating from the great amount of research into the middle years of schooling during the last ten years in Australia and in many western nations, suggests a significant number of students are under-achieving. According to the research, the reason lies in the fact that there is a very close link between students feeling engaged in their learning or connected to school, and their ability to learn (Bernard, 1991; 1997; Cormack, 1996; Cumming, 1996; Culican, 2001; MindMatters, 2000; Resnick, Harris & Blum 1993; Russell, MacKay & Jane, 2001; Schools Council, National Board of Employment, Education and Training, 1993).

The MYRAD executive summary (Russell, MacKay & Jane, 2001) and Messages from MYRAD (Russell, MacKay & Jane, 2003) highlighted in their findings that change in teaching and learning approaches recommended by extensive middle years' research was slow to happen at the classroom level (Russell, McKay, & Jane 2001; 2003) and that students' sense of belonging to school, attitudes to learning and their relationship with teachers tend to be very positive in year five and from there decline until they reach their lowest point at year nine (Russell, McKay, & Jane, 2003). These results are disturbing and call for change. This research however, was conducted within a positivist paradigm and as the results pertain to the whole cohort of students, it is impossible to either have an adequate description of the meaning students ascribe to their responses or relate these responses directly to specific sections of the cohort or specific situations. Consequently, there is a need to further research specific secondary school classrooms in order to compile rich data depicting environments as they really exist. I understand that projects such as MYRAD provide valuable data for broad direction in education at a state or system level, however, I think it necessary, in the light of the data generated by such projects, for each school to research its own scenario. Hence my interest in this research project that involves the key concepts of connectedness, empowerment and learning. This will enhance our understanding of the microcontext and may exhibit fruitful possibilities for lasting change.

Searching the Literature: Key Concepts

My search began with the concepts of connectedness and learning, and as I searched the related literature, I realised that the concept of empowerment was also particularly relevant for my study.

All three concepts of connectedness, empowerment and learning emanate from a paradigm or world view that understands everything as interconnected. This world-view does not see physical life as disconnected, separate entities, but as entities that are interrelated (Macy, 1983).

Connectedness

Connectedness is a term that has come relatively lately to the educational arena. The term originated in the resilience literature, with the work of Bernard (1991) and Resnick, Harris & Blum (1993). The primary focus of this research was the social and emotional wellbeing of children across the world born into high-risk conditions (Bernard, 1997; Burns, 1996). The term connectedness for Bernard, Resnick, Harris, Blum and others who work in this area describes a person's sense of belonging within the family, school and wider community. Three broad categories are defined that elicit and foster resiliency in children. They are:

- 1. Caring relationships,
- 2. High expectation messages,
- 3. Opportunities for meaningful participation and contribution. (Bernard, 1991; 1997; Resnick, Harris & Blum, 1993).

During the 1990s the term connectedness has developed additional meanings, one of which is to make connections within curriculum areas (Marsh, 2001; McKenny, 2001; Murdoch 1998; Palmer 1998; Stoll, Fink & Earl, 2003; Zyngier, 2003). This is closely aligned with teaching and learning within a community of learners (Fullan, 1992; 1999; 2001; Hill & Russell, 1999; Kruse & Louis, 1995; Palmer, 1998). It is a professional community that gives teachers and ultimately students, a sense of belonging and empowerment within their school community.

Empowerment

The understandings of empowerment as enabling, either personally (Cahill, 2002; Macy, 1983), personally and socially (Macy, 1983; Smith, 2000) or socially and politically (Freire, 1973; Groome, 1998; Shor, 1992) are relevant for my study. Each of these understandings incorporates contexts involving personal and social empowerment and it is these that have application in the school setting. These three contextual aspects, however, are interdependent and do not exist as separate entities if power is to be mutual and synergistic. Thus, relevant too is the *modus operandi* of power in any social context. The two major descriptors Macy (1983) uses are 'power over' and 'power with'. 'Power over' is a dominating power, whereas 'power with' facilitates the development of contexts that are mutual and synergistic.

Learning

In this context of learning and teaching for connectedness and empowerment, theory of learning and approaches to learning and teaching are paramount. Learning theory which best promotes learning for connectedness and empowerment is enactivism. The emerging theory of enactivism, which Begg (2002) describes as a development from constructivism, provides a sound basis for teaching and learning, incorporating the concept of 'power with' and obviating the dualistic approach to teaching and learning that has dominated education in the twentieth century (Darling-Hammond, 1997). As I generated data I became very aware of the importance of listening to student and teacher voices and blending them (MacBeath, 2004).

Relationship between these Three Concepts

Parker J. Palmer encapsulates the unity of the concepts of connectedness, empowerment and learning by saying:

Good teachers possess a capacity for connectedness. They are able to weave a complex web of connections among themselves, their subjects, and their students so that their students can learn to weave a world for themselves. The methods used by these weavers vary widely: lectures, laboratory experiments, collaborative problem solving, creative chaos. The connections made by good teachers are held not in their methods but in their hearts-meaning heart in its ancient sense, as the place where intellect and emotion and spirit and will converge in the human self (Palmer, 1998, p. 11).

Definitions of Terms and Key Concepts

For the benefit of the reader, I define the following terms:

- Key learning area leader: a leader of a particular, major learning area in a school. There are usually nine of these define areas. Five of them are particularly relevant for my study: Studies of Society and Environment (SOSE), Science, English, Mathematics, Technology.
- The definition of 'Middle Years of Schooling' varies from years six to ten (Schools Council, National Board of Employment, Education and Training, 1993), through five to nine (MindMatters, 2000) to five to eight (Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000).
- Year Seven is the first year of secondary school in Victoria. It usually coincides with a
 move, by the student, to a school different from that in which he/she completed the years of
 primary schooling.

After searching the literature, for the purposes of this study, I define my three key concepts as follows:

- 1. Connectedness as a sense of belonging to a learning community.
- 2. Empowerment as the ability to act with confidence in order to direct one's own life within the context of school.
- 3. Learning as a complex co-emergent process of intellectual and social development enabled through the construction of meaning, taking place within a community that is dynamic and robust in adapting to changing circumstances.

Research Context

Middle Years of Schooling Research

Beginning with the document 'In the Middle' (Schools Council, National Board of Employment, Education and Training, 1993), the last 10 years has produced research that delivers findings asking teachers in the middle years to negotiate a curriculum that is based on people (Cumming, 1996; Russell, MacKay & Jane, 2001; 2003).

Schools are generally depicted as communities of students, teachers, parents and the wider population in which the school is situated (Cumming, 1996; MindMatters, 2000; Schools Council, National Board of Employment, Education and Training, 1993). Middle years research also demonstrates that students must participate in decision making if they are to have true ownership of their learning and so achieve their potential (Russell, Mackay & Jane, 2001; 2003). In order for this to happen there must be flexibility on the part of the student, teacher, school organisation, system and the wider community (Cumming, 1996; Kruse, 2000; Russell, Mackay & Jane, 2001; 2003). The development of authentic curriculum, curriculum that is relevant to the lives of students (Putnam & Borko, 2000), is then more likely to eventuate. This is certainly an aim of the ideal middle years approach (Kruse, 2000). Flexibility in the classroom applies to teaching and learning activities as well as curriculum content. Effective teaching and learning practices engage students and give them a sense of belonging to a learning community. Reflecting on their learning in a supportive environment leads students to be truly connected and so develop relationships that enable them to learn and wish to continue learning throughout their lives (Fogarty, 1997; 2004).

All of the above will be supported if schools adopt a whole school design (Hill & Russell, 1999). Whole School Design has been a feature of many research projects. This concept has been developed considerably since 1999 using the Hill Crevola Design Elements for School Improvement (Fig. 2.3, p. 46). While the desirability and benefits of a whole school approach are acknowledged, the findings of the Middle Years Research and Development Project (Russell, Mackay & Jane, 2001) alert us to the fact that, even though there may be a commitment on the part of a school to a whole school approach, all the elements of such a design may not improve at the same rate.

Relationships

The focus on the reform of the middle years of schooling comes at a time when an emerging view of the world is one of interconnectedness rather than mechanism. Mechanism understands the world as a series of contained entities, controlled in a hierarchical manner (Collins, 1995). At the heart of the emerging view are ecosystems, all elements of which are interdependent (Capra, 2003). Each element is described in terms of its relationship to other elements. All are connected and interdependent.

It is logical then for educationalists and psychologists to have developed the term 'connectedness' to express the essential ingredient for human living. Discussion and debate continually returns to the concept and defines it as absolutely essential, if middle schooling is to be effective (Bernard, 1997; Hill & Russell, 1999; Kruse & Louis, 1995;). In addition all elements of Middle School reform are interconnected and interrelated, in that each is described in terms of the others and therefore none can be treated in isolation. Relationships are the core. Bronfenbrenner (1993) has applied this directly to education as he understands children's development to be contextualised within the relationships formed within their environment. The school, along with family and religion are part of the microsystem and mesosystem (Fig. 2.1, p. 22) in which human development takes place. The mesosytem, the environment in which the child immediately engages, provides input for the microsystem that is the child. Behaviour is the output emanating from the microsystem after processing the inputs.

Catholic Education Middle Years Projects

Middle schooling in the Ballarat Diocese has been influenced by the research projects undertaken nationally and at state level since 1993. Since 'In the Middle' (Schools Council, National Board of Employment, Education and Training, 1993), awareness of the middle years of schooling as a priority has been part of the consciousness of all schools. In response to this, the Catholic Education office of Ballarat has funded two major projects to professionally develop teachers in this area; one in Warrnambool from 1999 to 2002 and one in Ballarat from 2003 to 2005. Schools also receive ongoing assistance to explore approaches and materials that have been developed by researchers. Schools and colleges vary in their uptake of these services, so the rate of progress in the reform of middle schooling varies accordingly.

Year Seven

While the middle years includes years five and six, it is evident, from anecdotal feedback from teachers taking part in Middle Years projects within the Ballarat Diocese that, generally, these year levels, as part of a primary school, have students who are more positive in their attitudes to school than their secondary counterparts. This is supported by the findings of the Middle Years Research and Development Project (Russell, Mackay & Jane, 2001). Therefore, my research project will concentrate on students in year seven as this is one of the year levels perceived as problematic for students, in both connectedness and learning. There is also a body of anecdotal and documented evidence (Garden College, Office of the Principal, 2000) that suggests that there are approaches in certain schools in the diocese that are addressing the reform of schooling in these years.

Site of the Research

The site of this research is a school in the Catholic Diocese of Ballarat. It is a time of rapid change in the diocese and isolation, particularly in the north, and the redefinition of parish structures, means that diocesan personnel are instrumental in connecting schools to government and Catholic Education Commission of Victoria initiatives. Educational provision, therefore, is highly valued throughout the diocese.

Garden College

The choosing of a specific context for my project became paramount and I decided that Garden College was an appropriate setting as the school had responded to Middle Years research and had implemented a program in year seven based on Middle Years findings. I realised this would be the ideal context to explore the actual implementation of such a program, specifically in the areas of connectedness and learning. In addition I had developed a very good working relationship with all members of the school community. That good relationship continues to the present day.

Garden College is a co-educational college in Victoria. Students, numbering approximately 600, are drawn from a large area including the town in which the college is situated and surrounding large and small towns. In the late 1990s, for a range of reasons, the student population declined in numbers and it was decided by an incoming principal to radically alter the year seven program. This principal was influenced by the recently published report 'From Alienation to Engagement' (Cumming, 1996) and the Hill/Crevola, 'Whole School Design Elements for Effective Teaching and Learning' (Hill & Russell, 1999). In addition the principal had experienced reforms, similar to those he proposed, in another educational setting in a capital city. Thus the 'Holistic Course of Enhanced Learning' (HCEL) was introduced. As is Garden College, this title for the year seven course is a pseudonym.

Holistic Course of Enhanced Learning (HCEL) Program at Garden College

As the Holistic Course of Enhanced Learning (HCEL) program was based on the middle years report 'From Alienation to Engagement' (Cumming, 1996), the principal's communiqué (Garden College, Office of the Principal 2000) stated that the program emphasized the importance of:

- strong and sustained relationships with one key teacher,
- students having the opportunity to learn at their own pace in an engaged fashion
- a defined "home base" at school, which could act as a sanctuary
- students being able to use a variety of learning styles

• developing a sense of identity with a group of peers with whom they share learning experiences.

HCEL commenced in 2001 with the focus on teacher student relationships in the classroom. This continues into the present and includes team teaching within extended blocks of time thus enabling teachers to more easily connect with students and assist them to acclimatize easily ("Program a swift success", 2001, p 11). The teachers articulated its early success in terms of the students' ability to move confidently and freely around the school, a phenomenon not noted previously. Academically, the program was described as making links between key learning areas rather than treating each as a totally discrete unit ("Student program proves worth", 2001, p 23).

Relevant, too, is the communication that occurred at the time of the instigation of the program. The administration team agreed on its implementation and announced to the whole school community that expressions of interest would be received from teachers wishing to develop and work in the program. A team of four teachers was chosen and they commenced planning their program, excited by the possibility of an integrated approach and making trans-disciplinary links.

As I have already noted, this research context is particularly interesting as the school has attempted to address the concerns of middle years of schooling research and also provides the opportunity to explain the MYRAD data further. This will shed further light on Russell, MacKay and Jane's (2003) conclusions that change at the classroom level is slow to happen and that students' sense of belonging to school, attitudes to learning and their relationship with their teachers are in decline at the year seven level. This sets the focus for the research described in this thesis and leads directly to the research question and framework.

Chapter 1: Introduction

Research Questions and Framework

Research Questions

The fundamental research question is:

What factors do students and teachers in year seven at Garden College

understand as assisting or impeding connectedness, empowerment and

learning?

From this question the following sub- questions emerge:

What assists or impedes:

• teachers and students building caring relationships?

• student learning?

the empowerment of teachers and students?

A further research question that goes beyond the immediate context is:

To what extent are the MYRAD findings, outlined as part of my research

problem, applicable to the HCEL program and year seven students at

Garden College?

Research Framework: Epistemology, Methodology and Methods

A qualitative approach is integral to the fulfilment of my purpose in conducting this project

as it is "a situated activity that locates the observer in the world" (Denzin & Lincoln, 2000, p. 3).

The epistemology I have chosen is constructionism, as it is built on the premise that meaning is

constructed by those seeking to understand and so defines no objective truth (Crotty, 1998). I adopt

an interpretivist approach which aims to understand the values, attitudes and beliefs of people as

they act in certain situations. Researchers who adopt this stance reject the belief that human

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behaviour is governed by general laws (Candy, 1989). This is the theoretical underpinning that is most consistent with constructionism. Operating from this paradigm, I adopt several perspectives:

- Hermeneutical phenomenology as I am interpreting that which occurs in the daily lives of the participants (Sarakantos, 1998),
- Critical hermeneutics and critical enlightenment as I am researching the concept of empowerment (Kincheloe & McLaren, 2000),
- Symbolic interaction as I am dealing with "those basic social interactions whereby we enter into those perceptions, attitudes and values of a community, becoming persons in the process" (Blumer, 1969, p. 8), and
- Ethnography as I seek to understand the everyday life of people (Creswell, 1998).

The methodology of a case study is most appropriate for my work, and the methods I use involve observation and taking field notes, conducting interviews, both individual and in focus groups and the administration of a student questionnaire. These methods are able to generate rich data from which I am able to develop description and conclusions. In addition I use professional conversations occurring with teachers as these enable me to become part of the fabric of their school life.

Significance of the Research

Middle Years' Research

My research is significant as its priorities are consistent with national and state priorities in the educational sector (Ministerial Council on Education, Employment, Training and Youth Affairs, 1999; Department of Education, Employment and Training, 2000b). As I have already demonstrated, and will discuss in detail in chapter two, middle years of schooling has been a strong focus since 1993. There have also been major projects, such as the Middle Years Research and Development Project (MYRAD) (Russell, McKay, & Jane, 2001; 2003). My thesis will add to this body of research in new and insightful ways.

Focusing on the Classroom

A need identified by MYRAD is to focus on classroom teaching and learning strategies, as this is the area where change is slower to happen (Russell, MacKay, & Jane, 2001; 2003). In addition, there is the need to research specific contexts through in-depth qualitative studies to better understand the MYRAD findings. My research fulfils both these needs. Through an exploration of student and teacher understanding of connectedness, empowerment and learning and the relationship between these concepts in a specific situation, this study will identify enabling and impeding factors and highlight the importance of researching specific contexts and generating rich data and description. My work will contribute significantly to the development of a real picture of this important context in student development.

Student/Teacher Relationship

As previously noted, an important relationship in any school is the student /teacher relationship. My research is significant because of this focus. Often, systems promote whole school design (Hill & Russell, 1999) as fundamental, possibly at the expense of an emphasis on the teacher/student relationship. This is unintentional, but the spotlight needs to be re-focused in order to affirm and empower teachers and students.

Regional Research

The opportunity for regional schools to take part in research projects is far less than their urban counterparts and yet their needs are no less. It could be argued they are greater, given the difficulties they face (Catholic Diocese of Ballarat, 2001). My research is significant as its focus is a regional school and allows teachers to explore ways of connecting students to school and so improve student connectedness to their community as well as their learning.

My Role

In my role as Education Officer in the Catholic Education Office, Ballarat, I work extensively with practitioners in the middle years of schooling. I also facilitate professional development for these teachers. The study is, therefore, very relevant for me as we journey together and may encourage other schools to adopt similar research projects.

Student and Teacher Voice

As I noted previously, listening to teacher and student voices was not explicitly part of my original focus, but emerged as significant. It has been well recognised that school communities have many voices, both harmonious and competing, and a successful school allows all teachers' voices to be heeded (Evans & Songer-Hudgell, 2003; Fullan 1993; 1999; Lodge & Reed, 2003; Stoll, 1999;). It is also recognised, that student or pupil voice has been linked explicitly to school improvement (Lodge & Reed, 2003; MacBeath, 2004; Ruddock, 2004; Trafford, 2004) and to the development of curriculum at state level in Australia (Keighley-James, 2002) and to student learning (Zyngier, 2004b). My research allows student and teacher voices to be heard in a relevant, significant manner, thus broadening the concept of student voice, as it relates to learning. It also highlights the value of listening carefully and respectfully to both student and teacher voices

Middle years projects undertaken in the Ballarat Diocese since 1999 have shown, anecdotally, that a greater degree of change is required in the secondary school classroom than in the primary classroom, in order for students to feel connected to a learning community and so achieve their potential. In addition, the organizational constraints of the secondary school are often such, that teachers find it difficult to allocate time to either share their good practice or explore alternatives to their present practice. Therefore my study is beneficial, as it enables teachers of this year level to discuss and debate in a robust manner. It also enables students to articulate their understanding of connectedness, empowerment and learning.

Structure of the Thesis

I have chosen to use the first person for writing this thesis. This research, because of my previous and continuing involvement with the school, is very personal. The school community and I journey together in the field of teaching and learning. As researcher, I do not wish to become distanced from the researched (Sarakantos, 1998). Consequently I adopt the practice of writing in the first person rather than the third. This is consistent with the purpose of a qualitative study and better reflects the nature of my project.

This study argues the value of researching the understanding of connectedness, empowerment and learning in a specific year seven context. In Chapter One, I have demonstrated that my personal learning and teaching experiences, in addition to my professional reading, have given impetus for the study. I have stated the purpose of my research project is to explore teachers' and students' understandings of connectedness, empowerment and learning in year seven, in a specific situation and, that this exploration develops a rich picture of the classroom, as it presents in year seven at Garden College. I have further elaborated upon the relationship between the purpose of the research, the research problem and the research question and given the reasons for choosing the overall context and specific site of the research. I have briefly described the epistemology, methodology and methods I use and my relationship with the school personnel.

Chapter Two of my thesis reviews the literature relevant for my key concepts:

- 1. Connectedness
- 2. Empowerment and
- 3. Learning

This involves the considerable body of literature relating to my three key concepts. I commence with the first key concept, connectedness, and discuss the resilience literature as well as the body of literature that understands students and teachers as a community of learners. The second key concept involves discussion of literature relating to empowerment, including, concepts of power in history and their connection to pedagogical design for learning. The third key concept, learning,

discusses literature related to the middle years of schooling and relevant learning theories and approaches to learning.

The research framework I use to generate data to answer my research question, is fully described in Chapter Three, and includes my reasons for adopting a qualitative approach through the epistemology of constructionism and the theoretical perspectives of hermeneutical phenomenology, critical hermeneutics and critical enlightenment, symbolic interactionism and ethnography. I explain the reasons for adopting a specific case study methodology and the ways in which I develop methods for data collection and the importance of the administration of these to enable the optimum level of data generation. I also discuss the processes for data analysis, validation, ethical considerations and acknowledge the limitations of the study and my biases.

In Chapter Four, I present and discuss my data under the headings that directly relate to my research question:

- 1. Connectedness: Building caring, empowering relationships
 - Factors that enable the building of caring, empowering relationships at Garden College
 - Factors that students understand as impeding the building of caring, empowering relationships at Garden College
 - Teachers' understandings of their connection to the wider staff group.
- 2. Learning: pedagogy that connects and empowers
 - Factors that enable learning at Garden College
 - Factors that impede learning at Garden College.

In Chapter Five I draw conclusions and make recommendations according to the "iterative spiral" (Creswell, 1998) that has been developed. It is here the research question is finally answered and recommendations made in the light of this. I conclude with a reflection on the extended metaphor, we grow in the shade of each other.

CHAPTER 2

LITERATURE REVIEW: CONNECTEDNESS, EMPOWERMENT AND LEARNING

Introduction

As I stated in chapter one, the purpose of this research project is to explore teachers' and students' understandings of connectedness, empowerment and learning in year seven in a specific situation. This exploration is achieved by identifying ways in which teachers and students foster caring relationships within their classroom communities and enable learning through participation, contribution and the setting of high and achievable expectations. A comprehensive and focused search of the literature relating to these three concepts is paramount to achieving this purpose.

My belief that learning is enabled in an environment that promotes connectedness, led me to an exploration of the term connectedness and the discovery that it has more than one connotation in the literature. Three of these connotations are relevant for my research project. In certain contexts it means making connections within curriculum areas (Palmer, 1998; Marsh, 2001; Murdoch & Hornsby, 1997; McKenny, 2001; Murdoch, 1998; Stoll et al, 2003; Zygnier, 2004a). This is closely associated with the understanding that connectedness means teaching and learning within a community of learners (Fullan, 1992; 1999; 2001; Hill & Russell, 1999; Kruse & Louis, 1995; Palmer, 1998). Another body of literature understands connectedness as a person's sense of belonging within the family, school and wider community (Bernard, 1991; 1997; Fuller, 1998; Resnick, Harris & Blum, 1993). Embedded in all these understandings of the term, either implicit (Palmer, 1998) or explicit (Bernard, 1997; Cahill, 2002) is a reference to empowerment. Relevant too, are the theories of learning and the projects and approaches to teaching and learning that translate learning, connectedness and empowerment into practice. Thus this search of the literature reveals the key concepts of connectedness, empowerment and learning. All three are interconnected, as aspects of each are embedded in the others. It is impossible to label one as more important than the others. I begin with connectedness, continue with empowerment and conclude with learning, however, none is a discrete entity. I have selected examples of projects and

frameworks for teaching and learning and included them in each section, even though they are not the sole property of that particular section. I have used this method of organisation as I think it best highlights the interdependent nature of each of these key concepts.

Connectedness: the First Key Concept

Ecological Systems Paradigm

The concept of connectedness emanates from a paradigm or world view that understands everything being interconnected. This includes and transcends the mechanistic Newtonian world-view. An ecological systems world-view does not see physical life as disconnected, separate entities, but as entities that are interrelated. Elaborating on this theme Macy suggested:

What had appeared before as separate entities dissolve into flows, and are seen to be patterns in these flows- patterns that sustain each other by means of their relationships and exchanges. Atoms, cells, plants, people, societies.......

All are dynamic patterns, or open systems within systems.

They influence each other so deeply that it is hard to decide where one leaves off and the other begins (Macy, 1983, p.119).

All of these systems manifest flexibility and intelligence and must integrate and differentiate. This involves a process of discernment that all must embrace in order to survive and develop (Capra, 1996; 2003; Macy 1983). In integrating and differentiating, systems develop through discerning pathways that best suit the entity in its quest for continued existence. Part of this interdependent process is to "engage and enhance their own and each other's capacities" (Macy, p. 31).

The importance of interdependence is also emphasised in phenomenology where the relationship between the phenomenon, the world and the person are more important than the single entities (Merleau-Ponty, 1962). It is also seen in the development of complexity theory which states that systems, while consisting of parts are best studied as wholes, since new properties emerge that cannot be predicted by an analysis of parts: this is emergence (Capra, 1996; 2003; Lucas, 2000).

Complexity theory also involves non linear feedback groups and complex adaptive networks (Stacey, 1996). As the whole exhibits properties that are not evident in any of the parts, "the nature of whole is always different from the mere sum of its parts" (Capra, 1996, p. 29). Balance is an essential element in interdependence as life develops in complex ways within natural systems. In education the notion of interdependence has been enhanced by the work of Uri Bronfenbrenner.

Bronfenbrenner (1993) through the promulgation of his general ecological model of human development translates the notion of interdependence into the educational psyche. He describes human development as a complex reciprocal interactive and evolving process, involving the immediate and remote environments in which a child interacts on a regular basis. Bronfenbrenner defines five contexts of development. The first is a microsystem consisting of the elements, both human and otherwise of the environment in which the child interacts closely and regularly. Important in this context are family and school. The second context comprises the links established between settings in which the child interacts. Thus the relationship between family and school constitutes a mesosystem. A mesosystem incorporates a system of microsystems. The third context is defined by Bronfenbrenner as an exosystem, which is the combination of a number of settings, one of which does not contain the child. This may be the relationship between family members and their workplaces. The fourth, the macrosystem combines microsystems, mesosystems and exosystems and pertains to the culture of the community in which the child resides. The fifth, the chronosystem pertains to all of these but in addition acknowledges changes over time that affect the community and so affect the child, even though significant events may have occurred some time before the child was born. Thus educators are alerted to the environment both immediate and remote as interconnected and interdependent contexts in which the child develops. Figure 2.1 is a graphic interpretation of these five interrelated systems.

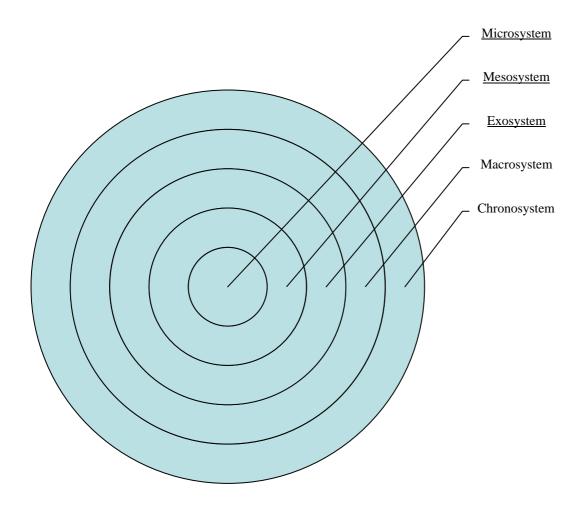


Figure 2.1 Five Contexts of Human Development (Bronfenbrenner, 1993)

With this in mind I will discuss the contemporary educational understanding of the term connectedness.

The Concept of Connectedness in Education

As previously noted the term connectedness has multiple meanings in the literature. Two of them are particularly relevant for my study:

- A person's sense of belonging within the family, school and wider community (Bernard, 1991; 1997; Fuller, 1998; Resnick, Harris & Blum, 1993)
- Making connections within curriculum areas (Marsh, 2001; McKenny, 2001; Murdoch, 1998; Palmer, 1998; Stoll et al, 2003; Zyngier, 2003), while teaching and

Chapter 2: Literature Review

learning within a community of learners (Fullan, 1992; 1999; 2001; Hill & Russell, 1999; Kruse & Louis, 1995; Palmer, 1998;).

While these are academically distinct concepts I do not believe they are mutually exclusive as the practicalities of achieving any one involves the other.

1. The Resilience Literature

In education, the term 'connectedness' has its origins in the body of literature known as 'Resilience Literature' (Bernard, 1991; 1997; Burns, 1996; Fuller, 1998; Resnick, Harris & Blum, 1993). The resiliency paradigm presents an ecological model in that it is developed within and enhances both individual and community (Fuller, 1998). Social cognitive theory, in particular the concept of self efficacy, which is associated with the current understanding of well–being, underpins this literature. It also involves empowerment as it enables young people to take control of their destinies, even in very difficult situations (Bernard, 1997). Thus, there is a close connection between connectedness and empowerment.

Three broad categories are defined that elicit and foster resiliency in children. They are:

- 1. Caring relationships,
- 2. High expectation messages,
- 3. Opportunities for meaningful participation and contribution.

(Bernard, 1991; 1997; Resnick, Harris & Blum, 1993).

The primary concern in this body of literature is the social and emotional wellbeing of children across the world born into high-risk conditions (Burns, 1996). These include "families where parents were mentally ill, alcoholic, abusive or criminal, or in communities that were poverty stricken or war torn" (Bernard, 1996, p. 7). The underlying premise is that "we are all born with innate resiliency...our inborn capacity for self-righting" (Bernard, 1996, p. 7-8) or "the ability to bounce back, recover from, or adjust to misfortune or change" (Burns, 1996, p. 94), which has also been described in terms of bungy jumping (Fuller, 1998). A resilient person develops the traits detailed in Table 2.1:

Table 2.1 Characteristics of a Resilient Person (adapted from Bernard, 1991)

Traits	Characteristics
Social competence	Responsiveness,
	Cultural flexibility
	Empathy,
	Caring,
	Communication skills,
	A sense of humour
Problem solving	Planning,
	Help-seeking,
	Critical and creative thinking
	_
Autonomy	Sense of identity,
	Self-efficacy,
	Self awareness,
	Task mastery,
	Adaptive distancing from negative
	messages and conditions
A sense of purpose and belief in a bright	Goal direction,
future	Educational aspirations,
	Optimism,
	Faith and spiritual connectedness

Protective and Risk Factors

The resilience literature developed a list of protective factors and risk factors. Protective factors are "those factors that buffer against the stresses of everyday life that might otherwise result in adverse physical, social or psychological outcomes for youth" (Resnick, Harris & Blum, 1993 p. 3). One of these protective factors is connectedness. The term developed from the area of caring relationships in which an understanding of adolescents' social relationships and feelings of connections to others as they experience life was deemed to be paramount. The term is currently defined as "[a] person's sense of belonging with others. A sense of connectedness can be with family, school or community" (Commonwealth Department of Health and Aged Care, 2000, p. 123). Connectedness to school is a significant protective factor (MindMatters, 2000; Resnick, Harris & Blum,1993) and connectedness to one caring adult is sufficient to foster resilience (MindMatters, 2000).

As indicated in Table 2.1, connectedness is understood as a basic need if we are to create socially competent people. In an ecological model the emphasis is on the protective processes rather than programs. We need, therefore, to work at the level of relationships, beliefs and opportunities for participation and consequently empowerment (Bernard, 1997). For Bernard, the process of connectedness, that is, linking children to adults, to interests and ultimately to life in order to build a sense of belonging, is essential to produce a socially competent person. This is in accord with the work of Brophy who maintains that "consistent projection of positive expectations, attributes, and social labels to students may have a significant impact on fostering self-esteem and increasing motivation toward exhibiting prosocial behaviors" (Brophy, 1996, p. 2). Resnick, Harris and Blum, (1993) highlight school connectedness as the most important protective factor against the 'acting out' behaviours in both boys and girls and the second most important against the quietly disturbed behaviours. The message is clear for schools. They must provide opportunities for all students to develop a wide range of competencies.

The concept of resilience is taken beyond students, however, as Kruse and Louis (1998) advocate the need for resilient teachers. Sergiovani (1993) speaks of belonging and connectedness in the context of community as a universal need. He takes the discussion well beyond the realm of the highly 'at risk' student. Sergiovani (1993) highlights the fact that we all need a sense of belonging, continuity, connectedness, caring and respectful relationships and opportunities to make decisions in order enable these for our youth. Personal empowerment happens within community. This is critically so for teachers.

Also relevant for schools are the identified risk factors; that is factors that contribute to students being at risk of alienation or being disconnected from school (MindMatters, 2000). These include:

- •unstimulating content that is unrelated to the student
- •small range of choice (especially in practical or vocational areas)
- •lack of student participation in decisions about curriculum content, process and assessment
- •passive teaching-learning strategies
- •minimal interaction with teacher and peers
- •lack of cooperative activity based and independent learning
- •competitive exam dominated assessment
- •one off rather than progressive assessment (Cahill, 2001).

Middle Years Research and Development Project

Bearing in mind the above protective and risk factors, one important project sought to address them for schools. The Middle Years Research and Development Project (Russell, Mackay & Jane, 2001; 2003), influenced by the resilience literature, sought to ascertain the level of connectedness of students to school. The study found that students' feelings of belonging to school declined progressively from year five to year nine. The fact that the validity of the results are based on the meaning ascribed to the word "belonging" by the participants is problematic, as individuals interpret words differently. Therefore, it would be a valuable exercise to interview students to ascertain the meaning they ascribe to the statement "I feel I belong at this school". Valid interpretation of their perceptions depends on the meaning they assign to "belong". This aside, the data are raising issues about school and classroom practices that we cannot ignore as they directly impede the students' ability to learn. It is relevant therefore to explore the concept of teachers and students as a community of learners as learning occurs in community.

2. Students and Teachers as a 'Community of Learners'

Teachers as a community of learners are often called a professional community (Fullan, 1999; Hill & Russsell, 1999; Kruse & Louis, 1995; Marsh, 2001; Stoll et al, 2003). The professional community is seen as an essential contributor to high student achievement, enhancing teacher collaboration, ensuring social support for student education and valuing authentic assessment (Fullan, 1999; Hill & Russell, 1999; Kruse & Louis, 1995). The concept of learning community includes students and leads to the delineation of a school as a "learning web' with linkages and relationships to industry and the community for both curriculum enrichment and experiential learning and action research" (Lepani, 1994, p. 3). This is consistent with the ecological model.

Effective professional learning teams allow teachers to collaboratively explore pedagogical approaches, continuously refine these and make the connections between curriculum areas (Palmer, 1998; Marsh, 2001; Murdoch & Hornsby, 1997; Murdoch, 1998). Connectedness, in a professional learning community, is seen in practice as collaboration and interaction. These are the hallmarks of a fully operational professional community, which fosters diversity while building trust, both provoking anxiety and containing it, creating knowledge and fusing the spiritual, political and

intellectual (Palmer, 1998). Here the concept of 'teacher as learner' (Barth, 2000; Fullan, 1999; Hough & Paine, 1992) is paramount as there is only a professional community when teachers understand themselves as learners. It is this professional community that gives teachers and students a sense of belonging, in that they are linked to people, interests and ultimately life (Bernard, 1997) and also empowers them within their school community. Forming such a community, however, is not always straight forward.

Difficulty in Development of a Professional Learning Community

The main factor, contributing to the disempowerment of teachers and students and preventing the development of a professional community, a community of learners, is I believe, the "inertial bureaucracy" described by Fullan (1999, p. 31). It is, according to Fullan, the greatest inhibiting factor in the development of a collaborative learning community and it is in the context of a collaborative learning community that change is successfully implemented and maintained. 'Inertial bureaucracy' is also akin to the dominant political power described by Freire (1973). Because the school bureaucracy is multi –faceted (Sun-Keung Pang, 2003) it is difficult to describe holistically and its actions are more often than not fragmented. Relevant here, too is the concept of balkanization (Fullan, 1993, p. 83) where strong loyalties within one group of staff members renders it hostile to other groups within the total staff group. Despite these issues, the development of a professional community is both possible and desirable. The following describes an explicit attempt to develop a professional community, comprising student, teachers and the Local Education Authority (LAE) in London, UK.

Improvement in Action: Sustainable Improvements in Learning through School- based, Teacher-led Enquiry Project

The University of London has undertaken this project to improve teacher learning in schools (Lodge & Reed, 2003). In this project "[t]eachers have the opportunities to collaborate with professional peers, both within and outside their schools, and access the expertise of external researchers and programme developers." (p. 7). Thus the project stresses the importance of teachers being able to collaborate widely both within and outside of their schools and to have influence over their professional development and professional learning. I am using Lillico's (2004) understanding

of professional development as the learning that arises outside the particular teaching institution, while professional learning pertains to the learning that emanates from the workplace. The concepts of connectedness, learning and empowerment are integral to this project. As does Carnell (2000), Lodge and Reed (2003) acknowledge the centrality of the organisational context in teacher learning. They also acknowledge that teacher learning can promote organisational learning. This seems to be an attempt to correct the "inertial bureaucracy" that Fullan (1999, p. 31) recognises as ultimately inhibiting improvements in student and teacher learning. Lodge and Reed (2003) find the concept of teacher capacity interesting as it enables organisational context and teacher learning to be linked through the teachers' capacities to impact on this. Once again, the centrality of connectedness and empowerment in the context of learning is implied. The professional community promotes shared purpose, collaboration, reflective enquiry and influence. Thus the two concepts of connectedness and empowerment are seen as two sides of the same coin and ensure that the learning will not remain with the individual but will be shared by the whole community of teachers.

Lodge and Reed (2003) claim that, while research shows that change needs to happen at the classroom level, this will not happen unless a professional learning community is established. As do Kruse and Louis (1995) and Stoll (1999), they identify conditions required in schools to support school–based professional practice: time to meet and talk; physical proximity; interdependent teaching roles; communication structures; teacher empowerment and school autonomy. The fact that the project involves teachers learning from their own and each others' practice and contexts ensures a richness of learning. This directly addresses the problem of "interial bureaucracy" as described by Fullan (1999, p. 31). The powerful focus is on teacher as learner, with the explicit focus on the process (Munro, 1999). Teachers, members of the Local Educational Authority and staff of the university have combined in the development of a learning community that is successful in that they are connecting and empowering teachers to contribute to the growth and development of their students, themselves and the organization. Parker J. Palmer (1998) takes this concept further by speaking to teachers as individuals and recognising students as individuals within an ecosystem.

The Individual Teacher and Students within the Community of Learners

Johanna Macy (1983) speaks of weaving a web in the context of ecosystems. This concept has been adeptly translated to the educational arena by Parker J Palmer (1998). Palmer says,

"[g]ood teachers posses a capacity for connectedness. They are able to weave a complex web of connections among themselves, their subject and their students so that students can learn to weave a world for themselves" (p. 11). Palmer defines 'connectedness' as the ability to "join self, subject and students in the fabric of life" and depicts this as going far beyond the realm of teaching technique as teacher, subject and student must be "woven into the fabric of community that learning and living require" (p. 11). Palmer specifically adds the academic subject to form a unity with teacher and students.

Palmer's understanding of 'disconnectedness' as emanating from fear, leads him to delineate two dimensions of this dominant feeling. One is the fear engendered within students, so that those born with love of learning begin to hate school. The other is the fear of the educational institutions' divisive structures that impact upon the teacher as a person and educator. There are so many fears within the school experience of students that when they are combined with those of the teacher they increase to a degree that education may be paralysed. In questioning why teachers persist in this fearful and therefore disempowering situation, Palmer says they fear "a live encounter with alien "otherness", whether the other is a student, a colleague, a subject or a self-dissenting voice within" (p. 37). Thus the line of least resistance is to maintain the *status quo* as the educational institution, aided and abetted by our western "commitment to thinking in polarities, a thought form that elevates disconnection into an intellectual virtue...urging teachers just to 'be themselves'" (p. 61-62).

Palmer also comments on the fragmentation of "reality into an endless series of *either-ors*" (italics in original) (p. 62). His solution is in paradoxical pedagogical design, in which he says, the paradox is a lens through which teaching may be viewed. Palmer understands paradox as the combining of two profound truths, even though each describes the opposite of the other (Table 2.2).

Table 2.2 Paradox in the Classroom (Palmer, 1998, p. 74)

A Paradox

Space should;

Be bounded and open;

Be hospitable and charged;

Invite the voice of the individual and the voice of the group;

Honour the "little" stories of the students and the "big" stories of the disciplines and tradition;

Support solitude and surround it with the resources of the community;

Welcome both silence and speech.

Here is a balanced approach, as recognised by the ecological paradigm that appears simple, and yet is one that many teachers find difficult (Palmer, 1998). Palmer says the heart must be engaged here as well as the head, as it is in the re-education of the heart that the ability to hold the tensions of paradox will be achieved. This is because "truth is found not by splitting the world into either-ors but by embracing it as *both-and*" (italics in original) (p. 63). While he seems to be addressing personal empowerment as he emphasises individual responsibility to achieve this, Palmer firmly establishes that this re-education of the heart can only happen in community as "community is the essential form of reality, the matrix of all being" (p. 97). He depicts a learning community as a 'Community of Truth' (Figure 2.2), not hierarchical and searching for objective truth, but circular. At the centre of the circle is 'subject' not 'object' as "a subject is available for relationship, an object is not" (p. 102). Palmer describes the way it looks as "less like General Motors and more like a town meeting, less like a bureaucracy and more like bedlam" (p. 101). Thus he connects the knower and the known in a powerful ecostystem, which will be at once, diverse, ambiguous, creative, honest, humble and free. Palmer's understanding of connectedness certainly implies that teachers and students have a sense of belonging to their school community.

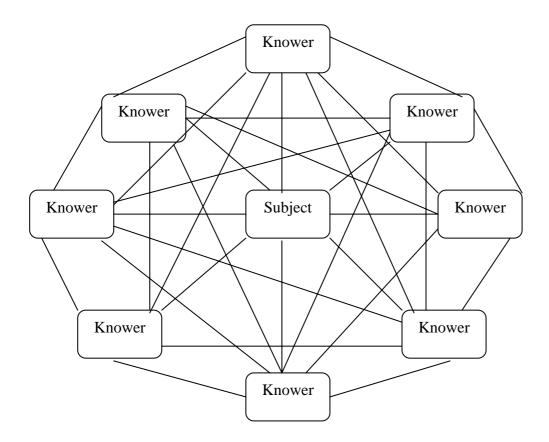


Figure 2.2 Community of Truth (Palmer, 1998, p. 102)

The Project for Enhancing Effective Learning (PEEL) depicts the journey of a group of teachers and students who did not fear the live encounter as described by Palmer, but embraced it and grew as a result. The PEEL Project is another example demonstrating that connectedness, empowerment and learning are inextricably entwined.

The PEEL Project

The Project for Enhancing Effective Learning (PEEL), a partnership between the tertiary and secondary sectors in Victoria, commenced in 1985 and has since spread widely in Australia and overseas (Baird & Northfield, 1992). It involves collaborative action research within classrooms and "confronts and challenges closely held attitudes, perceptions, conceptions and abilities relating to the nature of learning, the profession of teaching, one's own worth and success and personal satisfaction and fulfilment" (Baird & Northfield, 1992, p. ii). The first major aim of the project is to lead students and therefore teachers, to enhanced metacogniton. Metacognition is an important part of the learning process as it is the ability to reflect upon this process (Blakey & Spence, 1990; Fogarty, 1997; 2004; Livingston, 1997). Metacognition is to be attained through a heightened

knowledge and awareness of learning and the control of learning by both students and teachers through informed, purposeful decision-making. In discussing the learning process, words such as willing, able, motivated, interested are constantly used, because if students are both willing and able to learn they are then, with their teachers, able to manage and control the learning process. Students then are well prepared to be effective self-regulatory learners (Smith, 2000). This process is not divorced from ordinary classroom practices as "in everyday classroom activities, students practise monitoring the nature and progress of learning" (Baird & Northfield, 1992 p. 4). It is the ability to know what you know and what you don't know (Fogarty, 1997). Teachers report differences between this and previous projects in which they had participated. While others had promoted various strategies for student engagement in learning, PEEL was the only one that explicitly linked this to metacognition.

The project also has components for the management of change, teacher reflection on classroom practices and the meaning that underpins these. The description (Baird & Northfield, 1992) depicts teachers as informed participants, and underscores the problematic parallel between tertiary researchers and teachers on the one hand and teachers and students on the other, as each supposed subordinate endeavours to participate in a little understood or valued learning process. Thus reflection on practice and decision-making, in order to effect learning, must be a shared process and all participants must be equally valued if the process is to be effective. The project acknowledges that in the context of classroom learning interpersonal and peer group factors affect student outcomes. Therefore connectedness is axiomatic as a pre-requisite for learning. The Project report defines a classroom as an "educational ecosystem" (p. 6) and draws powerful analogies within the classroom, highlighting the diversity of all elements composing the context of learning.

Teachers who wish to change classroom practice have to have a "flexible, but clearly thought out strategy for change" (Baird & Northfield, 1992, p.188). Implied here is teacher empowerment, as a teacher who only acts at the dictate of authority has little flexibility. One of the features of the PEEL plan is to "broaden and change assessment to make it more collaborative and as congruent as possible with the learning being called for in class" (p.189). At the conclusion of the first stage of the Project (1986) a set of descriptors of the 'metacognitive' and 'passive' learner was collated. The metacognitive learner has a much broader understanding of the learning process than does the passive learner, and understands it as collaborative rather than teacher centred. Thus

this approach to learning builds on and develops the existing interconnectedness of those in the classroom and empowers all to embrace a deep, reflective approach to learning.

Smith (2000) in speaking of her own experience of PEEL says that, "support from peers and others as impetus to change was crucial. It provided affirmation during times of uncertainty, opportunities for collaboration, and worked to maintain momentum through difficult situations" (p. 128). Thus it is evident that the elements of connectedness demonstrated in the mutual support experienced by the members and of empowerment in the ability to continue despite difficulty, combine to effect successful completion of a project. The PEEL project continues, with professional learning sessions planned for 2005 and an annual conference attracting over 100 participants. The professional learning sessions are still very highly regarded by the teaching profession (S. Hill, personal communication, 9 December, 2004).

Given this level of success, it is difficult to understand why there has not been a wider and more consistent involvement in the project. The fact that participatory active research projects are viewed by some as problematic (Kemmis & McTaggart, 2000) may provide an answer. The perceived problem is attributed to the prominence of teacher knowledge of this model. Views of other groups within the school may understand this to be threatening as it implies individual teachers and teachers as a specific group, can effect change. If this is so it would seem to contradict research regarding the school in its totality as an organization, by people such as Fullan (1993; 1999) and Hill and Russell (1999) who suggest that successful change is only achieved within a whole school process. Consequently the question may be posed, has the emphasis on whole school approaches resulted in the disempowerment of teachers? While interesting the answer to this question is beyond the scope of this thesis. The crucial features of PEEL, however exemplify the notion of learning co-emerging within a reflective learning community.

My Definition of Connectedness

The literature discussed so far elucidates the educational understanding of connectedness relevant for my study. For the purposes of this research project I combine the understandings outlined so far and define connectedness as 'a sense of belonging to a learning community'. Embedded in all these understandings of the term is either implicit (Baird & Northfield, 1992;

Palmer, 1998) or explicit (Bernard, 1997; Cahill, 2002) reference to empowerment. The need to search the empowerment literature follows naturally.

Empowerment: The Second Key Concept

An internet search on the term 'empowerment' readily proffers three avenues, personal empowerment, social empowerment and political empowerment, plus advice on how to either build an ecologically sustainable society, use computers and the internet or build and promote an internet website. The literature, relevant for my research, generally understands empowerment as enabling, either personally (Cahill, 2002; Macy, 1983), personally and socially (Groome, 1998; Macy, 1983; Smith, 2000) or socially and politically (Freire, 1973; Groome, 1998; Shor, 1992). These divisions are artificial and do not reflect Palmer's encouragement to use 'both-and' rather than 'either-or' (Palmer, 1998). In reality the three aspects are very much interdependent. The understanding of the three aspects of empowerment I have chosen from the literature has developed over time. In order to understand why I have developed a definition of empowerment that underpins my study, I believe the history of the western understanding of the root word 'power' is both necessary and relevant for an understanding of the western contemporary notion of empowerment.

Concepts of Power in History

The understanding of power has always been very closely related to the prevailing western view of the world, therefore the understanding that underpins the concept of connectedness, also underpins the concept of power. Until the second half of the twentieth century the physical world was conceived as a series of contained entities arranged in a hierarchical order (Berry & Clarke, 1991; Collins, 1995; Edwards, 1999; Fox, 1983; Kelly, 1992; McDonough, 1990; Macy, 1983; Morwood, 1997). As portrayed in the first two chapters of the Book of Genesis, men were at the apex of the hierarchy, and, traditionally, that position explicitly involved dominance. Consequently power was defined in terms of force, and survival was the result of struggle between two or more opposing forces and hence the notion of opposite became embedded very early in our culture. The emerging contemporary world-view is, however, very different. This understanding is of a world consisting of ecosystems, all of which are interconnected and interdependent (Macy 1983; Edwards, 1999; Collins 1995; McDonough, 1990; McFague, 1993). Gaia theory, promulgated by Lovelock

(1979) conceptualises the earth as a living being. This concept has been developed further in theology in the work of Sallie McFague (1993) as she describes the earth as God's body.

The history of the understanding and exercise of power can also be divided into two broad eras, pre and post seventeenth and eighteenth centuries (Danaher, Shirato & Webb, 2000; McHoul & Grace, 1993; Slaughter, 2002). Pre seventeenth and eighteenth centuries understood power in terms of the sovereign/subject relationship. The divine right of kings was largely unchallenged, as a dutiful, religious (often superstitious) population gave allegiance to their king as they did their God. The seventeenth and eighteenth centuries witnessed the Enlightenment, the rise of Rationalism, and the Industrial Revolution, which in turn produced a western scientific epistemology, and with it a different understanding of power. The world-view at this time encouraged analysis and control and, consequently power was described in mechanical terms. Generally, in this way of knowing, power has a negative connotation, as its object is domination. Power dominates people, but truth frees them (Freire, 1973; Shor, 1992). It is the 'power over' of which Macey (1983) speaks. Truth (knowledge) in this epistemology is a product of western science.

Life as we experience it, and have experienced it for two to three hundred years, has been influenced by a western scientific epistemology, based on an inadequate world view. While we have begun to value the contemporary scientific understanding of the world, the dominant concept of power in our societies is still one that values scientism or mechanistic control. This is gradually changing in certain areas, as the works of Michael Foucault and Joanna Macy demonstrate. They are relevant because, although their writing emanates from different perspectives, they exhibit significant similarities and always provide deep insights that are very relevant for teachers who seek to understand power relations within their school community. While I discuss them in this section the concepts expressed relate to connectedness as well as empowerment.

Michael Foucault

Michael Foucault, writing in the second half of the twentieth century and basing his observations on European political situations in the 1950s and 1960s, maintained that both right and left forms of government still understood power as the cause of the relationship between the 'sovereign' and the 'subject' (McHoul & Grace, 1993). He maintained that power is the result of the

relationship rather than the cause and that societies produce specific practices, which demonstrate the internal operation of power relations. While this distinction may appear semantic, I find it helpful in assisting the understanding that a change in the nature of the relationship will result in a change in the type of power being demonstrated. Foucault understands relations of power as permeating, so that they characterise the social body (McHoul & Grace, 1993). Thus he understands that power should operate within a societal relationship and that rather than emanating from a central point, which for Foucault is the State, power should emanate from many local and regional points. Power is seen by Foucault to circulate through an organization and "individuals are vehicles of power, not its points of application" (McHoul & Grace, 1993, p. 89). He also stresses that power should rise rather than descend (Danaher, Schirato & Webb, 2000). This is in opposition to a hierarchical model that merely perpetuates domination.

Foucault observed society from a political/economic perspective and described power from the perspective of that society, as the administration of life (McHoul & Grace, 1993), in that government assumes responsibility for all of the life processes within society. Biological and political life merges as political strategies revolve round: "the demands for basic needs, for the realisation of potentials, for the annihilation of scarcity and the concomitant demand for complete fulfilment and plenitude" (McHoul & Grace, 1993, p. 62). He exposed the nature of a society as he examined different powers exhibited by that society.

All this is relevant for school communities as they continually grapple with the relationship between the institution and the people within. Of particular relevance to schools is Foucault's discussion of 'disciplinary power' as he says that "only a particular mode of society could have invented this form of punishment" (McHoul & Grace, 1993, p. 66). The form of government, and hence the society for which it speaks, values the normalizing of individuals. Thus they must define 'normal' and 'abnormal' in order to do this. Consequently, a society that values disciplinary power values four stages of the disciplinary process. The first stage is through controlling space, by enclosing certain groups in certain spaces. The second is through the control of activities undertaken by groups. The third is by organising training into segments or stages and fourth by coordination of all for the overall cohesion of the institution. Power is only directed one way, as the development of the institution is paramount and examinations in this model are set by those who exercise power by already possessing the relevant skills, and are taken by those who are subjected

to this power. Power does not rise in this model, rather it descends. Foucault maintains this is a reflection of the values of that particular society and further states that an institution is composed of opposing forces likened only to a state of war (McHoul & Grace, 1993). Disciplinary power, according to Foucault, "increases the forces of the body (in economic terms of utility) and diminishes these same forces (in political terms of obedience)" (p. 77). The understanding that power should rise rather than be imposed from above is consonant with the understanding of power described by Johanna Macy.

Joanna Macy

The locus of power changes with Johanna Macy's (1983) description of power emanating from a world-view that understands everything as interconnected. Macy's work assists a more holistic understanding of the world. Words such as patterns, flows, relationships, exchanges, dynamic, open systems are all manifestations of interconnectedness. These ecosystems, families and societies experience synergy, that is, power that rises rather than descends. In Macy's view "power is understood as mutual and synergistic, arising from interaction and generating new possibilities and capacities" (Macy & Young Brown, 1998, p 117). This understanding of power is relevant for schools as they endeavour to lead each child to realise his/her full potential, a realisation that can only happen in community.

Power in a world-view, where the universe consists of separate entities, is associated with domination, invulnerability and win/lose situations. Macy (1983) and Swift and Levin (1987) describe this as a zero sum situation. In the world-view described by Macy, power is associated with vulnerability and win/win situations. Domination involves having someone to have *power over* and is a product of a patriarchal society. This concept of power, involving 'power over', according to Macy (1983) renders the particular society dysfunctional because unless an organism is open to change, it cannot develop to its full potential, as it requires assistance from all elements from the environment to do so. This concept Macy (1983) calls 'power with'. In Macy's understanding 'power over' should give way to 'power with'. Macy says the concept of 'power over' is also inaccurate because no living thing can develop in isolation as evidenced in the function of brain cells. While this may be true when describing the development of ecosystems, people often

develop in enough isolation, albeit dysfunctionally, to establish and maintain significant 'power over' situations.

All systems manifesting 'power with' require flexibility and intelligence and must integrate and differentiate. Integration and differentiation means they exhibit individual traits and *modus operandi*, yet they work together to promote all. This involves a process that all must embrace in order to survive and develop in life-enhancing ways (Macy 1983). Part of this process is to "engage and enhance their own and each other's capacities" (p. 31). Here the cultural and personal aspects of empowerment begin to emerge. Consequently, each member of the society understands that another's attainment of increased development has been assisted by them. This means the development of each member's power to nurture and empathise is paramount. This does not obviate the ability to be assertive or mean that destructive behaviour is to be tolerated, but it does mean that objective description and external control are impossible.

This understanding is a challenge to us all as interconnectedness means that we cannot distinguish between a responsibility to ourselves and others (Macy 1983). It is particularly relevant to teachers in the understanding of themselves and their students as a community of learners and in their attempts to address already-defined ecological problems such as excessive exploitation and consumption by wealthy peoples, an economics of endless growth which takes no account of the limits of the earth and exponential population growth, the damage to the ozone shield, climate changes due to greenhouse gases, the pollution of the atmosphere, rivers and the seas, the degradation of the land, the loss of the wilderness and the extinction of entire species (Edwards, 1999). It is also relevant for teachers as they endeavour to understand and enhance the learning community that is their school. It is problematic, however, that teachers often acknowledge the situations they understand as globally significant, yet ignore or treat as inevitable, the disconnectedness existing within their school community. It is only in accepting the totality of the challenge that they will have a sense of belonging to all humanity and the web of life and exhibit this understanding in their workplace. Thus the concepts of connectedness and power are inextricably entwined.

While writing from different perspectives, Foucault and Macy both understand power as resulting from relationships and individuals as vehicles of power in a societal context. Their

approaches to the understanding of power demonstrate this concept from the perspectives of biological, sociological, political and economic systems and so challenge teachers to define the quality of the power relations in their classrooms and consequently the environment in which they and their students are developing. Macy's understanding of power underpins the concept of empowerment.

Empowerment

Paulo Freire, Ira Shor and Thomas Groome

I situate my understanding of empowerment in the writings of Paulo Freire (1972; 1973), Ira Shor (1992) and Thomas Groome (1998), as they all write in the context of education. I then demonstrate from the literature, the development of two of Freire's and Shor's fundamental pedagogical components, which also exhibit aspects of Groome's pedagogical understanding. These components, as I will demonstrate, are firmly entrenched in recommended contemporary teaching and learning approaches.

Paulo Freire (1972; 1973) understood education as the key to empowerment. Education for Freire is "the practice of liberty as it frees the educator no less than the educatees from the twin thraldom of silence and monologue" (1973, p. viii-ix). As he was writing in the context of the situation in Brazil he was adamant that people should be subjects (not objects) who act upon and transform their world. While the development of the autonomous self is problematic in the context of a 'power with' situation, Freire, because he was working with severely oppressed people advocated subjectivity so as they individually may become conscientized and through this be empowered collectively. His concept of conscientization involved learning to perceive social, political and economic contradictions and to take action against the oppressive elements of reality. For Freire, personal and social/political empowerment intertwined and therefore an empowering educational process was one that encouraged critical attitudes that led to action.

Ira Shor, who translated Freire's thought to education in the United States of America, describes empowering education as "a critical-democratic pedagogy for self and social change" (Shor, 1992, p. 15). Thus the personal, cultural and political are immediately understood as three

sides of the one triangle. His justification for this understanding is that "human beings do not invent themselves in a vacuum, and society cannot be made unless people create it together" (p. 15). He, following Freire, proposes an agenda of values that enable empowering pedagogy. This pedagogical design is relevant for cultural situations that are generally described as less traumatic on a global scale, but are nevertheless very significant for educatees. Participation and problem solving are sections of his pedagogical design that are widely advocated today.

Thomas Groome's writing is particularly relevant for this research project, as he translates Freirian notions into the context of Catholic education. Thomas Groome (1998) connects education to all facets of life and unites Freirian and Christian philosophy. He states that pedagogy should be "the antithesis of 'banking education'" (p. 103). Rather, he speaks of a "humanitas pedagogy" (italics in original) (p. 103) that inspires people to be creative. This must necessarily engage the heart as well as the head so as the whole person, cognitive and affective, is developed in a lifegiving way. Noting the fact that education means "to draw out (e-ducare)" (italics in original) (p. 200), Groome emphasises that educators must ask appropriate questions to ascertain learner knowledge, feelings and actions. Writing in a Catholic Christian context, Groome says that educators must be with learners in such a manner as to develop their human rights. He deplores the fact that education treats learners as passive recipients of knowledge and advocates active participation in the education process.

Freire, Shor and Groome concur in advocating participatory pedagogical processes that involve problem solving and dialogue. I now relate their understanding of these components of pedagogical design to the contemporary classroom.

Pedagogical Design for Learning

Participation

Participation, which involves teachers and students involved in learning that is meaningful and leads to action, is widely advocated, either explicitly or implicitly as an essential component of any educative process both for teachers and students (Bernard, 1991; 1997; Cahill, 2002; Cormack, 1996; Cumming, 1996; Freire, 1973; Fullan, 1999; Groome, 1998; Hill and Russell, 1999; Russell,

MacKay & Jane, 2003; Kruse, 2000; Marsh, 2001; Saha, 2002; Shor, 1992; Schweisfurth, Davies & Harber, 2002; Wesselingh, 2002). Contemporary approaches that advocate student participation as an essential component of learning concur with Freire's (1973) articulation that educators are agents of change and participation involves being with the educatees so they are also agents of change. Participation, however, is low in traditional classrooms (Russell, Mackay & Jane, 2001; Shor,1992;). Shor (1992) is referring explicitly to an American context, while Russell, MacKay and Jane (2001) are referring to Australian Middle Years classrooms. Shor notes that children commence life as motivated learners, participating in their own learning and having great curiosity. These are reflective of Palmer's (1998) understanding of student motivation being terminated by attendance at school. Shor also states that students are prepared for non-participation in school and society by experiencing teacher-centred classrooms, dominated by rote drills, short question exams and standardized tests. Shor (1992) concludes that schools are set up and run by those elite, who do not wish others to participate in the organization of their society. This reflects the understanding that power systems within society reflect the values of that society, where the elite cannot encourage participation as they act spontaneously to maintain the status quo (Freire, 1972; 1973). It is therefore reasonable to ask whether maintenance of the status quo that allows teachers to be an elite, powerful group, is the reason for lack of student participation.

For Freire (1973), to be human is to engage in equitable, balanced relationships with others and with the world. To achieve this, a person must be integrated rather than adaptive or adjusted. Becoming integrated is a direct result of being able to participate and make choices. Groome (1998) "demands active participation in education" as this "prompts and empowers them [the students] to become agents in their own learning" (p. 103). Contemporary publications encourage teachers to plan curricula for active citizenship (Wesselingh, 2002), that includes student voices, intercultural communication, democratic ways of researching and working, curriculum and learning for national identity (Schweisfurth, Davies & Harber, 2002; Victorian Curriculum and Assessment Authority, 2005), using the inquiry process (Marsh, 2001; Murdoch & Hornsby, 1997; Murdoch, 1998) and studying values and controversial issues (Marsh, 2001). All these approaches involve participation in the educative process that involves engaging in relationships with others and the world and seeks to prepare students for participation as fully-fledged members of society. Action in any such society necessarily involves social and political aspects. Specific approaches based on this perspective are

discussed later in this chapter. Another component of Shor's pedagogical design is problem posing, problem solving and dialogue.

Problem Posing/Solving/Dialogue

Dewey (1916) wrote disparagingly of understanding education as being 'poured in' in order to fill students with knowledge and skills. Freire (1972) wrote "[e]ducation is suffering from narration sickness" (p. 57) when expounding his 'banking' theory of education. He used a banking metaphor, which draws upon the image of filling something that was empty. Groome (1998) speaks of the "transfer of information from the knowledgeable heads of teachers to the empty heads of learners" (p. 103). This is an 'acquisition' form of learning (Sfard, 1998). Freire, like Foucault, sees this form of education as mirroring an oppressive society. In this the elite teachers are the only ones who think, know everything, impart discipline and make choices. The students are merely objects in this process and are consequently deprived of their freedom as the teacher confuses the authority of knowledge with his/her own professional authority. Freire's description is powerful, concluding that oppression is overwhelming control and by that very fact is necrophilic, and consequently is nourished by love of death, not life (Freire, 1972). Shor (1992) acknowledges that there are some teachers and students who are quite content with an acquisition approach to education as they see the need for and are good at dispensing and acquiring information. This is true when students are encouraged to accept a passive role in their own education and to be satisfied with the result. The high accolades that accompany these results can prove counter-productive in encouraging school communities to value participatory approaches to pedagogy. Instead they laud a banking theory of education.

When problem posing takes over from banking education however, then the teacher/student relationship becomes reciprocal. The classroom is participatory and true dialogue facilitates learning, as the students are "critical co-investigators in dialogue with the teacher" (Shor, 1992, p. 54). Dialogue for Freire, is an encounter between people, involving communication and inter communication and founded on love of the world and people. They are then able to be creative as described by Groome (1998) and so become the empowered individuals that Fullan (1991) says are the only vehicles of improved education. True dialogue develops critical consciousness, which

Chapter 2: Literature Review

"allows people to make broad connections between individual experience and social issues,

between single issues and the larger social system" (Shor, 1992, p. 127).

It is here we are reminded of empowerment within a community about which Macy (1983) speaks.

Both teacher and students become open to change and therefore deep learning. They are able to

develop and shape the world in which they live. Such concepts are embedded in the Common and

Agreed National Goals for Schooling in the Twenty-first Century (Commonwealth Ministerial

Council for Education, Employment, Training and Youth Affairs, 1999; Victorian Curriculum and

Assessment Authority, 2005), participatory approaches to education and have been to the forefront

in research into the middle years (Kruse, 2000; MindMatters, 2000). Empowering pedagogy

involves participation and problem solving. These two components of education are featured in all

the approaches I will discuss in the following section.

My Definition of Empowerment

For the purposes of this study it is necessary for me to define empowerment in a way that

encapsulates the concepts from the literature as they relate to a group of year seven students and

their teachers. Therefore I unite the concept of self-direction with the context applicable to the

students and their teachers and define empowerment as 'the ability to act with confidence in order

to direct one's own life within the context of school'.

Learning: The Third Key Concept

Learning for Connectedness and Empowerment

In this context of learning, theory of learning and approaches to learning and teaching are

paramount. I situate my search in the Middle Years and Student Voice literature and understand

constructivism and constructivist approaches to learning as a process of making meaning to be

relevant. In addition, I investigate the possibilities afforded by an exploration of the emerging

theory of enactivism. Both empirical and theoretical literature support appropriate theory and

approaches that promote connectedness and consequently, empowerment of teachers and students,

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by stressing the fundamental importance of relationships, high expectation messages and opportunities for meaningful participation in the learning process.

Relationships and Learning within Middle Years Research

The definition of 'Middle Years' varies from years six to ten (Schools Council, National Board of Employment, Education and Training, 1993), through five to nine (MindMatters, 2000), five to eight (Victorian Board of Studies, 1999) and sometimes, generally, as the years bridging the primary and secondary schooling (Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000). Hence with my study situated in year seven, the 'Middle Years' literature, whatever the definition used, will be relevant.

Beginning with the document 'In the Middle' (Schools Council, National Board of Employment, Education and Training, 1993) the last 10 years has produced research that delivers findings asking teachers in the middle years to negotiate a curriculum that is based on people (Cumming, 1996; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Kruse, 2000; Russell, MacKay & Jane, 2001; 2003) and should include the element of fun (Brown, 2002). Effective teaching and learning is essential if students are to achieve their potential. It should be cooperative and be fostered within a reflective community atmosphere (Cumming, 1996; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Kruse, 2000; Russell, MacKay & Jane, 2001; 2003; Schools Council, National Board of Employment, Education and Training, 1993). Thus immediately, intellectual and social development are understood in this literature to be equally important. Assessment, if teaching and learning is to be effective, must be within an integrated and inclusive curriculum and be valid and fair (Cahill 2000; Cumming, 1996; Schools Council, National Board of Employment, Education and Training, 1993). Many projects specifically address these issues (e.g. Holdsworth, 2003; Nelson, 2003; Zyngier, 2003).

Respondents to the School's Council's discussion paper in 1993 said that in order to achieve effective middle schooling there is a need to "transform traditional approaches that involve students

in the ingesting and regurgitating of factual information" (Schools Council, National Board of Employment, Education and Training, 1993, p. 38). The document also highlights the value of approaches to teaching that take into account the lived experience of the learner and his/her environment and states that there must be a concerted effort on the part of systems, professionals, principals, teachers, teacher training institutions and research agencies is advocated to "expedite the development of effective middle schooling" (p.65).

Research also recommends that school structures should be flexible, smaller rather than larger, and student-centred, so as the fundamental goal of middle years, effective teaching and learning, may be achieved (Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Hill & Russell, 1999; Russell, MacKay & Jane, 2001; 2003; Schools Council, National Board of Employment, Education and Training, 1993). This, however, should be achieved within a whole school process. The Hill-Crevola Whole School Design for Improvement in Teaching and Learning (Figure 2.3) and Hill's set of strategic intentions were integral to the design. The Design is the conceptual base for developing specific programs. It has nine interdependent elements. These are currently used widely within school communities to facilitate all sectors of the community working collaboratively towards a set of common beliefs and understandings. Thus relationships are to the fore in all concepts of effective middle schooling. If schools are to "expedite the development of effective middle schooling" (Schools Council, National Board of Employment, Education and Training, 1993, p.65), by addressing the relational and learning issues highlighted above, I believe the concepts of connectedness and consequently empowerment must be fully explored by the community of learners in each school.

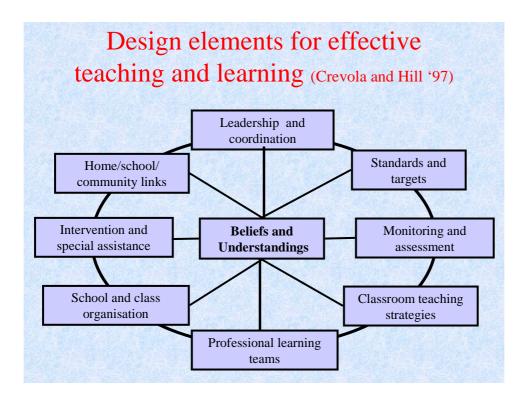


Figure 2.3 Design Elements for Effective Teaching and Learning

Middle Years Research and Development Project (MYRAD)

The Middle Years Research and Development Project (MYRAD) is a current study, commenced in 1999, that combines connectedness and student achievement and acknowledges the interrelationship between wellbeing and literacy. The initial research found that students' perceptions of and attitudes to school and learning and relationships with teachers tend to be very positive in year five and from there decline until they reach their lowest point at year nine. For example, in the area of 'Student Decision Making and Self Regulation', the students were asked the degree to which "My teachers let us have some say in what we do in class". Sixty-two percent of primary students agreed that this happened often, while only 34% of secondary students agreed (Cahill, 2001).

While conclusions can be drawn about students and schools on the basis of these data, it is difficult to allow for the fact that a primary student when faced with the statement "My teachers let us have some say in what we do in class", bases a response on the experience of few teachers, sometimes only one. A secondary student, however, has a number of teachers to consider and it is

impossible to ascertain whether they are responding to their most positive or negative experience or are delivering an 'on balance' judgment.

Teachers similarly were asked to agree or disagree with the statement, "My students are involved in classroom decision making about the curriculum". Thirty–four percent of primary teachers agreed and 24% of secondary teachers agreed (Cahill, 2001). Here, it is possible that 'curriculum' as perceived by teachers and 'what we do in class' as perceived by the students are not necessarily the same. It may also be construed that teachers understand curriculum in a much narrower sense than do students. Whatever the reason for the discrepancy, it highlights the fact that perceptions of students and teachers may differ and as teaching and learning is a partnership, the discrepancies bear investigation. This investigation is the focus of this study.

The MYRAD study also compared student and adult perceptions and found that:

generally teachers expressed much more positive views of how their students saw their school experiences than the students did themselves[f]or both primary and secondary students the greatest discrepancy was to be found in perceptions of personal interest taken by teachers in their students.

(Russell, MacKay & Jane, 2003, p. 17).

Other statements, where teachers perceptions were more positive than their students, relevant for my study are:

- o Students want to come to school most days
- o Teachers treat students with respect
- o Teachers give students some say in what is done in class
- Students find work in class is interesting
 (Russell, Mackay & Jane, 2003)

These statements are relevant as they impact directly on the students' abilities to construct meaning intellectually and socially.

The MYRAD executive summary (Russell, Mackay & Jane, 2001) and Messages from MYRAD (Russell, Mackay & Jane, 2003) state that the study found that over a period of time there was a low degree of change in the critical area of classroom teaching and learning strategies. These include strengthening both teacher-student relationships, involving students in all facets of their learning in the classroom and encouraging students to achieve in a wide range of areas. There is a considerable relationship between this finding and the areas defined by the resilience literature as eliciting and fostering resilience:

- 1. Caring relationships
- 2. High expectation messages, and
- 3. Opportunities for meaningful participation and contribution.

(Bernard, 1991; 1997; Resnick, Harris & Blum, 1993).

Thus teachers and students are understood to be in partnership in the learning process. I will now discuss the William Buckland Lighthouse Project as this project understands teaching and learning partnerships to be fundamental in the learning process.

Teaching and Learning Partnerships

Teaching and learning partnerships involving the wider community are a focus for middle years reform (Schools Council, National Board of Employment, Education and Training, 1993) as is teacher reflection (Baird & Northfield, 1992). Particularly significant, as it combines both these foci, is the William Buckland Lighthouse Project begun in 1999 and funded by the William Buckland Foundation, an independent non-profit organization (Kruse, 2000). Each of the five schools in the Lighthouse project has developed a project of its own in the context of the school and wider community. These involve authentic learning, which, in this context, means discovering what happens in the real world in some depth (Kruse, 2000) and is described as a cognitive apprenticeship to experts by Seely Brown, Collins and Duguid (2003) or learning that is situated in the experience of the learner (Borko, Mayfield, Marion, Flexer & Cumbro, 1997). Each project is the result of a response to a real need in the school and a necessary component of the approach is teacher and student reflection on practice (Putnam & Borko, 2000). In the Lighthouse Project these reflections are written and so contribute to the findings of the research. Student and teacher writing

plots the path of the project as all respond to the many facets of their educational context, in the one journal entry. The breadth of data that are being gathered shows that teachers and students do not distinguish between 'core' educational matters and those that are generally seen as peripheral. In a real setting it is often the peripheral aspects that dictate the success or failure of the project as a whole (Kruse, 2000).

Teacher/Student Relationship

The teacher/student relationship is fundamental in any teaching and learning partnership and this is to the forefront in the five Lighthouse schools projects, as they acknowledge teacher and student contributions equally and it is this partnership that drives these projects. Research confirms that effective teaching and learning cannot be a unilateral process (MindMatters, 2000; Russell, Mackay & Jane 2003; Schools Council, National Board of Employment, Education and Training, 1993). All parties must work together if success is to be achieved (Hill & Russell, 1999; Palmer, 1998). There is a need for pedagogical design for effective learning, developed in partnership by teacher and student in the context of the wider school community (MindMatters, 2000; Russell, Mackay & Jane 2003; Schools Council, National Board of Employment, Education and Training, 1993). It is problematic however, that the concept of effective learning has developed over time and is linked to the economic and social conditions of any particular era (Gough, 2002b). As many teachers' careers span a considerable time, it is understandable that some may be rather cynical about these changing understandings of what constitutes effective learning and cling to their preferred understanding or, on the other hand, they may want to be part of a whole school approach, but feel 'out of their depth' in addressing certain issues (MindMatters, 2000). Whatever the reason, many teachers find it difficult to change the way they operate in their classrooms. They know they need to improve practice to ensure learning is effective, but do not always know what that means in relation to their students and their teaching areas. This often results in confusion for students, however, as they may view learning through a different lens than do their teachers. There are multiple lenses through which learning is viewed. This is clearly demonstrated in the following study.

Through which Lens are you Looking?

A recent study in Queensland has reported student perceptions of relevant teaching and learning strategies and noted the emphasis on relationships when students describe learning situations (Queensland School Curriculum Council, 2000). These students see learning through a relational lens. The same study reports teacher requests for learning support materials. A great number of these requests centre round content and skills that they perceive it necessary for students to acquire. While they also request assistance to improve relationships with students, the overall impression is of conservatism rather than a desire to be progressive in utilising strategies to ensure more effective learning.

These middle years' teachers give the impression they are looking for a blueprint for the improvement of student outcomes similar to that of literacy education in the early years. They need support in acknowledging that what is successful in the first five years of schooling cannot be automatically transplanted into the middle years of schooling.

In the same study however, a different picture of the teachers is gained through the descriptions of their various classroom approaches. Here the teachers are very aware of their students and the progress being made on a number of levels. Conservatism does not dominate here and the picture alters accordingly.

The writers of this report also warn that researchers are very rarely teachers or students themselves, and so the lens through which the researchers see data may produce a different picture from the lens of a student or teacher (Queensland School Curriculum Council, 2000). It is clear, therefore, that each lens through which a project is viewed must be clearly identified both as an entity and in relationship to the whole.

Listening to Student and Teacher Voices

Listening to the voices of the members of school communities is paramount in any educational research project. School communities have many voices, both harmonious and competing. It has been well recognised that a successful school allows all teachers' voices to be heeded (Evans & Songer-Hudgell, 2003; Fullan 1993; 1999; Lodge & Reed, 2003; Stoll, 1999;). Student or pupil voice is linked explicitly to school improvement (Lodge & Reed, 2003; MacBeath, 2004; Mitra & Frick, 2004; Ruddock, 2004; Trafford, 2004;) and to the development of curriculum at state level in Australia (Keighley-James, 2002). When student voice is really heeded, students feel respected, understand their views make an impact, have greater control over their learning in that they are able to articulate their learning and devise methods of improvement and generally feel more positive about school. Teachers too have an enhanced opinion of and understanding of student capabilities and are more likely to change practice in accord with their increased understanding of their students. Hence they exhibit a renewed zest for teaching (Ruddock, 2004).

Unfortunately many schools understand listening to student voice as yet another area to be addressed in an already over crowded curriculum and timetable (MacBeath, 2004; Ruddock, 2004). When this is the case, listening to student voice, more likely than not becomes tokenistic as it is not treated as fundamental in the teaching and learning partnership (Dutson-Steinfeld, 2004). There is also the very real danger of listening to but not hearing student voice (Crane, 2004). There are well-documented examples of genuine consultation with students in the areas of behaviour management, the compilation of disciplinary rules and regulations, the organisation of the school, usually within the context of membership of the School Council (Trafford, 2004). While these instances are successful and commendable, there are two areas that that are problematic. One, there is a very real danger that only strident or articulate voices may be heard, thus causing many other students to feel disenfranchised (Ruddock, 2004) and two, student voice is not often heard in relation to student learning (Zyngier, 2004b). The first problem reinforces already imbalanced power relations in the schools and, while students must understand democracy does not mean every one is heard equally, schools are not justified in merely maintaining the dominant culture in this way (Crane, 2004).

The second problem tends to be overshadowed by other reasons for listening to student voice, for example, to lessen school refusal (Zyngier, 2004b) and to treat students as customers (Findlay,

Fitzgerald & Hobby, 2004). The key reason however, for listening to student voice is surely to improve student learning, by allowing the students to articulate their thoughts about their learning, so that teachers are able to plan curriculum and methods of delivery that suit their students' needs. The fact still remains that within the educational community students are the most disenfranchised group, particularly in the area of learning (Keighley-James, 2002). Recent research (Mitra & Frick, 2004) demonstrates the ability of students to speak honestly in an attempt to work with their teachers to make their school and better learning community. This has also been highlighted in a project undertaken in Melbourne (Zyngier, 2004b). The participating students, who were deemed 'at risk' were well able to articulate their learning needs. One girl commented:

If they taught in a way that people would actually want to learn it in the first place, you wouldn't have to keep going over it to keep it in people's heads (p. 2).

A boy commented: "I hate working in tight small spaces. If I had lots of space, I could let my imagination take over" (p.3). Change, therefore, may be quickly expedited by listening and truly hearing student as well as teacher voice.

Schools that engage with student voice find:

- relationships are better between students and teachers
- young people are willing to take and exercise responsibility
- discipline is improved
- feelings of safety are increased
- alienation and truancy are reduced
- inclusion and motivation are increased
- confidence and self esteem are raised
- challenge is readily accepted
- high expectations are the norm
- standards of attainment rise

(Trafford, 2004).

I believe that listening to student voice in the area of pedagogy is the area that requires additional attention and I address this in my study as it is students who are the greatest number of participants.

Learning Theory

After searching the Middle Years literature in the area of learning and teaching partnerships and student /teacher relationships, I now discuss the theories consistent with this study that underpin learning. The learning theory of constructivism has been a dominant component of educational thought and research during the last decades of the twentieth century and social constructivism is the forerunner of enactivism, the learning theory I think is best suited to the ecological paradigm. In view of this, I limit my discussion of constructivism to social constructivism. I briefly review both social constructivism and enactivism.

Social Constructivism

Bruning, Schraw and Ronning (1999), define constructivism as a psychological leaning which "generally emphasizes the learner's contribution to meaning and learning through both individual and social activity... In the constructivist view, learners arrive at meaning by selecting information and constructing what they know." (p. 215). Davis, Sumara & Luce-Kapler (2000) understand constructivist learning "as a process of ...adapting one's actions to ever changing circumstances" (p. 65). Social constructivist approaches to learning such as these draw heavily on the work of Lev Vygotsky, and his contribution is discussed here.

Lev Vygotsky

Born in 1896, Vygotsky was a Russian pioneer of developmental psychology. He pursued an active career as a psychologist for somewhere between 10 and 17 years, dying at the age of 37. In that comparatively short career, his prolific writings challenged the then current theories that addressed the relationship between learning and development in children. As he wrote in post revolutionary Russia, his work reflected Marxist theory and the problems facing education in this new societal structure. It is not surprising then, that he placed so much emphasis on the social aspect of education.

Zone of Proximal Development

Vygotsky describes the Zone of Proximal Development (ZPD) as the difference between what a learner can accomplish unaided and what he/she can do with help and also concludes that interaction with other adults and peers contribute significantly to a child's intellectual development. The ZPD underpins current social constructivist approaches and Bruning, Schraw and Ronning (1999) define it as "the difference between the difficulty level of a problem a child can cope with independently and the level that can be accomplished with help" (p. 218). They describe it as the blend of psychology and sociology that leads to cognitive development according to this social constructivist theory. Here the interpretation of the individual and the influence of his/her environment collaborate to construct meaning. As a result truth is not objective and absolute, but subjective and relative according to cultural beliefs and tools of the community of the learner. Mental interactions construct meaning and allow the learner to be apart of this. Human cognition is essentially social and situated, in that is occurs in context. Engagement occurs, not merely as individuals, but within concrete social and material situations (Bronfenbrenner, 1993; Kirschner & Whitson, 1997). This calls for reconciliation of the social and cognitive aspects of learning (Cornford, 1999).

Vygotsky conducted experiments to prove to his satisfaction, that a child who exhibited independent learning ability below his/her standardised age ability, could be led to learn more difficult tasks/concepts if assisted by a teacher or more capable peers (Vygotsksy, 1978). He also found that, after defining the Zone of Proximal Development for any child, that child soon (given the same supportive environment) began to exhibit independent learning behaviours at that level. In doing so Vygotsky emphasised the importance of imitation as part of the process of learning. This implies naturally, that there is another person to imitate, and so learning is immediately understood as social, as this is the context in which the child constructs meaning. For Vygotsky, "human learning presupposes a specific social nature and a process by which children grow into the intellectual life around them" (1978, p. 88). Thus the intellectual and social are inextricable entwined, and therefore, "[a]ll the higher functions originate as actual relations between human individuals" (1978, p. 57). Even though he has been criticised, as much of his work was with special needs children and therefore seen to be relevant to a limited group (Glassman, 2002), Vygotsky's own further description of the Zone of Proximal Development as encompassing "those

functions that have not yet matured, functions that will mature tomorrow, but are currently in an embryonic state" (1978, p. 88) is able to be widely applied in practice. Vygotsky was insistent that "every function in the child's cultural development appears twice: first, on the social level and later on the individual level; first between people (interpsychological) and then inside the child (intrapsychological)" (1978, p. 57).

Neo- Vygotskian Approaches

It is interesting to note the development of neo-Vygotskian approaches as many educationalists rely on translations of translations, and as Smagorinsky notes, "that most readings are 'selective' and reveal more about the appropriators than about Vygotsky's psychological theories" (Smagorinsky, 1995, p. 193). This is somewhat evident in educational communiqués, where current documents outlining Vygotskian principles in the classroom and the theory upon which the notion of 'scaffolding' is based. Scaffolding is an instructional technique by which the teacher assists a child with a learning strategy or task and then gradually enables the child to take responsibility (Clay & Cazden, 1992). They state that:

according to theories developed by Lev Vygotsky, problem solving

and other skills can be placed into three categories:

- Those performed independently by the student
- Those that cannot be performed, even with help; and
- Those that fall between the two extremes, tasks that can be performed with the help of others.
 (Dodge, 1998, p. 2)

Vygotsky (1978) in describing his Zone of Proximal Development, does so only in terms of the first and third points as they are the basis for the theory. He does not refer to the second point at all. He writes: "The state of a child's mental development can be determined only by clarifying its two levels: the actual developmental level and the zone of proximal development" (Vygotsky, 1978, p. 87). This is consistent with his affirmation of Piaget for describing his developmental theory in terms of what the child has rather than what he or she lacks (Vygotsky 1975). Scaffolding, by its very nature and according to current classroom strategies bearing that title, creates a pathway

towards achievement and does not focus on that which is unattainable. The fact that current educationalists deem the second point worthy of inclusion may reveal more of their orientation by their description of the deficit, than that of Vygotsky. If this is so, we run the risk of not being totally true to Vygotskian theory. This differing emphasis may be sufficient to skew the focus and therefore be counter-productive in our efforts to promote learning.

The Elastic and Unbounded Mind

In neo-Vygotskian terms Smagorinsky understands that the mind is elastic and unbounded. This elasticity means that people develop according to cultural values and these are handed down from generation to generation. Even values that are considered universal alter their acceptable expression from culture to culture (Smagorinsky, 1995). The unbounded nature of the mind refers to its limitless potential for intellectual growth and the limitless range of tools available for mediation. "The zone is the range of ability and its upper reaches are continually in the state of evolution" (Smagorinsky, 1995, p. 196).

The Vygotskian mind, according to Wertsch "extends beyond the skin" (Wertsch, 1991, p. 14) and may become one with the tools. Smagorinsky (1995) uses the examples of computers and paint brushes. These tools, of course, only have meaning within a cultural context and so their meaning will not be constant across cultures. Thus the elastic and unbounded mind cannot succumb to modern empirical research as it is impossible to develop an instrument that encompasses all facets and contexts of its operation (Smagorinsky, 1995). Smagorinsky argues that telos (the end point of development) must be seen to be elastic and not limited to language development only. He also concludes that research findings:

are only valid when the learner is consonant with and can appropriate the mediational means of the research as useful cultural tools, and when the researcher takes into account the learner's appropriation of the research tools when finding evidence for a claim.

(Smagorinsky, 1995, p. 204)

Implications for Learning

A comprehensive understanding of learner consonance with cultural tools and the Zone of Proximal Development, has wide implications for assessment. Assessment is derived from the Latin *assidere* meaning 'to sit with' (Earl, 2003) and is part of the learning process (Victorian Curriculum & Assessment Authority, 2005). This concurs with Vygotsky's Zone of Proximal Development, as the adult or more capable peer provides feedback to the child to improve the child's ability to perform the set task. If this understanding is recognised by educationalists as relevant and important, then assessment must take on a very different focus. Authentic curriculum, which situates learning in the experience of the learner (Borko, Mayfield, Marion, Flexer & Cumbro, 1997; Starratt, 2004), requires authentic assessment practices. Learning and assessment are not separate entities. Indeed assessment is learning (Earl, 2003) and should only exist to enable learning (Baker, 2003). If this is acknowledged in practice, the learner is assessed on the basis of performance rather than a test (Murdoch & Wilson, 2004).

Currently there are many learning situations where so often the only valued form of assessment is a test and its resultant score. This is a mechanistic approach. In this form of assessment there is little or no attention paid to the consonance between learner and tools or the Zone of Proximal Development, and hence little or no attention paid to the learner's ability to construct meaning. It is also interesting to note that Vygotsky (1978) criticised the research of his time for ignoring this premise, but, not in as wide a context as that postulated by Smagorinsky (1995). Margaret Donaldson (1978) was one researcher who concurred with Vygotsky's understanding that the child's ability to solve practical tasks develops as the child "talks him or herself through" actions and because it is "directly related to the child's practical dealings with the real world" (Vygotsky, 1975, p. 22). Donaldson understood thinking to be contextualised and deplored the decontextualisation of learning in British schools of the day. Donaldson stressed learning is enabled when contextualisation involving interpersonal relationships allows tasks to be presented in a way that locates them in the real world of the child. Tharp (2002), demonstrating the contemporary relevance of contextualisation, designates eight indicators in relation to home, community norms and knowledge, community based activities, family participation and student preference.

If schools were to really take Vygotsky's Zone of Proximal Development seriously, students who achieve poorly on an 'ability' test should also be assessed on their ability to achieve with assistance from adults or more capable peers (Moll & Greenberg, 1990). This means that a fixed measure of ability is irrelevant as, in isolation, it takes no account of the student's potential as indicated by the level of assisted achievement. If this is true, then it must also follow that the range of tools accessed by students must be available and acknowledged in the assessment procedure. Therefore assessment must be in authentic settings as this is where the learner is best able to make meaning by using available cultural tools.

A Balanced Approach

There needs to be a balance in the learning process, however, as learning occurs in many ways. This can be expressed using Sfard's (1998) notion of there being two major metaphors of learning, the acquisition metaphor and the participation metaphor. To embrace one, to the total exclusion of the other, may be unwise. Current research places emphasis on the importance of the social aspect of learning in the middle years of schooling. It recommends the participation metaphor over the acquisition metaphor. It remains to be seen by subsequent generations whether this is built on a sound understanding of human cognitive development as expounded by Vygotsky or is an over reaction to the dominance of the acquisition metaphor and/or driven by an over emphasis on the socio-economic goals of post-modern western society.

In a constructivist model the role of the teacher is not predominantly a 'sage on the stage', but a 'guide on the side' (Betts, 1997) and therefore the learner is usually the initiator of learning experiences. The teacher, however does not abdicate all responsibility in this scenario as both teacher and learner take part in the learning experiences. In a fruitful partnership both co-initiate, and are thus engaged together in the learning process. Teachers scaffold experiences that lead learners to accomplish more than they are able to, unaided. As students and teachers involve themselves in this structure, interpreting knowledge and understandings, each is called to structure consciousness (Vygotsky, 1978). Experiences involve the wider community because, if development is socially mediated, then contact with society is essential for development, and learning cannot be contaminated by other human beings, rather they provide the mediational signs and tools for cognitive development according to the culture in which the individual abides

(Smagorinsky, 1995). This understanding reflects Bronfenbrenner's ecological model of human development (Bronfenbrenner, 1993).

Achievable Challenge

Vygotsky's approach implies there is a challenge involved in any learning experience. A skilful teacher presents challenges that are achievable, thus encouraging learners by having them experience success. A report from the School of Engineering, Burnie College of TAFE. Tasmania (1989) describes the use of projects as a teaching strategy. The report delineates certain relevant guidelines for the development of projects that render them achievable challenges. It states that the product should be tangible, relevant and capture the imagination of the student, by enabling creativity. The project should engender excitement and fun and have an "an identifiable end point, achievable within an appropriate timeframe" (p. 2). If the project is lengthy it is advisable to break it into smaller, more manageable tasks. These guidelines contain the notion of scaffolding, situating it in relevance and creativity and assisting teacher and student to work together in a participatory manner. It is the student and teacher thus engaged in the learning process that enables the student to view the task or project as an achievable challenge.

We Grow in the Shade of Each Other

Vygotsky (1978) certainly gives us a way forward in the quest for the successful transformation of traditional approaches to learning in the middle years of schooling. His emphasis on the cultural aspects of learning and the consequential immersion of the individual in the richness of his/her environment 'fleshes out' the concept that we grow in the shade of each other. As noted at the beginning of this work, anyone who gardens needs no convincing that this is botanically true. Plants that fail to reach maturity when they stand alone, may succeed amazingly well when placed in the shade of another plant and then can thrive alone if the other plant is removed. Vygotsky translates this image as he describes human psychological/cognitive development. Learning precedes development and that learning comes from the environment as the learner is assisted by those around him/her to make meaning of all aspects of life. Gradually the child/young adult is able to think and act as a mature member of a community. Rather than ignoring individuality, he places that individuality in context.

If middle years' educators adopt this theory, learning will be authentic, relevant and rigorous as it will be situated in real life. Learning activities will be collaborative as students can achieve much more when assisted by others. Assessment will take into account tools available to the learner and the Zone of Proximal Development on both its levels and thus encourage students to further learning as they achieve success beyond their individual capabilities. Certainly, the implications surrounding the Zone of Proximal Development are such that, this theory could provide the basis for the development of middle years curriculum as advocated in all the research conducted since 1993. In this way learning in the middle years could focus on "the "buds" and "flowers" of development rather than (only on) the "fruits" of development" (Vygotsky, 1978, p. 86).

Cognitive and Affective Development

Constructivism recognises and acknowledges cognitive and affective development as necessary aspects of learning, as meaning is constructed in the context of both. Cognitive and affective domains have been universally acknowledged in curriculum design since work Bloom's work in 1956 and Krathwohl, Bloom& Masis' work in 1964, and while there have been many deviations from this first systematisation, cognitive and affective goals remain fundamental in any value based educative process. The relevance of the affective is that it involves the process of internalisation, which sees the person progressing from a general awareness of an issue to a point where he or she is compelled to act (Seels & Glasgow, 1990). Clarifying values was a perspective explicit in the Victorian Studies of Society and the Environment (Victorian Board of Studies, 1999). Krathwohl, Bloom, and Masis, (1964) developed a 'Taxonomy of Affective Domain' delineating stages in a person's adoption of a value. These stages are:

- 1. Receiving
- 2. Responding
- 3. Valuing
- 4. Organization
- 5. Characterisation by value or value set.

This taxonomy may be helpful in assisting teachers to evaluate their pedagogical design and to ascertain whether it is challenging students to go beyond the tolerance of level one, through

volunteering, supporting and discussion of the intermediate levels to the resolving of level five. It may also be problematic as it does not reflect the interconnectedness of ecosystems inherent in an ecological paradigm (Davis, Sumara & Luce-Kapler 2000), although to be fair these taxonomies of cognition and affect were developed some decades before ecological notions impacted on education. It may assist teachers in understanding the various levels of commitment they would like their students to achieve, but it is only helpful if they understand the attainment of any level as an extremely complex process, shown in part by the finer detailed sub-stages postulated by the authors and their acknowledged tentativeness of just how to capture the transitions from stage to stage. The danger is that teachers understand a taxonomy as a lock-step linear process. If this is the understanding then the use of a taxonomy is a hindrance rather than a help in teaching for connectedness and empowerment. The De Souza (2003) model, which understands the cognitive and affective as intersecting circles, better reflects an ecological model. If used in conjunction with the taxonomy, it may assist the understanding of the complexity of development in these two areas.

There is, however, another theory of learning which does not separate the cognitive and the affective, indeed seeks to avoid such a distinction altogether, but understands learning holistically. This is enactivism. The theory of enactivism is useful for this thesis as an ecosystem and a learning situation exhibit similar characteristics.

Enactivism

Education is the process by which individuals construct meaning so that they, as learners, "might become fully alive human beings who contribute to a society of the common good" (italics in original) (Groome, 1998, p. 72). The emerging theory of enactivism which understands cognitive and affective development as part of the transformation of an ecosystem, encapsulates this concept of education and so provides an apt and relevant base for learning which is connected and empowers.

Enactivism is a theory of cognition consistent with an ecological paradigm. It is grounded in an analysis of living systems and cognition (Whittaker, 1995) and emanates from a world view as described by Macy (1983). It stems from the premise that "cognition is a biological phenomenon and can only be understood as such" (Maturana & Varela, 1980, p. 7). Maturana and Varela

describe knowing as "effective action, that is, operating effectively in the domain of existence of living beings" (Maturana & Varela, 1992, p. 29). They maintain that "cognition is effective action, an action that will enable a living being to continue its existence in a definite environment as it brings forth its world" (p. 29-30). Cognition is not "a representation of the world "out there," but rather an ongoing bringing forth of a world through the process of living itself" (p. 11). This is the process of transformation (Davis, Sumara & Luce-Kapler 2000). Thus knowledge is defined as effective behaviour in a given context.

Self organisation or autopoietic theory, develops this understanding in the context of a system in which an organism engages with its environment (Whitaker, 1995). The identity of an organism is developed within the system. Systems that continually recreate themselves are defined as autopoietic, which involves acting to adjust to local conditions (Reid, 1998). This implies the interrelatedness of components of any system. Cognition is therefore understood by Maturana and Varela (1980) as inter-activity as "living systems are cognitive systems and living as a process is a process of cognition" (p. 13). The world we bring forth is done so in coexistence with others as "we are continually immersed in this network of interactions. Effective action leads to effective action: it is the cognitive circle that characterizes our becoming" (Maturans & Varela, 1992, p. 241). Effective action, or cognition is fundamental to existence.

Enactivism is an emerging educational theory. Davis and Sumara (1997) developed the theory, reacting negatively to "the limitations of a mechanically based model of a complex human mind" (p.108) and to the consequent understanding of knowledge as something external that must be acquired. Learning occurs in context in all domains of existence and in an enactivist understanding, both the identity of the learner and the nature of the context change as the learning occurs, because "[e]verything is inextricably entwined" (p. 111). Thus "cognition is understood as embodied" (Davis, Sumara & Luce-Kapler 2000, p. 66) as learning is holistic. Learning for Davis, Sumara and Luce-Kapler is "participation in the world, a co-evolution of knower and known that transforms both' (p. 64).

Begg (2002) understands enactivism as "a recent development from constructivism" (p. 51). The development according to Begg, is in the understanding of learning as a complex emergent process taking place within a learning system that is dynamic and robust in adapting to changing

circumstances. Davis, Sumara and Luce-Kapler use the term "co-emergence" (p. 119) to describe the simultaneous development of individual and collective identities as the learner is part of the context rather than within it. This is closely aligned to Fullan's (1999) understanding of a learning organisation "continuously acquiring and using new and better knowledge" (p. 15) as opposed to the acquisition of same. Consequently, the "link between cause and effect is very difficult to trace" (Fullan, 1999, p. 4) as this is acknowledged to be non linear. Davis, Sumara & Luce-Kapler's (2000) description of learning as complex rather than complicated, means it is consequently, somewhat messy, "less like General Motors and more like a town meeting" (Palmer, 1998, p. 101). There is a close connection here to the Vygotsky's (1978) theory of the Zone of Proximal Development, which understands learning as a social phenomenon and also to Bronfenbrenner's (1993) understanding of the various contexts of human development. Enactivism, however, develops the concept of the complexity of learning beyond the social to the ecosystem, where the entire system is affected by the cognitive development of each individual (Davis & Sumara, 1997). Individual and collective identity is transformed and it is a viable system that values "the uniqueness of the individual" (Davis, Sumara & Luce-Kapler 2000, p. 176). Cognition, thus, is broadened in its definition, to include, not only rational thinking but all forms of learning. This complexity has implications for teachers as learner growth must be the basis from which to operate (Begg, 2002). The teacher role then becomes one of co-learner and facilitator. This concept is also integral in the concept of lifelong learning (Wain, 2004). Unfortunately the tendency for the western thinking to involve dualities blocks the pathway to the holistic understanding of learning accessible through the theory of enactivism.

Dualistic and Holistic Thinking in our Educative Process

To encourage the full human development of each person it is necessary to "engage the whole person as an active participant" (Groome, 1998, p. 103) and understand the need to commit to the "'common good' as integral with the personal good of their learners" (italics in original) (p. 192). Our western patterns of thinking, inherited from Greek Aristotelian philosophy, which understood the intellect as in no way connected to the body, means that we have the strong tendency to value rationality above other (sensual) ways of knowing (Capra, 2003; Tarnas, 1996) and the external above the internal (Wilber, 1996). This thinking is consistent with a mechanistic world-view and means that knowledge, the learner and the world are understood as opposing forces

(Davis, Sumara & Luce-Kapler 2000). Thinking in dualities also means we categorise according to perceived opposites and find paradoxical thinking difficult, as we cannot accept perceived opposites together. Even in the articulation of the understanding of constructivism, which is built on the premise that all of our understandings are situated in experience, action, and interaction, we identify individual/social and relativist/objectivist (Begg, 2000). Dualistic thinking so often translates to every domain of our existence, as we find ourselves repeatedly making choices on an either/or basis, thus ignoring the non linear nature of the operations as understood in complexity theory (Stacey, 1996). Often the elements of choice are not mutually exclusive and can and do co-exist harmoniously, reaping the benefits of this *modus operandi*. In many ways schools are endeavouring to engage the whole person and to understand the good of the individual and the common good as intertwined rather than mutually exclusive. They are, however, hampered by dualistic thinking, either chosen or imposed. This thinking thwarts the promotion of holistic approaches to education as it assumes the relationship between teaching and learning is direct, causal and linear (Petrosky & Delandshere, 2004). This thinking has been the most powerful influence in education in the twentieth century (Darling-Hammond (1997). An exploration of enactivism would highlight this dichotomy and enable a re-thinking of the development of learning experiences that allows educators to develop practices that are theoretically consistent, and acknowledge learning as a complex web of interaction, where knowledge is understood as "contingent, contextual and evolving; never absolute, universal or fixed" (Davis & Sumara, 2000, p. 78). Freire (1973) described the antipathy of empowering learning as a monologue. Davis and Sumara (1997) use the complement, conversation, when describing an enactivist theory of cognition. Davis and Sumara articulate four characteristics of conversational learning: The conversation:

- 1. leads the participants rather than they lead it
- 2. unfolds within the reciprocal, co-determined actions of the people involved
- 3. is a process of opening ourselves to others, at the same time as opening the possibility of affecting our understandings of the world
- facilitates a movement towards consensus among persons whose thinking/acting can no longer be considered in strictly subjective terms
 (p. 110).

In the following section I discuss four frameworks that may be used to enable learning in an enactivist manner. Each is understood as a framework from which to develop social constructivist learning experiences. Each has a theoretical as well as practical component, but these two aspects exist in differing proportions in each framework.

Frameworks enabling learning

There are recommended and commendable frameworks for constructing meaningful, conversational learning experiences, particularly in the areas of health, science and studies of society and the environment, renamed humanities, (Victorian Curriculum and Assessment Authority, 2005) that are designed according to the principles of constructivism and thus promote learning, by understanding "instruction and socialization as two interconnected parts" (Wesselingh, 2002, p. 21). They may well be further enhanced in implementation through the adoption of an enactivist approach as this promotes a deep understanding of the conversational aspects already outlined. I shall discuss four such frameworks in which participation and action to solve problems are integral components and so promote learning in a context of connectedness and empowerment:

- 1. Multiple Intelligences
- 2. MindMatters
- 3. The Inquiry Process
- 4. Civics and Citizenship Education

1. Multiple Intelligences

The work of Howard Gardner, popularized after 1983, develops a social constructivist understanding of learning. His work is particularly significant in contemporary educational circles. Gardner's keen interest in the arts and developmental psychology led him at first to explore one in the light of the other. He first published 'The Arts and Human Development' in 1973 and stated that, unlike Vygotsky, the work grew out of the clash between his own life experiences and Piaget's theory. Gardner says, that for him (Piaget), the developed individual was the developed scientist. As Gardner had once entertained ideas of being a serious pianist he wished to challenge this concept.

In his study of the artistic development of people Gardner states that there were instances where the thought of the child anticipated the thought of the mature artist. He therefore challenges the consecutive nature of Piaget's stages but acknowledges, however, that Piaget noted "often the younger child appears more gifted than the older in drawing" (Gardner, 1973, p.18). Gardner respects Piaget and acknowledges that Piaget was only interested in the development of logic and that he (Piaget) realized this himself as he acknowledged the creative imagination was a magnificent subject which remained to be investigated (Gardner, 1973).

Gardner (1973) describes development as taking place within three systems: making, perceiving and feeling, all of which have independent existence at birth. Making and perceiving are previously well-established psychological concepts. Gardner adds feeling, although he notes that Piaget comes close to dealing with a 'feeling' system when he introduces play, dreams and imitation up to the age of five years. Gardner also describes the development of the artist, performer and audience in everyone. He differs from Piaget in that he says that artistic development, after the age of seven results from a gradual build-up and interaction between feelings and acts, rather than a complete reconstruction of world-view as in Piagetian terms. He also sees Piaget's work and his own as complementary, so there is some agreement between himself and Piaget. It is after the age of six, the height of Piaget's symbolic period, that divergence occurs. Gardner sees the ages of 5-7 as extremely important as it is then that the child is able to incorporate formal aspects of the arts into his/her own art-works. Thus he sees development as a deepening process involving the same principles rather than involving a total reorganization of systems. He also notes that Piaget's operational thought is not vital to artistic development (Gardner, 1973).

The Theory

In 1983 Gardner, published his best known work 'Frames of Mind', in which he promulgated his Multiple Intelligence Theory and so revolutionized learning theory and teaching practice. This revolution occurred as Gardner had access to the media through Project Zero and so was able to widely publicise his ideas. Here, he claims that intelligence is not a single measurable competence. Gardner maintains that everyone has eight intelligences to facilitate learning:

- Linguistic
- Logical-mathematical
- Spatial
- Body-Kinaesthetic
- Musical
- Interpersonal
- Intrapersonal
- Naturalist

The first seven intelligences were named in 'Frames of Mind'. An eighth, the Naturalist, was added later (Gardner, 1999).

While it is postulated that all of these intelligences are discrete entities, none is developed in isolation and most pursuits require the use of a number of intelligences. For example, a dancer must have a developed body-kinaesthetic, musical and spatial intelligences. A choreographer must add the intrapersonal and interpersonal intelligences to these in order to be successful. If the choreographer teaches then the linguistic and logical-mathematical intelligences assist in the efficiency of the process. An analysis of the use of various intelligences in the dance industry is discussed in depth by Donald Blumenthol-Jones (2004). Gardner claims that, while we have the potential to develop intelligence in eight domains, most of us remain, in most domains, at the level of a five-year-old thinker (Gardner, 1973, p. xii).

Multiple Intelligence theory is bio-physical, in that Gardner only recognises an 'intelligence' if it is has the following criteria (Gardner, 1999, pp. 36-41):

- The potential of isolation by brain damage
- An evolutionary history and evolutionary plausibility
- A definable set of core operations
- Susceptibility to encoding in a symbol system
- A distinct developmental history, along with a definable set of "end-state" performances
- The existence of idiot savants, prodigies and other exceptional people
- Support from experimental psychological tasks
- Support from psychometric findings.

Gardner very much stresses that each intelligence should be used to represent concepts that have been internalised by the learner. He acknowledges that each intelligence is a way to develop desired capabilities, but stresses that they are valuable tools for approaching a concept, subject matter, or discipline in a variety of ways. They "can be activated in a cultural setting to solve problems or create products that are of value in a culture" (Gardner 1999, p. 34). This theory expanded the popular concept of intelligence as previously the one measurable, largely static, form of intelligence known as general intelligence, which has dominated educational research and practice in the United States of America and elsewhere.

Gardner (1999) acknowledges that different cultures both today and in history, espouse different values and that, traditionally, only the linguistic and logical-mathematical have been valued by schools. He also is appalled at what he regards as the mis-application of his theory within some educational settings in Australia. Convinced that schools generally try to cover too much subject matter, superficially, he says that his theory, if implemented, allows students to come to a greater depth of understanding, as well as portraying their understandings and difficulties in a way that is comfortable for them. For Gardner Multiple Intelligence Theory is:

a ringing endorsement of an ensemble of propositions:

we are not all the same: we do not all have the same kinds of minds:

education works most effectively for most individuals if these
differences in mentation and strengths are taken into account
rather than denied or ignored (italics in original) (Gardner, 1999, p. 91).

In addition, Gardner (1999) states that he wishes his theory to stimulate schools to discuss community values, which he understands as the fundamental purpose of education, pedagogy and educational outcomes.

Thus the use of the framework provided by Mutliple Intelligence Theory facilitates the development of enabling learning experiences involving participation and action to solve problems and facilitates learning in all domains. In this respect an enactivist approach to learning is reflected. The theory also encourages the conversation suggested by Davis and Sumara (1997) as Gardner, while addressing learning by an individual, does so in a cultural/community context. The problem

solving and creation that Gardner understands as the purpose for using intelligences is cultural and therefore involves group identity. The use of multiple intelligences within an enactivist approach to learning will ensure the promotion of the deep understanding that Gardner portrays as the desired result of the implementation of his theory.

Anecdotally, there is acceptance of the fact that students in Australian schools are part of a society that receives eighty-five percent of information visually. This too, is relevant to learning as students move outside the classroom in a world of family life, work and recreational activity that values the use of multiple intelligences. Therefore it is difficult for them to find learning experiences interesting or relevant if this framework is not used. It is productive to allow students to demonstrate their learning in a variety of ways, in a number of settings and the use of the framework provided by Multiple Intelligence Theory is one way to achieve this goal. Howard Gardner (1999) also delineates a number of strategies to use with large classes of students. These include gathering and sharing data with other teachers and the students themselves, self assessment and peer feedback, flexible assignation of teachers, having older students work with younger ones and having an effective transmission system within the school. These strategies readily translate to an ecological model of learning.

Critique of Multiple Intelligence Theory

The critique of Howard Gardner's work by Kincheloe (2004) writing from an empowerment perspective is relevant for this research. Kincheloe maintains that, while he welcomes the diversity that the theory brings to education, Gardner is victim of the social, political and cultural forces which bore his theory and that the "reduction of the human life processes, of the ontological realm of being to biology is disturbing" (Kincheloe, 2004, p. 150). While acknowledging that better pedagogical and assessment practices are a result of the application of Multiple Intelligence Theory, Nolan (2004) maintains that the theory does not address the problems faced by people of colour but favours the dominant white culture. The possibility of focusing on one intelligence only, to the exclusion of the development of the whole person is seen to be problematic (Progler, 2004) as is the possibility of equating an adequate understating of mathematics with an adequate understanding of the logical-mathematical intelligence (Appelbaum, 2004).

Progler's (2004) and Appelbaum's (2004) concern that the theory may favour the dominant white culture, I find relevant, as this is the perennial problem articulated by Freire (1972; 1973) and Shor (1992) when speaking of empowering pedagogy. There is the need, however, to be very aware of the two levels of discussion in these works. One is to value the broadening of the concept of intelligence that has resulted from Gardner's work and the consequent development of alternative pedagogical and assessment strategies and the second is to be aware of the distinct possibility of merely maintaining the *status quo* of any dominant culture. Maintaining the status quo of the dominant culture is occurring as well, however by those discouraging the use of multiple intelligences for other reasons. Hattie (2005) describes multiple intelligences as a "pop-educ claim" (p. 13-14), and advocates the design of learning experiences where the success criteria while broad, are only assessed in one mode, a written piece (Hattie, 2005). This, in itself, is maintaining the dominant culture within society, a culture that only values measurement of success in very narrow terms, one of which is mastery of the written word.

While I acknowledge the potential problem of maintaining the dominant white culture in the manner described by Progler (2004) and Appelbaum (2004), I believe Multiple Intelligence Theory provides a sound basis from which classroom teachers may develop empowering pedagogy. There are many students in our classrooms, who are marginalized for a range of reasons. Through the use of Multiple Intelligence Theory it is possible to render the classroom more inclusive by allowing all students to demonstrate their learning in a variety of ways. An insightful teacher will then encourage students to express their learning in a product of value to their particular culture. All are consequently able to celebrate the diversity and the cross cultural understanding that this engenders. It is the teacher's application of the theory that will render the situation empowering or otherwise. If the teacher is culturally inclusive then teachers and students can make a difference and break the cycle of inculcation of eurocentric and androcentric virtues and ethics, decried by Weil (2004).

2. MindMatters

The second of the four frameworks is that provided by MindMatters. The recent study Mind Matters (2000) provides a significant framework for learning in an enactivist model as it builds explicitly on the resilience literature and hence emanates from an ecological and empowering paradigm. The study works on the premise that relevant teaching and learning experiences are

integral to an effective approach to mental health (both teaching for and teaching about). The project Mindmatters developed a framework designed for schools, which provides materials for increased understanding of mental health for teacher and student, and places connectedness in the context of teaching and learning. Here connectedness, curriculum, community and teaching and learning are all inextricably entwined. The framework is underpinned by the goals articulated in the resilience literature, that is increased understanding of youth, building positive relationships with them by giving practical support and allowing them to participate as individuals in society (Bernard, 1991; 1997; Fuller, 1998; Resnick, Harris & Blum, 1993). The opportunity is there, in a conversation, in enactivist terms, to open ourselves to others and at the same time affect our understandings of the world in which we live (Davis & Sumara, 1997)

Health and Education

The educational sector has come to recognise that health is an integral part of education and the two are inseparable. This is accepted to the degree that MindMatters requiring the cooperation of health and educational experts, deputes mental health to be a key focus for secondary schools and cites health as the 'core business' of teachers (MindMatters, 2000, p. 3). The report attributes the positive reception of the classroom materials to the "eagerness of educators to contribute to the mental health and well being of young people" (MindMatters, 2001, p. 2). Connectedness to family, friends and school as defined in the resilience literature is taken further by the assertion that, for a student 'at risk' it is sufficient to have a relationship with one caring adult in order to make a difference (Bernard, 1997; MindMatters, 2001). Quite often this caring adult is a teacher (Cahill, 2000). Thus the framework, presented in MindMatters, enables learning by encouraging students to participate and take action to solve problems and is an empowering pedagogy in the vein of that recommended by Freire (1972), Shor (1992) and Groome (1998) and also promotes learning in the enactivist manner as described by Davis and Sumara (1997).

3. The Inquiry Approach

The third framework is The Inquiry Approach. The Inquiry Approach (Murdoch & Hornsby, 1997) is a framework encouraged by the studies of society and environment course advice levels one to four, (Department of Education, Employment & Training, 2000a). As the name implies,

students and teachers are encouraged to inquire, using their natural curiosity (Marsh, 2001). The use of this framework moves the focus from the "individual child to the contextualized, social child, whose competencies are inter-woven with the competencies of others" (Lyle, 2000, p. 51). This requires learning to be student-centred (Murdoch& Wilson, 2004) by the posing of a problem, which Shor (1992) says involves probing an issue to reveal its personal or social dimensions, and the attempt to solve it. Teachers are very much part of the student learning process, so student-centred learning when described in the Inquiry Approach clearly delineates the partnership dimension involving both teacher and student. Teachers who are used to a traditional mode of teaching may find the process difficult (Hawley & Duffy, 1998). As well as problem based learning, the Inquiry Approach involves critical thinking, both convergent and divergent. Marsh (2001) says the Inquiry Approach involves the sustained examination of a few topics, where students ask challenging questions and where they generate original and unconventional ideas. The Murdoch/Hornsby framework has the following stages:

- Tuning in and preparing to find out,
- Finding out,
- Sorting out,
- Going further,
- Reflecting and making conclusions,
- Taking Action.

Murdoch and Hornsby (1997) and Murdoch (1998) encourage teachers to inquire into an area that is part of the 'big picture' of life. A host key learning area is chosen from either, health, science or studies of society and environment, the latter renamed humanities (Victorian Curriculum and Assessment Authority 2005). Learning then becomes situated as "the problem posing teacher situates learning in the themes, knowledge, cultures, conditions and idioms of students" (Shor, 1992, p. 44). Learning in this mode is authentic as it "is connected to something meaningful outside school" and is "such that some people in the community will be genuinely interested in conversing with the student about whatever conclusions and proposals might have issued from the study" (Starratt, 2004, p. 57). Teacher and student relationships are improved and the ownership of the learning that is inherent in this model means that students are led towards the critical consciousness required in order that they may take personal and social action. An enactivist approach to learning is

consistent with the approach required to implement this framework as it reinforces the understanding that the approach allows the conversation to lead the participants and "to unfold within the reciprocal, co-determined actions of the persons involved" (Davis & Sumara, 1997, p. 110) as middle years students work collaboratively to make their world a better place.

This concurs with the model of research advocated by Shor (1992) as teacher and student undertake ongoing research and reflection together. It is an integrated model, a response to the fragmentation of learning, combining general and specific content, focusing on learner values and thinking processes and reflecting the complexity of knowledge and its application in a range of contexts (Fogarty & Stoehr, 1991; Starratt, 2004). Relevance is assured as neither students nor teachers live compartmentalised lives, but rather negotiate each day in a myriad of ways that reflect the context of their existence and their ability to learn in this connected environment. Thus they operate in the context of all systems described by Bronfenbrenner (1993), sharing in an holistic way, a concept widely valued (Fullan, 2001; Otero, 1999; Murdoch, 1998; Shor, 1992). Students become involved and therefore, empowered to take personal and social action. The actions may not be as globally significant as those described by Freire (1972), but they are nevertheless part of the same process of empowering students to take control of their lives and connecting them to society so that they make a difference by inquiring and taking action together. Thus, effective action, that is cognition in an enactivist model, is integral to the Murdoch and Hornsby (1997) Inquiry Approach.

4. Civics and Citizenship Education

The fourth and final framework is that provided by Civics and Citizenship education. The re writing of the Victorian Curriculum Standards Frameworks (Department of Education, Employment & Training, 1999), imbedded civics and citizenship education (CCE) within studies of society and the environment and this has now become a dedicated domain, including the dimension, 'Community engagement', in the Victorian Essential Learning Standards (Victorian Curriculum and Assessment Authority, 2005). The Australian Commonwealth Government issued materials to schools, which provide a framework to enable learning in this area. The type of citizenship education promoted, is one involving active participation, as students learn through doing rather than through formal instruction (Commonwealth Government Civic Expert Group, 1994;

Holdsworth, 2003). These documents assert that problem solving is essential (Shor, 1992) and teachers engaging in effective education in this area structure their timetables to allow students to participate in long-term projects based in their community. These vary and include "practices that demonstrate social commitment, care for the environment, fund raising, civic competencies, practices of critical consumerism, the developing or building of one's own opinion, practices of representation" (Wesselingh, 2002, p. 29). This prepares students to "cope with the plurality, differences and conflicts that are an inevitable part of democracy" (Wesselingh, 2002, p. 24). Students regard participation very broadly and articulate it from the personal to the political dimension (Schweisfurth, Davies & Harber, 2002) and teachers who are aware of this and teach accordingly ensure that students will be connected and empowered as they mature into fully-fledged citizens. There is active interest in this aspect of education internationally as well as locally, indicated by the current study of civics education in twenty-four countries begun in 2002 by the International Association for the Evaluation of Educational Achievement (Saha, 2002). Effective citizenship, the designated outcome of this educational endeavour, is linked to political competency and participation. It is this participatory aspect that is relevant for this thesis.

Participatory aspects have often been neglected in formal civics and citizenship education as an empowering sense of connectedness must exist between teachers and students before this can be achieved. Saha (2002), when speaking of the relationship between education and active citizenship says "[s]tudents who talk more with their teachers and who liked school were more likely to participate in legitimate forms of activism" (p. 7). Young people however, who are taught to think clearly and critically about their society may be understood to be problematic by many members of society as they will not work to maintain the status quo and will not succumb to a concept of 'citizenship' that "invokes ideas of loyalty and patriotism and the image of obedient citizens" (Wesselingh, 2002, p. 15). If, however, participatory, citizenship education is not promoted by teachers then a dominant elite will continue to govern (Freire, 1973). The themes of connectedness, empowerment and learning are strongly united as civics education involves living, not merely studying (Wesselingh, 2002), and the role of the school is to assist a student to become a future citizen by learning to act like one (Saha, 2002; Victorian Curriculum and Assessment Authority, 2005). Thus an enactivist approach would greatly facilitate these goals as it assists "a movement towards consensus among persons whose thinking/acting can no longer be considered in strictly subjective terms" (Davis & Sumara, 1997 p. 110).

In Summary

I have situated my search in the Middle Years and Student Voice literature which has significant implications for my study. I have also discussed social constructivism and investigated the possibilities afforded by an exploration of the emerging theory of enactivism. In the light of this I have described four frameworks that enable learning by promoting connectedness and empowerment. These frameworks also promote student learning by stressing the fundamental importance of relationships and opportunities for meaningful participation in the learning process in all domains of student life. They are frameworks that would be significantly enhanced by the adoption of enactivism as a theory of learning, enabling educators to clearly articulate learning as it occurs within an ecosystem acknowledging that "[e]very moment of life is a learning event, a creative participation in the complex choreography of existence" (Davis & Sumara, 2000, p.178).

My Definition of Learning

Education is essentially concerned with the education of the whole child physically, spiritually, intellectually, morally, socially and emotionally by the development of holistic approaches to curriculum (Catholic Education Commission of Victoria Policy Documents, 1994b, 1994c, 2002; Groome, 1998)). My literature search has reviewed learning theory and approaches that underpin an understanding of learning from constructivist and enactivist perspectives and has briefly examined some other dominant theoretical positions and implemented programs influential in Victoria. For the purposes of this study, which must necessarily be limited, I focus on the intellectual and social, and understand learning, in enactivist terms, to be 'a complex co-emergent process of intellectual and social development enabled through the construction of meaning, taking place within a community that is dynamic and robust in adapting to changing circumstances'.

Conclusion

As demonstrated in this chapter, in order to understand connectedness, empowerment and learning it is necessary to understand the concepts of power and the relationships of power that underpin the concept of empowerment. This then enables the various concepts of connectedness to be understood as it is in this context that they exist. "Good teachers possess a capacity for

connectedness. They are able to weave a complex web of connections among themselves, their subjects, and their students so that their students can learn to weave a world for themselves" (Palmer, 1998, p. 11), encapsulates the empowering connectedness that is possible through the involvement of students and teachers in empowering pedagogies. It places teachers in a strategic position, enabling them to create a learning environment that connects and empowers both themselves and their students. The creation of this environment is essential, as only then is learning that encompasses the totality of the intellectual and the social aspects of human being able to happen.

The Venn diagram in Figure 2.4 demonstrates the interrelatedness and, simultaneously, the discrete nature of connectedness, empowerment and learning. It also signifies, that for my study, these concepts are situated within a middle years of schooling context. For me, the overlapping area is not an attempt to quantify the interrelatedness but is a constant reminder that interdependence is fundamental. It is also a reminder of the 'messiness' and distortion that may ensue from any attempt to isolate each concept to the detriment of their interconnectedness.

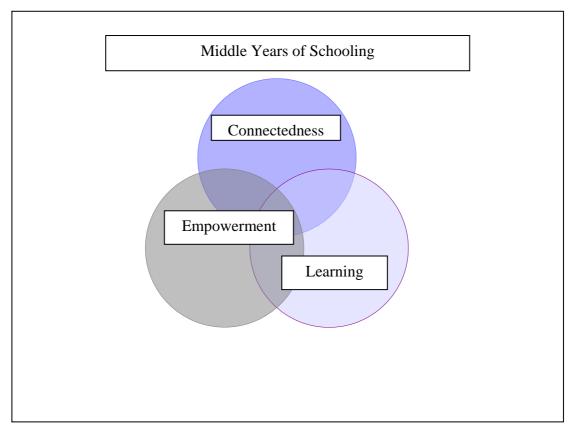


Figure 2.4 Key Concepts in Context and Relationship

Beyond the Literature Search

Having searched the relevant literature, I proceed in the next chapter, to describe the research framework I adopt to effect my qualitative study and answer my research question, which emerged from the research problem that the MYRAD project highlighted in its findings that change in teaching and learning approaches recommended by extensive middle years' research was slow to happen at the classroom level (Russell, McKay, & Jane 2001; 2003) and that students' sense of belonging to school, attitudes to learning and their relationship with teachers tend to be very positive in year five and from there decline until they reach their lowest point at year nine (Russell, McKay, & Jane, 2003). My research question, therefore, is:

What factors do students and teachers in year seven at Garden College understand as assisting or impeding connectedness, empowerment and learning?

From this question the following sub- questions emerge:

What assists or impedes:

- teachers and students building caring relationships?
- student learning?
- the empowerment of teachers and students?

and the further research question:

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

In conducting this research it is important to develop a framework that empowers both the participants and myself, as it is only in this context that relevant data will be generated. In chapter three, I explain the reasons for choosing constructionism as my epistemology and the reasons for including four theoretical perspectives in my research design. I explain and justify my reasons for using a specific case study methodology and describe in detail the ways in which I develop and methods for data collection and the importance of the administration of these to enable the optimum

level of data generation. I also discuss the processes for data analysis, validation, ethical considerations and acknowledge the limitations of the study and my biases.

CHAPTER 3

RESEARCH FRAMEWORK: EPISTEMOLOGY, METHODOLOGY AND METHODS

Introduction

Chapter One identified and described the research problem and purpose of the research. The research context was identified and described in some detail. The key research question and sub questions were:

What factors do students and teachers in year seven at Garden College understand as assisting or impeding connectedness, empowerment and learning?

What assists or impedes:

- teachers and students building caring relationships?
- student learning?
- the empowerment of teachers and students?

and the further research question that goes beyond the immediate context:

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

Chapter Two presented the search of the literature relating to the three key concepts, connectedness, empowerment and learning.

It is immediately apparent that I, as researcher, am seeking to explore areas that are integral to the everyday lives of students and the professional lives of teachers. It is paramount, therefore, that the research framework I adopt is empowering for the participants. They must be reassured, at all times, that they, as participants, are respected by me as researcher.

Gough (2002a) says "[i]gnorance is a useful criterion for evaluating research because it focuses attention on the users...particular people in particular locations, times and contexts." (p. 3). A considerable degree of ignorance exists among the members of the wider school community and educationalists regarding the perceptions of the participants in my study, that is the teachers and students, so I view my research project as contributing to the filling in of a blank spot in the understanding of both teacher and student perceptions of the concepts of connectedness and learning and, consequently, empowerment (Wagner, 1993). As my research focuses on a particular set of students and teachers involved in particular programs, in a particular school, at a particular time and I wish to understand their perceptions, the methodology I choose has to be consistent with this focus. It needs to facilitate a broad generation of data, acknowledge the many interpretations of this data by the participants, the relationship between themselves and myself as researcher, and allow for data analysis that is, as Creswell (1998) states, "an iterative spiral" (p. 53). Van Maanen's (1995) description of research as involving fieldwork, headwork and textwork reinforces this concept.

In this chapter I will discuss the epistemology, theoretical perspectives, methodology and methods used in my research. These four components of the research framework are related and each informs the other (Crotty, 1998).

Epistemology

A Qualitative Approach

Research, by its very name involves re–searching (McLaughlin, 2002) and is about advancing a field or discipline and contributing to its development (Gough, 2002a). In order to accomplish this, we need to know how we know what we know.

Qualitative research is described by Denzin and Lincoln (2000) as "a situated activity that locates the observer in the world" (p. 3). This is the approach I have chosen as I wish to understand meaning as it is constructed by the participants in my study. Through this approach knowledge is produced and data generated rather than merely gathered or collected (Gough, 2002a). My research undertaking requires the generation of rich data, allowing me to gain a deep insight into the

meaning of connectedness, empowerment and learning as constructed by the participants, through their own understandings and experiences, and thus, a qualitative approach is the most appropriate. Using this approach for my study I will stand with Vidich and Lyman (2000) who emphasise that a work will be judged according to its ability to communicate and actually say something to the reader. Sarakantos (1998), drawing on a number of authors, captures the essence of qualitative research in descriptions involving:

- reality in interaction,
- the researcher and the researched as two equally important elements of the same situation and
- studying reality from the inside not the outside.

In my study the observation of the interaction between students and students, teachers and students, and teachers and teachers is paramount. It is in these interactions that the processes of school life are discovered. Important too are the interactions between the participants and myself. It is a qualitative approach that allows me to observe and participate in conversations with the participants as well as formally interview them. I am able to witness all facets of school community life, from formal learning, through to those peripheral events and happenings that impact so often and significantly on reality as it is constructed by the participants.

The fact that the researcher and the researched are two equally important elements of the same situation, I find both inviting and daunting. Inviting because this facilitates openness and interaction. Daunting because, as researcher, I tread a fine line between reflecting reality as it is constructed by the participants and distorting that reality, either through my misconception or through the participants' deliberate distortions of reality as they perceive it to be. Avoidance of the latter depends on the degree of trust between the participants and me. While a positivist methodology does not present these pitfalls, equally it does not present the opportunity to represent reality as it really exists for all the participants, as such a representation requires an holistic approach (Candy, 1989). My wish to fill in a blank spot (Wagner, 1993) in research that used a positivist methodology, requires a qualitative approach, in order to effectively communicate reality as constructed by the participants. Selection of an appropriate epistemology is then paramount.

Constructionism is the epistemology I have chosen as I wish to explore and discover meaning as it is constructed by the students and teachers in my study.

The following table (Table 3.1) designates my research framework and involves the four elements that inform one another (Crotty, 1998).

Table 3.1 Research Framework

Epistemology	Constructionism	
Theoretical Perspective	 Interpretivism Hermeneutical Phenomenology Critical Hermeneutics and Critical Enlightenment Symbolic Interaction Ethnography 	
Methodology	Case Study	
Methods	Questionnaire	
	In-depth Interview/ Focus Groups/ Conversations	
	Close Observation	

Constructionism

Epistemology addresses the nature of knowledge and provides the philosophical basis for how knowledge is acquired (Crotty, 1998). It becomes the vehicle for situating the understanding or way of knowing.

As I am fundamentally interested in the way students and teachers construct meaning in their daily lives constructionism (McLaughlin, 2002) or constructivism (Lincoln and Guba, 1994) is

an appropriate epistemology. Denzin and Lincoln (2003) describe the constructivist paradigm as follows:

The constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings), and a naturalistic (in the natural world) set of methodological procedures (p. 35).

Constructionism or constructivism, defines no objective truth (Crotty, 1998; Denzin & Lincoln, 2003). Rather than striving to locate objective truth it understands that meaning is constructed from experience. Therefore all is relative. The value system from which I come is implicit in this approach.

Theoretical Perspectives

The way in which an understanding of the world is constructed constitutes a theoretical perspective. The purpose of the research justifies the theoretical perspective adopted by the researcher (Crotty, 1998). My purpose is to explore teachers' and students' understandings of connectedness, empowerment and learning in year seven in a specific situation and so develop a rich picture of the classroom as it presents in year seven at Garden College. The theoretical perspective/s also direct the structure of the research design and the methods to be used to generate data and enable them to be analysed.

Beliefs underpin research and these define the relationship between the researcher and the researched. A paradigm is a basic set of beliefs that guide an action (Lincoln & Guba, 1994). Crotty (1998) delineates three research paradigms, quantitative, interpretive and critical, and notes they are all empirical, systematic, theoretical, public, self-reflective and open-ended. Connole (1993) delineates a fourth paradigm, deconstructive/poststructural and Denzin and Lincoln (1994) delineate a fifth to cater for "messy", "uncertain" or "experimental" research (p.15). While each perspective may stand alone they are not mutually exclusive and often elements of more than one perspective may be used in any single project. McCutcheon (1981) identifies three and understands them as forming a triangle. Thus each becomes a lens through which research is undertaken. For this study an interpretive lens seems most appropriate.

Interpretivism

Interpretive social science has its origins in German social science and philosophy, in the persons of Max Weber (1864-1920) and Wilhelm Dilthey (1833-1911) and is described as requiring "an empathetic understanding of the everyday lived experience of people in specific historical settings" (Neuman, 2000, p. 70). The need for purposeful, meaningful study of social interaction, in order to better understand the reasons for actions was stressed by Weber.

An interpretive approach aims to understand the values, attitudes and beliefs of people as they act in certain situations, and researchers who adopt this stance reject the belief that, human behaviour is governed by general laws (Candy, 1989). Candy, in differentiating between an interpretive and positivist approach, says, "the notion of theory shifts from a search for law-like regularities about the nature of social behaviour to the identification of social rules that underlie and govern the use of social facts" (p. 4). Reality and validity are therefore defined in this way in an interpretative approach.

There are also a number of assumptions shared by those adopting interpretivist theory. These are:

- Causes and effects are mutually interdependent
- Inquiry aims to understand individuals rather than to generalise
- Inquiry is holistic rather than fragmented
- Inquiry is always valued laden (Candy, 1989).

With this understanding of an interpretative approach I value its ability to generate data that recognises the complexity of human perceptions and the meaning constructed through them. This recognition can then lead to a greater understanding of what constitutes the values, attitudes and beliefs of teachers and students in their relationships and in their quest for learning. As demonstrated in Table 3.1 I have chosen four interpretativist perspectives for my study. I will now discuss each of these. The first is hermeneutical phenomenology.

Hermeneutical Phenomenology

As I am interpreting that which occurs in the daily lives of the participants, hermeneutical phenomeology is the theory that underpins my research. Hermeneutics is fundamentally the process of interpretation, while phenomenology focuses on the experience of every day life (Sarakantos, 1998). Crotty (1998) notes that while the word hermeneutics itself is only two hundred years old, Biblical exegesis has always used an interpretative approach, as did literary students of ancient Greece. The concept derives from the supposition that texts have meaning for the reader and that meaning is ultimately the property of the reader. The writer of the text understands its meaning, but that meaning may be very different from that of the reader. This is readily understandable if the text has been written some time ago, as is the case in the Biblical text. It is, however, true of all texts. The reader constructs her/his own meaning according to his/her experiences of life. Thus the meaning of the text ascribed by the reader can go deeper than that ascribed by the author. Hermeneutics involves both interpretation and description.

The German philosopher, Husserl (1859-1938), first used phenomenology to study how people experienced their world. Implicit here is the understanding that people only know what they can experience. Here perceptions make meaning and the analysis of these experiences provides deeper meaning. Crotty (1998) describes phenomenology as laying aside, as best we can, the prevailing understandings of those phenomena and revisiting our immediate experience of them. The term hermeneutical phenomenology is credited to Martin Heidegger (1889-1976), although he used the term phenomenological hermeneutics, as phenomenology was very much to the forefront in his understanding (Crotty, 1998). Heidegger purports not to rely on culturally derived meanings, but on those meanings discovered by humans in their quest for 'being'. It is the experiences encountered in life, that are fundamental to human existence and the interpretation of them must be "faithfully rendered" (p. 100).

In contemporary research van Manen (1990) explains phenomenological research in terms of researching from the inside out and expounds the value of becoming so closely associated with the research subject as to be a participant observer. Thus the perspective of hermeneutical phenomenology is very relevant for this study as I generate and interpret data gathered from

students and teachers in ways that involve close observation in order to interpret and better understand their every day experiences.

Critical Hermeneutics and Critical Enlightenment

The second perspective relevant for my study is a critical perspective and involves both critical hermeneutics and critical enlightenment. As Sarakantos (1998) notes, the critical and interpretative approaches are quite compatible as "critical theorists see people as creators of their destiny" (p. 8). Critical theorists understand that meaning is constructed, but constructed in the context of power. Structures that dominate and manipulate, shape the construction of meaning. This may create a state of tension if that which appears to be on the surface, is not, in fact, the reality.

As I am researching the concept of empowerment in my study, aspects of critical theory as described by Kincheloe and McLaren (2000) are relevant. Originating in Frankfurt, in the first half of the twentieth century critical theory is generally associated with cultural criticism. Kincheloe and McLaren, however, link critical theory with a hermeneutical approach in their description of critical hermeneutics. They claim that this is an often-neglected aspect of qualitative research informed by critical theory. Interpretation is fundamental to a qualitative approach and no interpretation is value-free as researchers always interpret according to perceived relationships (Denzin & Lincoln, 2003). The purpose of critical hermeneutics, according to Kincheloe and McLaren, is to "reveal power dynamics within social and cultural contexts" (p. 286). Kincheloe and Mclaren also describe critical enlightenment as the context in which "critical theory analyses competing power interests between groups and individuals" (p. 281) and within specific situations, identifying winners and losers.

This is relevant to schools because of their institutional status. As institutions, they have clearly defined formal power structures and even more clearly defined informal power structures. The latter very often define the culture of the school, more so than do the former. The processes by which power play operates are integral and affect the operation of the members of the community in their corporate entity and as individuals in their professional, everyday lives. Therefore in any understanding of empowerment that involves both enabling and impeding factors, a critical stance is inevitable and desirable. As stated in Chapter Two when discussing the contribution of Shor (1992) to an understanding of empowerment, this theory is relevant for cultural situations that are generally

described as less traumatic on a global level, but are nevertheless very significant for those involved in education.

Symbolic Interactionism

The third perspective enabling an understanding of society and the human world is symbolic interactionism (Crotty, 1998). It is attributed to the American social-psychologist, George Herbert Mead (1827-1881) although the promulgation of the theory is accredited to Herbert Blumer (1900-1987), and deals directly with issues concerning "language, communication, interrelationships and communitythose basic social interactions whereby we enter into those perceptions, attitudes and values of a community, becoming persons in the process" (Blumer, 1969, p. 8). Blumer describes three basic assumptions about symbolic interactionism:

- That human beings act towards things on the basis of the meanings these things have for them
- That meanings of such things is derived from, and arises out of, the social interaction that one has with one's fellows
- That these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters (p. 72).

This approach is relevant for my exploration as teachers and students engage in the use of language and modes of communication often exclusively understood by their peers. This means sub-cultures develop within the school culture and those who are extraneous to the group, may or may not be able to understand meaning as it is constructed by any particular sub-culture. I see this perspective as highly relevant for any study within a school setting and my process allows for data generation and analysis that recognises this perspective as fundamental to any true understanding of the concepts of connectedness and learning.

Ethnography

The fourth and final perspective relevant for my study is ethnography. "Ethnography involves an ongoing attempt to place specific encounters, events and understandings into a fuller

more meaningful context" (Tedlock, 2000, p. 455) in the daily life of people (Creswell, 1998). This is also relevant for my study as I describe and interpret personal situations through ongoing fieldwork. Involvement in prolonged interaction with the participants in their everyday student and professional lives is integral to the research. The teachers' professional lives also intersect with mine on an ongoing basis. While a case study is bounded (Stake, 2000), my involvement with the school community has been significant in the last ten years and will continue after the case study concludes. This is both advantageous and problematic as I discuss further in this chapter. The fact remains, however, and it is because of this, I have had and will continue to have, relevant conversations with the participants. Originally ethnography was associated with involvement with cultural studies, but as Tedlock states, it "has also proved useful in a number of applied areas, including education" (p. 456). Creswell (1998) translates it specifically to the school setting.

Summary of Theoretical Perspectives

All these four theoretical perspectives have a number of elements in common. They all aim to understand values, attitudes and beliefs of people as they act in certain situations. Van Manen's (1990) interpretation of hermeneutical phenomenology is very closely aligned to Creswell's (1998) understanding of ethnography, although, Tedlock's (2000) emphasis on a "fuller more meaningful context" (p. 455) adds a further dimension. Symbolic interactionism highlights the existence of subcultures within a community, which is relevant for any study within a school and critical hermeneutics and critical enlightenment relate directly to the concept of empowerment, which is also fundamental to this study. An understanding of these four perspectives, separately and in combination, highlights both the holistic and analytical approaches that co-exist within this research project. Thus, in order to ensure the generation of rich data, the methodology and methods used have to be congruent with my theoretical perspectives, facilitating both holistic and analytical approaches that value the context of my research project.

Context in Naturalistic Inquiry

The theoretical perspectives of hermeneutical phenomenology, critical hermeneutics, symbolic interactionism and ethnography are components of naturalistic inquiry. The case study from a naturalistic perspective enables applications that are impossible from studies that do not

recognise context as paramount. Context situates the study and has the potential to empower the participants. Dey (1993) sees context as fundamental in such an inquiry as through context "its wider social and historical import" are grasped (p. 32).

Erlandson, Harris, Skipper, and Allen (1993) also emphasise the importance of context in any naturalistic inquiry. This emanates from the understanding that "all subjects of such an inquiry are bound together by a complex web of unique relationships" (p.16). It is this web of relationships that both "restricts and extends the applicability of the research" (p. 16). A case study is powerful, flexible and open as it can instigate further study of the same context or stimulate further study of similar contexts. Lincoln and Guba (1985) say a case study is the preferred design for any naturalistic study as it allows for thick description that enables the reader to be a part of the context.

Methodology

Case Study

As my research is situated in a particular school with a particular group of students and teachers involved in a particular program, a case study is the most appropriate design (Creswell, 1998; Lincoln & Guba, 1985; Patton, 1987; Stake, 2000).

A case study can be both quantitative and qualitative (Stake, 2000). Stake describes a number of relevant criteria in relation to case studies:

- A case by its very nature is bounded-an integrated system.
- It exhibits patterned behaviour.
- It cannot be understood without reference to other cases, yet it has its own context (p. 436).

My study is within a bounded system, exhibits patterned behaviour and has its own context.

Stake also identifies three types of case studies:

- 1. an intrinsic case study,
- 2. an instrumental case study, and
- 3. a collective case study.

My study is of the first type as I seek to understand the perceptions of teachers and students in that particular context. If further research is undertaken and a generalisation is able to be drawn, then it becomes an instrumental case study, but at this time that is not the immediate goal.

As the conclusions from a case study are compared with those of other case studies I seek both what is common and what is particular about my case study (Stake, 2000) and therefore I must take into account:

- the nature of the case
- its historical background
- the context (physical, social, educational) and
- similar contexts (if relevant).

Stake also comments that all cases have "important atypical features, happenings, relationships and situations" (p. 439). While Stake acknowledges there exists doubt about the validity of a single case study he maintains:

the case study method has been too little honoured as the intrinsic study of a valued particular, as it is in biography, institutional self-study, program evaluation, therapeutic practice and many lines of work (p. 438).

In addition, Stake states that his position is corroborated by other researchers. While generalisation may be a possibility and must be addressed, Stake warns of the real possibility of an over-riding interest in generalisation detracting from the specific findings of the case study.

Methods

This chapter has situated this study in an appropriate epistemology, constructionism. It has also identified that an interpretive theoretical perspective will lead to most insight using a case study methodology. In this final section details of the actual methods employed are given.

Description of the Participants and Program

The Participants

As described in Chapter One, Garden College is a co-educational college in Victoria. Students, numbering approximately 600, are drawn from a large area including the town in which the college is situated and surrounding large and small towns.

The participants in my study included four HCEL teachers, three female and one male, one welfare officer, the principal, curriculum coordinator, one key learning Area co-ordinator, one year level coordinator and 93 year seven students. All students were observed, 83 completed the questionnaire and 68 volunteered to be interviewed, 12 individually and the remainder in focus groups.

The four teachers varied in their classroom experience. One had taught in the school for more than 20 years, while the other three had between five and 15 years' classroom experience. These three had taught in other settings. I have allocated pseudonyms to all participants whose material has been quoted in Chapter Four.

The Holistic Course of Enhanced Learning (HCEL)

An understanding of the Holistic Course of Enhanced Learning (HCEL) program operating at Garden College is also a necessary forerunner to an understanding of the data generation methods used.

The HCEL program incorporates English, mathematics, science, history, geography and information technology. The cohort of students is divided into four groups, each with a homeroom teacher. The four class groups are then further combined into two. Each of these groups is team

taught by two teachers, one a mathematics/ science practitioner and the other a humanities specialist. Ideally they are male/female combination, however this was not the case at the time of the data generation. The school also provided a classroom block, complete with toilet and locker facilities, dedicated to year seven.

The student handbook (Garden College, Office of the Principal, 2004) provides the following details:

The HCEL home-room teacher will be present for more than fifty percent of classes:

- This builds a strong, ongoing relationship with one key teacher
- It minimizes the number of teachers dealing with each student
- It provide a clear focal point of contact between home and school.

Two HCEL teachers will work in partnership with pairs of classes:

- This increases flexibility of the manner in which classes operate
- It enhances student learning
- It increases the effectiveness of teaching and learning time
- It ensures continuity in the event of one teacher's absence.

Balanced selection of paired teachers for each HCEL class:

- One male, one female teacher
- Both highly motivated and dedicated teachers
- One pair to cover the areas of English, Mathematics, Science, History, Geography and Information Technology.

Establishment of a learning area for year seven only:

- The year seven HCEL classrooms are in a dedicated, year seven only area
- No classes from other areas are scheduled in the year seven classrooms.

All belongings are safely stored in the classrooms:

- There are no external locker rooms or bays
- Displays of student work are secured within the classroom

 Each student has an individual locker with a shelf inside the homeroom for school bag and books.

HCEL teachers' workstations located within the HCEL area:

• HCEL teachers are readily accessible to students.

HCEL student tables will be arranged in clusters not in rows:

- To facilitate group work
- This enhances the possibility of students' assisting each other and
- Promotes learning through interaction
- This provides support for all students and
- Allows for different combinations of students; sometimes mixed ability; sometimes similar ability.

This listing of what was expected from the program became a key reference for interpretation within the study.

Involvement in Research Design

Smith (2000) stresses that whatever data collection methods are used they must be empowering and they are empowering if they "focus on the self-understandings and feelings of worth of individuals" (p. 166). She continues with this suggestion that:

researchers adopt designs that enable participants to tell their story, reflect on their perceptions and understandings in terms of their validity, uncover, explore and resolve repressed feelings, question personal life goals or directions and identify specific skills or competencies (p. 166).

While I have already discussed listening to student voice at some length in Chapter Two, it is relevant here to note that David Hargreaves (2003), the Chief Advisor to the Secretary of State for Education and Skills, UK, stresses that despite the emphasis on negotiated curriculum in the middle

years literature, the student voice is still under-represented in curriculum design. As this is true also of student involvement in research design, Lodge and Reed (2003) proffer a hierarchy of ways in which research approaches by teachers can involve students (Table 3.2).

Table 3.2 Involvement of Students in Research Design (Lodge & Reed, 2003, p. 6)

Level	Involvement of students in research			
1	No research involving students			
2	Students are objects of research			
3	Students are objects of research and feedback is given			
4	Students are involved in research and feedback is followed by dialogue			
5	Students are involved in designing research with teachers and feedback is followed by dialogue			
6	Students initiate research			

I have involved teachers and students in designing the research. Teachers have been involved at level five as I discussed my proposed data generating methods with them prior to the research. During the data generating period I discussed and revised methods of observation, developed the questionnaire in conjunction with the teachers and discussed and devised the best method of administering the considered questionnaire, ways in which the data may be interpreted and finally questions and arrangements for interviewing students and themselves. Students were involved at level four as I asked a group of year eight students whether they thought it better to interview individually or in groups. This is empowering and gives the participants a degree of ownership of the study.

Data Generation

Observation

Observation is the fundamental component of all research methods (Angrosino & Mays de Perez, 2003). It is the most reliable form of data gathering as far as the researcher is concerned, as the knowledge gained from observation is his/her own, because she/he are the primary witnesses. Therefore observation is best conducted in settings that are natural for the participants. My initial observation period was six days and another period of four days concluded my research.

The purpose of my initial observation period was to build a relationship with the year seven students and to further my relationship with the teachers. This involved close observation and the taking of field notes. This period allowed me to develop an empathy with the participants and ensured my presence did not upset the *status quo* in the classroom. I decided against being a participant observer in the classroom, as that could significantly alter the dynamics within the various learning situations. I opted to be a close observer. Van Manen (1990) sees the role of the close observer-researcher as involving "an attitude of assuming a relationship that is as close as possible while retaining a hermeneutic alertness to situations that allows us to constantly step back and reflect on the meaning of these situations" (p. 69). My teaching background assisted this process as a teacher is always called upon to assume close relationships with students and colleagues and still retain a distance that enables reflection.

Within the classroom situation I established a relationship with the students over a period of time, by adopting the role of close observer. There was prolonged engagement "so that the ... observer's status becomes less prominent, as evidenced by the participants' conversation and behaviour" (van Manen, p. 72). The interaction that occurred was significant in building an environment of trust with the students.

Early in the first term, I visited the school and spoke with the students and parents, explaining the research project and answering any questions that arose. This proved very beneficial to developing a relationship built on trust, particularly with the students who felt reassured by the knowledge they gained, both of the project and me. I had already spoken with the teachers prior to this meeting.

Trust-building was not problematic with the teachers. I had previous associations with them that engendered a mutually trusting relationship. Nevertheless, I had to remain constantly aware that I had not visited their classrooms in this manner before and that an atmosphere of trust could easily deteriorate, if my behaviour and interactions were perceived as threatening. As I had many in-depth conversations with the teachers and was asked, as a result of these and my classroom observations, to attend their meetings, I understand myself as a participant observer as far as the teachers were concerned. My operating in this way did not have the effect of distortion that was a concern for me in the classroom. In addition, I ensured they were informed at all times of my progress and, where

possible, engineered the peripheral, yet very important details, such as timetabling. This was also helpful and productive in the sense that their organisation facilitated my operations and they realised that I appreciated them allowing my presence in their professional lives.

Field Notes

During those observational periods I took field notes and video tapes. These provide a record of happenings, anecdotes as they unfolded during observation. These are, by their nature, improvisational, as they are produced without fore-thought. Ely and Anzul (1991) describe field notes as "those rapid jottings or whisperings into a tape recorder of details and dialogues that serve as guide posts for fuller descriptions" (p. 69). From this data the analysis was begun and continued. Field notes described the setting, both physical and social, the interaction between students and students, teachers and students and teachers and teachers, the interruptions, the time of day, the weather, atmosphere within the classroom, direct speech, body language, teaching and learning approaches, expressions of emotions. I alternated between taking notes and video taping as student reaction varied according to the medium being used. When I took notes I was extremely unobtrusive, but found it very difficult to remain so when using a video camera. The students were often very aware of their being 'on camera' and therefore were more likely to exhibit behaviour that was a performance rather than their natural state. The video camera was valuable, however, when they were too absorbed in their learning to realise I was taping.

In addition to taking field notes and video taping I kept a reflective journal that I completed after each period of observation, sometimes immediately and sometimes after a period of time, as ideas occurred to me. This enabled me to reflect upon my observation and return to many scenarios in order to discuss these with students and teachers. These reflections initiated many professional conversations in which I came to understand at a greater depth the total milieu in which the teachers and students operated and their understanding of many fundamental concepts and issues.

Questions

Question Development

This case study is set in the context of middle years of schooling research and the students and teachers of year seven in Garden College. The following questions in Table 3.3 encapsulate my interests; I also list the possible data sources and the source of relevant theoretical understanding. (Dunbar, Clarkson, & Toomey, 2000).

Table 3.3 *Questions and Sources*.

Conce	erns/Questions	Data Sources	Underpinning Literature
1.	How are connectedness and learning conceptualised by students and teachers in year seven?	Teachers and students of year seven	Resilience literature Empowerment Literature Theories of Learning and Teaching Literature (empirical and theoretical) Middle Years Literature Approaches to teaching and learning literature (empirical and theoretical)
2.	What are the similarities and differences between students' and teachers' perceptions of connectedness and learning?	Teachers and students of year seven	Middle Years Research and Development Project
3.	What are the strategies teachers use to assist students to feel connected the school community?	Teachers and students of year seven	Approaches to teaching and learning literature (empirical and theoretical) Middle Years Literature
4.	What are the strategies teachers use to assist students to learn?	Teachers and students of year seven	Theories of Learning and Teaching Literature (empirical and theoretical) Approaches to teaching and learning literature (empirical and theoretical) Middle Years Literature

C	Concerns/Questions	Data Sources	Underpinning Literature
5.	What strategies do students appreciate as assisting them to learn?	Students of year seven	Middle Years Literature
6.	How do teachers and students construct opportunities for student participation in learning?	Teachers and students of year seven	Theories of Learning and Teaching Literature (empirical and theoretical) Approaches to teaching and learning literature (empirical and theoretical) Middle Years Literature
7.	What are the main enabling and hindering factors impeding on the connectedness of teachers and students?	Teachers and students of year seven	Resilience Literature Mindmatters program Middle Years Literature
8.	What approaches to teaching and learning empower teachers and students?	Teachers and students of year seven	Teaching for empowerment literature Approaches to teaching and learning literature (empirical and theoretical) Middle Years Literature Teachers and students of year seven

Questionnaire

In order to gather initial, but more specific information about the participants' perceptions of connectedness, learning and empowerment I designed a student questionnaire completed by all year seven student participants. It endeavoured to elicit information relating to:

- Building caring relationships
- Setting high and achievable expectations
- Opportunities for participation
- Empowerment.

I decided on categories one to three as they were highlighted in the resilience literature (Bernard, 1991; 1997; Resnick, Harris & Blum 1993). The Middle Years Research and Development (MYRAD) literature also included a description of the areas of teaching and learning that equated with these categories (Russell, Mackay & Jane, 2003). These categories with the addition of 'empowerment' also address my research sub-questions, what assists or impedes:

- teachers and students building caring relationships?
- student learning?
- the empowerment of teachers and students?

The majority of questions were open-ended to facilitate description and leaving respondents "free to respond as they like" (Dey, 1993, p. 15). The purpose was to "discover major relationships and patterns where little is known" (Erlandson, Harris, Skipper & Allen, 1993, p. 36) by generating data from all students, so I could use this to develop interview questions on the basis of something interesting and relevant in their responses. Miles and Huberman (1994) describe this type of sample as purposive and acknowledge that qualitative studies use samples that have evolved as the study progresses. The teachers were impressed that the whole group was to be given the opportunity to complete the questionnaire. They described this as empowering (Research Journal, April 29th, 2004).

Initially I wanted to ask each student to select a favourite subject, as selecting a specific subject meant students would be focussing on one or at most two teachers and on what is important to them. By doing this, it would also be possible to ascertain whether every student has quality time at school. This is relevant data as it is a significant contribution to a description of the context and is fundamental to my addressing what I believe to be a flaw in the findings of the MYRAD data. On the advice of the teachers, however, I changed the selection of a favourite subject to the selection of a core subject. English, mathematics, science and studies of society and environment (SOSE) are regarded as core. The teachers felt this would be more beneficial and I still had the students selecting a specific subject, and because of this selection I would still be able to ascertain whether or not students had quality time at school. I discussed all the questions with the teachers and modified the language and re-arranged the sentence structure as advised by them. There was no substantial difference in the content of the questionnaire, but their suggestions, I presumed, would

assist in the tailoring of the questionnaire to the understanding of the participants. As I was particularly interested in empowerment, I also understood this as a manifestation of the concept. At the conclusion of the questionnaire the students indicated their willingness to participate either in an individual interview or focus group. If they selected a focus group they were asked to name a small number of students they would appreciate in their group. This insured they would all feel comfortable at the time of interview. Table (3.4) delineates the questions I asked, the purpose for asking them and their theoretical underpinning. The questionnaire in the format received by the students is contained in Appendix 12.

Table 3.4 Student Questionnaire: Purpose and Theoretical Underpinning

Question	Purpose	Theoretical Underpinning
Choose one of English, SOSE, Science or Maths to answer the following questions.	To relax and empower students To focus students on one or two teachers	Empowerment
1. In that subject what do you like about: • the work, • the people (students and teachers), • the classroom activities, • activities done outside the classroom • other things	To elicit each student's priorities/preferences To encourage lateral thought	Connectedness: Building caring relationships Learning: High and achievable expectations Empowerment
2. How well do you feel you learn in this subject?	To elicit student perception of their achievement in learning	Learning: High and achievable expectations
3. What helps you learn in this subject?	To identify student perception of how they learn best	Learning: High and achievable expectations Empowerment

Question	Purpose	Theoretical Underpinning
4. How do you know you if you are learning well in this subject?	To elicit student understanding of learning	Learning: High and achievable expectations Empowerment
5. What happens that stops you learning as well as you could?	To identify the blocks to optimum levels of learning	Learning: High and achievable expectations Empowerment
6. What do you find hard to learn in this subject	To identify student difficulties in learning situations	Learning: High and achievable expectations Empowerment
7. Do other students you know in the class learn a lot in this subject?	To identify the level of awareness of others' learning	Learning: High and achievable expectations Connectedness: Building caring relationships
8. If you are away for two or three days will one of the teachers talk to you and find out if you have a problem because of this?	To elicit student awareness of care for themselves and others by the teacher	Connectedness: Building caring relationships
9. If you have been away for two or three days has one of the teachers helped you with any problems you have?	To elicit the incidence of this.	Connectedness: Building caring relationships
10. How does the teacher help students who find it difficult to learn?	To elicit student awareness of care for themselves and others by the teacher	Connectedness: Building caring relationships
11. How do other students help those who find it difficult to learn?	To elicit students' level of care for others	Connectedness: Building caring relationships

Question	Purpose	Theoretical Underpinning
12. Do you help the teacher decide what you are going to learn? If you answer YES, how do you help?	To elicit understanding of negotiated curriculum	Connectedness: Building caring relationships Providing opportunities for participation Empowerment
13. In this subject are you offered a number of varied activities? Explain why you circled Yes or No.	To elicit the degree of choice available	Learning: High and achievable expectations Connectedness: Building caring relationships Providing opportunities for participation Empowerment
14. In this subject how does the seating arrangement affect your ability to learn?	To elicit the affect of the physical arrangement on learning situations	Learning: High and achievable expectations Connectedness: Building caring relationships Empowerment
15. If you could change something about this subject what would it be?	To elicit areas that provide dissatisfaction	Providing opportunities for participation Empowerment
16. Do you talk to the teacher about problems you are having with the work in this subject?	To elicit level of student confidence in addressing academic problems	Learning: High and achievable expectations Connectedness: Building caring relationships Empowerment
17. Do you talk to the teacher about other problems?	To elicit level of student confidence in addressing problems of a general nature	Connectedness: Building caring relationships Empowerment

Question	Purpose	Theoretical Underpinning
18. Think of another subject that you do not like as well. Do you learn well in that subject? Explain why you said Yes or No	To elicit students' understanding of links between liking and learning	Learning: High and achievable expectations Empowerment
19. What has been your favourite learning time since you have been at Garden College?	To elicit a favourite learning situation	Learning: High and achievable expectations Empowerment
20. Describe a time since, you have been at Garden College, when learning has been fun.	To elicit an understanding of fun	Learning: High and achievable expectations Empowerment

In order to elicit further elaboration on the data generated by the student responses to the questionnaire I used in-depth individual interviews, focus group interviews and professional conversations.

In-depth Interviews, Focus Groups and Professional Conversations

The Interview as an Exchange

If an interview is to generate true data it must involve an exchange between interviewer and interviewee. Both the researched and the researcher need the ability to collect dependable data and develop the capacity to examine this data and make sense of it (Pekrul, 2004). MacBeath (2004) notes that, voices in schools are very complex. He also highlights that voice can be verbal and non-verbal and that it is "neither constant nor without contradiction" (p. 1). Too often students are viewed only from the adult perspective (Lyle, 2000). I find the model MacBeath describes helpful, as it portrays

the individual as having three internalised voices, that of child, parent and adult. Usually a child responds according to the voice in which they are addressed. If a student is addressed in the voice of a parent, the response will usually be that of a child; if the same student is addressed in the voice of an adult the response will more than likely be in the mode of the adult. This has implications for me as researcher, as this is a very significant step in the process of listening to students to generate relevant data.

Interview Structure

Interviewing generally refers to face-to-face verbal interchange. This may be on a one-to-one basis or a group interchange. Interviews may also be structured, semi-structured or unstructured (Fontana & Frey, 2003). I used in-depth individual interviews with both teachers and students in a semi-structured way. The in-depth interviews allowed the participants the privacy to express their views in a very personal way. I was advised by a group of year eight students that this is the best way to generate real data and I gratefully accepted their advice, as they are far closer to the thought processes of their age group than I.

The structure of my interviewing process, therefore, was directive using a semi-structured question format and my purpose was phenomenological as I endeavoured to discover the perceptions of students and teachers as they constructed meaning from their daily experience of:

- 1. Building caring relationships
- 2. Setting high and achievable expectations
- 3. Providing opportunities for participation
- 4. Empowering themselves and others.

Twelve student interviews were conducted and each of the four teachers was interviewed. The questions for all student interviews were loosely structured around the questionnaire each had completed previously. The aim was for further elucidation as each was asked to elaborate on issues emerging from the answers in their responses to the questionnaire. I did not aim to address all questions with every person or group, but used the material in their specific responses to the

questionnaire to choose relevant questions from the list. As the teachers had not completed a questionnaire, I attempted to address all the above areas in their interviews.

The HCEL program incorporates English, mathematics, history, geography and information technology and while my original intention was to research within these areas, this proved to be impossible if I was to attain a true picture of learning in year seven. The students, at the time of interview, digressed, using examples from subjects outside the program. I found these digressions very informative and so have used them where relevant. This is consistent with my understanding of the complexities of a learning community.

Interview Technique

Interview technique is extremely important as interviews are ways to listen to and learn from people (Madriz, 2003). Ely and Anzul (1991) stress the importance of listening and the necessity of remaining detached. An interviewer must not manipulate the interview if the data generated is to be authentic. At the same time it is important to exhibit active listening skills as it may be necessary to clarify information from the interviewees or encourage them in their reflection. Fontana and Frey (2003) stress the need to understand the language and culture of the respondents, which impacts on the personal presentation of the interviewer. This is important as the personal presentation of the interviewer, in turn, impacts on the degree of acceptance by the culture of the participants. Voice and demeanour are two aspects of presentation needing to be uppermost in the interviewer's psyche. Intonation, choice of vocabulary and body language speak loudly and clearly to participants, so both need to be such that the interviewee is comfortable in expressing opinions without intimidation. An interviewer must be aware that in a school context many students and teachers are extremely adept at reading intonation and body language and responding accordingly. While being conscious of appropriate interview technique, I found my close observation and responses to the questionnaires, in addition to the positive rapport I had with the students and teachers, also facilitated the understanding necessary to conduct interviews which yielded rich data.

Focus Group Structure and Technique

Madriz (2003) says that the group interview is the simultaneous interviewing of several individuals, either formally or informally. The process is more commonly referred to as focus group interview and derives primarily from market research in the corporate world. These groups typically consist of six to ten people (Patton, 2002). I conducted group interviews with both teachers and students in a semi-structured way. I decided to offer group interviews or focus groups as I felt these allowed the participants the freedom to comment as they saw fit and also to respond or add to others' contributions. Focus groups are understood to cater for participants who find an individual interview intimidating and for those who rather communicate in the company of others (Madriz, 2003). Focus groups can also help participants to recall certain events (Fontana & Frey, 2003). My decision to offer both individual and group interviews was vindicated as both methods were chosen by a significant number of students and each generated significant data. The teachers were also interested in both approaches and took part in each with similar results. The process for the student and teacher group interviews was the same as that for the individual interviews.

Focus group interviews require additional technical expertise, as the increased numbers mean the interviewer has to be very aware of including all voices and allowing them to have equal weighting. Once again, my observation period facilitated this process, as I had come to know the traits of many students and was equipped to deal with the composition of all groups. As Patton (2002) states, the object of the focus group is to obtain high quality data in a social setting so people can consider their own views within this context. Thus the interviewer needs to be constantly aware that there will be multiple interactions that, at times, will also involve the interviewer. Managing the blend of all voices, is the hallmark of skilful leadership (MacBeath, 2004) and in this instance the interviewer is leader. All this considered, I found the focus groups to be an enjoyable data generating experience. In summary I valued the individual interview for the personal reflection it allowed, and the focus group or group interview for the interaction that clarified many issues.

Another consideration I found crucial in conducting either in-depth interviews or focus group discussions, was the preparation of the venue and the recording technology. If the venue is unsuitable, data generation will be limited, as the participants will not be comfortable and focused. Also the recording technology needs to be such so that it works unobtrusively, and therefore is not

distracting. I believe that the venue and suitable preparation of the technological aids contributed significantly to the level of data generation from the interviews with both teachers and students.

Six student focus groups and one teacher focus group generated data. Three teachers participated in a group interview. The fourth group member was absent from the group interview, due to unforseen circumstances. In keeping with an ecological model, I understand this to reflect the messiness of life in a school and the real situation of this workplace.

Guide Questions

Students

Students were given the choice of being interviewed alone, as part of a focus group or both. Table 3.5 is the set of guide questions I developed for all student individual and focus group interviews:

Table 3.5 Interview Guide Questions for Students

Question	Purpose	Theoretical Underpinning
1. Students said the following help them learn. Which of them helps you well? Tell me why:	To empower students	Empowerment
 Teacher explanation The program-two teachers in the roomeighty minute periods Discussion with teachers and students Text books Activities The process you follow how you organise yourself. 	To elicit student understanding of the factors they identified as enabling learning	Learning: High and achievable expectations

Question	Purpose	Theoretical Underpinning
2. Most students said other students help them learn. They also said that distracting students stop them learning as well as they could. Is this a major problem?	To empower students To elicit student understanding of the factors they identified as impeding learning	Empowerment Learning: High and achievable expectations
3. What ideas have you to stop students distracting others?	To empower students	Empowerment
 4. Do you learn better if you are having fun while learning? Give some examples of learning experiences that are fun. 5. What have you learnt about other people since you have been in Year 7? 	To empower students To elicit student understanding of the factors they identified as enabling learning To empower students To elicit their degree of connectedness to other students	Empowerment Learning: High and achievable expectations and opportunities for participation Empowerment Connectedness: Building caring relationships
6. What have you learnt about yourself since you have been in Year Seven? 7. What are you really good at or want to work harder at?	To empower students To encourage reflection To identify student difficulties in learning situations	Empowerment Empowerment Learning: High and achievable expectations
8. Do you feel part of the class community? If so, what happens in your class that makes you feel you belong to your class community?	To elicit student understanding of belonging to a learning community	Connectedness: Building caring relationships

Question	Purpose	Theoretical Underpinning
9. What are the times when you don't feel you belong to your class community? How do you feel at these times? What could be done to help this?	To elicit student understanding and experience of feeling this way	Connectedness: Building caring relationships
10. If you are worried about a personal problem do you know an adult that you can talk to about this problem?	To identify students connection to caring adults	Connectedness: Building caring relationships

As well as responding to the above, I encouraged students to elaborate in any way they or I understood to be relevant. Because of this a great deal of interesting data were generated. In addition there were interviews where a significant amount of time was spent exploring interesting personal reflections of relevance to the students and integral to my study.

Of those interviewed, material from 28 students, 16 boys and 12 girls has been recorded in Chapter Four. Material from the responses to the questionnaire by an additional seven students has also been recorded. To record further material would have resulted in unnecessary repetition. The material chosen from the 28 interviewees exhibited what appeared to be an in-depth understanding of a concept or a specific, relevant focus. The interviewees were educated in their primary years at 12 different schools, one in a capital city, five in reasonably large country towns and six in very small rural towns. Ten of the students, at the time of interviews had turned 13 years of age, and 18 were still 12 years old.

Teachers

As well as individual and group interviews I had professional conversations with teachers. A conversation is also a face-to-face exchange (Groome, 1998). It differs from an interview as the all parties participate equally and each is personally engaged and relaxed in the exchange. A good conversation is usually stimulating for all concerned and does not follow any set agenda and may, and often does, arise spontaneously. This is relevant for my project as I had a number of stimulating

conversations with various participants, some spontaneous and others by design. These generated data as they were very relaxed exchanges.

For the teachers I developed the following set of guide questions (Table 3.6) and explored these areas either formally as part of the individual and group interviews or less formally as part of a professional conversation:

Table 3.6 Interview Guide Questions for Teachers

Question	Purpose	Theoretical Underpinning
1. What is your definition of learning?	To empower teachers To elicit teacher understanding of learning	Empowerment Learning: High and achievable expectations and opportunities for
2. What are the indicators of student learning?	To empower teachers To elicit teacher understanding of factors enabling learning	Empowerment Learning: High and achievable expectations
3. How do you give feedback on student learning?	To empower teachers To identify strategies used by teachers	Empowerment Learning: High and achievable expectations
4. What significant strategies have you to assist students learn? How/why are they useful? How do you know?	To empower teachers To elicit teacher understanding of factors enabling learning and the strategies they use	Empowerment Learning: High and achievable expectations and opportunities for participation

Question	Purpose	Theoretical Underpinning
5. What significant factors hinder their learning?	To empower teachers	Empowerment
	To elicit factors they understand as impeding learning	Learning: High and achievable expectations and opportunities for participation
6. What could be done to improve your ability to assist student learning?	To empower teachers To encourage reflection	Empowerment
7. How important to you is it that students feel a sense of belonging in your class?	To elicit teacher understanding of the importance of connectedness	Connectedness: Building caring relationships
8. What do you do specifically, to foster a sense of belonging to a learning community, for your students and yourselves?	To identify strategies used by teachers to foster a sense of belonging to a learning community	Connectedness: Building caring relationships
What hinders you in fostering this sense of belonging?	To identify blocks to this process	
What assists you to do this well?	To identify aids to this process	
9. How do you identify student at risk?	To elicit teacher understanding of what constitutes a student at risk	Connectedness: Building caring relationships
10. What strategies do you have to assist those at risk?	To identify strategies used by teachers to connect students at risk	Connectedness: Building caring relationships
What could be done to improve your ability to assist these students?	To identify teachers needs in this area	

Summary of Data Collection Methods

The following Table 3.7 is a summary of the data collection methods used.

Table 3.7 Summary of Data Collection Methods and Participants

Data collection methods	Participants	
	Students	<u>Adults</u>
Close Observation Questionnaire	93 year seven students 83 year seven students	Four HCEL teachers
In-depth Interview	12 year seven students	Four HCEL teachers
and		One welfare officer The principal
Conversations		The curriculum co-ordinator One key learning area co-ordinator
Focus Groups	56 year seven students Material selected from 16 students for inclusion in chapter four	Four HCEL teachers

Sequence of Data Generation

Earlier in this chapter I described the story to be told in this thesis as an "iterative spiral" (Creswell, 1998, p. 53). Table 3.8 outlines the cascading sequence of data generation as one stage informs the next.

Table 3.8 Sequence of Data Generation

Early term one	Visit to school to talk with students, teachers and parents
Middle term one and beginning term two	Frequent visits for observation
Middle term two	Administer student Questionnaire
Late Term 2	Collation of data: Theme Analysis
Early term 3	Student/ teacher interviews
Middle term 3	Further collation of data into themes
Late term three	Post-interview observation
Term 4	Further collation of data and reworking of themes

Data Analysis and Interpretation

Theme Analysis

As I am researching the real world of the participants, the identification of themes as they occur in the data and an analysis of these themes is most appropriate for my study. Themes are described by Ryan and Bernard (2000) as "abstract (and often fuzzy) constructs that investigators identify before, during and after data collection" (p. 780). Ely and Anzul (1991) say they arise in one of two ways. They can be "a statement of meaning that (1) runs through all or most of the pertinent data, or (2) one in the minority that carries heavy emotional or factual impact". They define themes as "the researchers' inferred attitude that highlights explicit or implicit attitudes towards life, behaviour or understandings of a person, persons or culture" (p 150). As they usually

have as their focus underlying ideas about human existence and are supported by the literature search, they are very powerful organising tools for any qualitative study.

As described earlier in this chapter these are the themes I have identified from the literature and used to develop my questions for the questionnaire:

- 1. Building caring relationships
- 2. Setting high and achievable expectations
- 3. Opportunities for participation
- 4. Empowerment

The analysis of these themes involves the "iterative spiral" as envisaged by Creswell (1998) as data generated initially through observation, is developed through the questionnaire and interview processes. The task is to constantly revisit the field notes, and tapes, both video and audio, of the interviews in order to clarify the analysis of teacher/student perceptions and how they align with the above themes. This was accomplished by collating the data from the student responses to the questionnaire, transcribing the interviews and reading both the collation and transcripts as well as my field notes and research journal, several times. The collation of the responses to the questionnaire is organised to include whole statement responses where I understand them to be relevant and only single concepts where this facilitated ease of understanding. In order to indicate multiple responses in the collation of the questionnaire, I used the symbol '1' as this facilitated the quick location of responses for multiple sources (Appendix 13).

I then used the data to weave a story as an aid to internalising as well as linking material. Subsequently, the data was aligned with the themes and, taking note of the iterative spiral, I decided to amalgamate the themes setting high and achievable expectations and providing opportunities for participation, as both pertain directly to learning and the amalgamation avoided unnecessary repetition. I found, as I demonstrated in my literature search, that empowerment was inextricably entwined with connectedness and learning, so, for the purposes of presentation and discussion I decided to use two major themes, once again to reinforce this understanding and to avoid unnecessary repetition. This better facilitates an iterative spiral, as the concepts involved in each, if treated discretely, may result in a presentation that is unnecessarily reiterative and, therefore,

Chapter 3: Research Framework

because of this restriction, fails to reflect the ecological nature of the case study. The major themes

after my immersion in the data now become:

1. Connectedness: Building caring, empowering relationships

2. Learning: Pedagogy that connects and empowers.

As will be demonstrated in Chapter Four, in the presentation and discussion of my findings, to

separate these themes entirely, is artificial. After completing a draft of Chapter Four, I returned to

the data contained in the collation of the questionnaire (Appendix 13) and the interview transcripts

and read them yet again. This was to ascertain the inclusion of all relevant material, to identify any

such material that had been inadvertently excluded and to identify any relevant material that had

previously been discounted because of apparent irrelevance.

Limitations

Relationship between the Researcher and the Researched

Following Lather (1991) and Smith (2000) I acknowledge the fact that a researcher from the

Catholic Education Office "however well intentioned, is seen as the expert who has power conferred

through association with the 'great seat of learning' which influences "the social relations of the

research act" (Lather 1991, p.91)" (Smith, p. 162). While the 'great seat of learning' in Smith's

context is the university, nevertheless, for practical purposes, the Catholic Education Office is viewed

by many in the same light in its relationship with schools. It is essential therefore, to establish an

atmosphere of trust and a rapport with the participants so they are enthusiastic about generating

relevant data. As I have already discussed, my long-standing association with the school has enabled

me to establish that trust as, I am understood by teachers, more as a 'critical friend' than an expert.

The principal recently described my method of working with teachers in the school as the 'creation of

a staircase', on which my enthusiasm for ideas created by the teachers, assists them to take their ideas

to the next level. This provided a firm basis on which to build close observation.

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Biases

In order that the study may deliver findings that are true to the testimonies of the participants, I was constantly aware of my biases. I am biased against that which could be perceived to be an unfairly negative portrayal of the performance of secondary teachers. I understand the positivist research findings in the MYRAD data regarding the attitudes to school among secondary school students (Russell, MacKay & Jane, 2003) are lacking in sufficient descriptive detail to be definitive. Therefore I wished to provide descriptive data, at least in one setting, that might lead researchers to rethink the stark publication of such results, on the grounds that they may be understood to denigrate, by association every teacher in years seven, eight and nine. I must, however, be open to the fact that the MYRAD data may be able to be generalised.

I have always understood the students at Garden College to be friendly. Therefore, I could be prejudiced in favour of a high level of connectedness within the school community. I could construe, on the basis of my interactions, limited though they are, that all students and teachers have a developed sense of belonging to the learning community. In order to counteract this, I allowed all students to fill in the questionnaire and, rather than select a small number of students and articulate their perceptions, I have selected material from 28 interviewees. This group of 28 varied widely in many respects. The presentation and discussion of results in chapter four attest to this.

As described in chapter one, through my involvement with the initial development of the HCEL program, I had experienced the negativity of selected key learning area leaders. I understood that this may have lead to bias against them as supporters of the program. In order to counteract this I allowed all HCEL teachers to speak at some length on their relationship with this sector of the staff. Once again, the presentation and discussion in Chapter Four attest to this.

Another bias that emerged as the study progressed was my attitude to text books. I did not identify this at the commencement of the project, but realised when the students talked positively about them, that my reaction was surprise, as I have been privy to many discussions with professional educators who denigrate the use of text books, particularly by teachers who appear dependent on them. On reflection, at that time, and subsequently, I realise this to be a bias.

Validation

Dey (1993) defines a valid account as one "which can be defended as sound because it is well-grounded conceptually and empirically" (p. 253). He then notes that this is difficult to ascertain as it is only through data that we have access to our sources. Therefore the only way forward is by checking findings through the utilisation of multiple methods. This process is generally known as triangulation, which Stake (2000) describes as "using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation" (p. 443). This method also serves "to clarify meaning by identifying different ways the phenomenon is being seen" (p. 444). This is accomplished internally by my use of observation, questionnaire and interview/focus group as three different avenues of data generation.

The fact that qualitative research may only apply to a single case raises the question of generalisability (Dey, 1993). Even though a single case-study, provides an opportunity to analyse thoroughly and so provide a valid basis for inference, the findings may not be applicable to the wider population. Miles and Huberman (1994) note that single case studies usually have many traits they share with many similar settings, some traits they share with some other settings and a few peculiar to themselves. As my study aims to fill in a blank spot in existing research, the data generated must be sufficiently deep and rich, that researchers may be stimulated to undertake other case studies, so, collectively, they may provide insights applicable to a wider population.

Lather (1991) analyses the concept of validity further and defines construct validity, face validity and catalytic validity. Construct validity is relevant for my study as I am operating from a critical perspective, as I recognise that meaning is constructed in the context of power and I seek to explore and understand the use of power in the research context. It must necessarily follow that I, too, critique the methods I use, lest I abuse the power entrusted to me. I have compiled a research journal throughout the study and have used this as a prompt for reflection. I have also discussed my observations with many participants in order to clarify my thinking and, as noted above, have checked my initial reaction to certain perceptions of the participants. This is face validity according to Lather. Thus I have been able to evaluate and re-evaluate the conclusions I have drawn from the data generated by the methods I have chosen.

In addition I have used the student responses to the questionnaire to develop questions to be used in the interview situation. This is "recycling description, emerging analysis and conclusions back through at least a sub-sample of respondents" (Lather, 1991, p. 67), as this gave individuals the opportunity to clarify the meaning of statements they had made in the questionnaire. In some cases the meaning I had attributed to the statement had differed from the explanation given in the interview. In working with the teachers I was constantly able to seek clarification and further elucidation of my classroom observation. This has proved invaluable in drawing conclusions and developing recommendations. The readiness with which the school community has accepted, with a view to implementation, the recommendations of the study attest to its validity. Lather entitles this catalytic validity. Thus, according to Lather's categories, I am affirmed in my understanding that this study is valid.

Ethical Considerations

While absolute privacy and confidentiality is desirable but not always possible (Christians, 2000) they are, nevertheless, major considerations in a study such as this. The recent Information Privacy Act (Privacy Act 2000, 98 Parliament of Victoria) has placed a great responsibility on educational institutions to ensure the privacy of individuals in a way never experienced before. Therefore assurance is given to participants that there will be no disclosure of the data they generate, that will identify them in any way and that, the only person to view/listen to the tapes they make, will be myself, as researcher and my supervisor. Both teachers and students have been allotted pseudonyms which will protect their identity from becoming public. The teachers have, of course, been alerted to the fact that, because there are so few of them, they may be identified by the views they express. As Fontana and Frey (2003) observe, "because the objects of inquiry in interviewing are human beings, extreme care must be taken to avoid any harm to them" (p 88).

Ensuring the accuracy of data is another ethical consideration. Christians (2000) points out that "Fabrications, fraudulent materials, omissions and contrivances are both non-scientific and unethical" (p. 140). Therefore, the utmost diligence was maintained in order to ensure accuracy. The "iterative spiral", carefully managed, once again becomes an imperative. Copies of relevant documents given to all participants are included in Appendices 2-11.

Conclusion

Having considered all of the above I am satisfied this chapter demonstrates that the research framework I adopt is empowering for the participants and that the epistemology, theoretical perspectives, methodology and methods used in the research inform each other and are consistent with my purpose of conducting an exploration of connectedness, empowerment and learning in year seven at Garden College. I am also satisfied that, through the implementation of this framework, I will be able to answer my key research question:

What factors do students and teachers in year seven at Garden College understand as assisting or impeding connectedness, empowerment and learning?

and the further research question:

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

The unfolding of the ensuing story is an 'iterative spiral" (Creswell, 1998). The management of this "iterative spiral" commences and develops in the next chapter, where I present the data and discuss this in the light of my literature review.

CHAPTER 4

PRESENTATION AND DISCUSSION OF RESULTS

Introduction

In Chapter Two, after searching the literature relating to connectedness, empowerment and learning, I identified the themes around which I would develop data generating instruments. The themes were:

- 1. Building caring relationships
- 2. Setting high and achievable expectations
- 3. Opportunities for participation
- 4. Empowerment

In Chapter Three, I explained the analysis of the data generated as per the epistemological, theoretical and the methodological framework. This analysis leads to conclusions and recommendations through the development of an "iterative spiral" as envisaged by Creswell (1998). The task I undertook was to constantly revisit the field notes, and tapes, both video and audio, of the interviews in order to clarify the analysis of teacher/student perceptions and seek in them commentary on the above themes. The process also enabled the collation of the data from the student responses to the questionnaire and the transcription of the interviews. These, as well as my field notes and research journal, were read several times. I then used the data to weave a story as an aid to internalising as well as linking material. Subsequently, the data was aligned with the themes identified from the literature and, taking note of the iterative spiral, I decided to amalgamate the themes setting high and achievable expectations and providing opportunities for participation, as both pertain directly to learning. This amalgamation avoided unnecessary repetition. I found, as I demonstrated in my literature search, that empowerment was inextricably entwined with connectedness and learning, So, for the purposes of presentation and discussion I use two major themes, once again to reinforce this understanding and to avoid unnecessary repetition. This better facilitates an iterative spiral, as the concepts involved in each, if treated discretely, may result in a presentation that is unnecessarily reiterative and, therefore, because of this restriction, fails to reflect the ecological nature of the case study. The major themes now become, after aligning the data and the themes identified from the literature:

Theme 1. Connectedness: Building caring, empowering relationships

Theme 2. Learning: Pedagogy that connects and empowers.

In order to answer my key research question:

What factors do students and teachers in year seven at Garden College understand as assisting or impeding connectedness, empowerment and learning?

and the further research question:

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

I discuss, within these themes using pseudonyms for all participants and in the light of the literature, the factors that enable the building of caring relationships in year seven at Garden College. I also discuss how these factors are empowering for the students and teachers. I also discuss the factors that impede the building of caring relationships and the consequent disempowering effect this has on both students and teachers. Similarly, I discuss pedagogy that the participants perceive as enabling learning and the manner in which this promotes connectedness and empowerment; and the pedagogical approaches that they find impede learning and the resultant disconnectedness and disempowerment for all participants.

As described in Chapters One and Three, the research was set in the context of the Holistic Course of Enhanced Learning (HCEL) program. This program, however, includes only English, mathematics, science, information technology and studies of society and environment, which incorporates history and geography. The students, when describing factors enabling learning, often did so in the context of other subject areas. Naturally, I have included their descriptions of learning in other subject areas when they are relevant. This highlights the school as a web of learning as

described by Palmer (1998), even in the eyes of students, a view that may surprise educationalists wedded to an acquisition metaphor of education Sfard, (1998).

In Chapter Three, I described my inclusion of students and teachers in the development of my methods and data generating tools. All participants responded enthusiastically to these and, consequently, I have a variety of data that develop a rich picture of year seven at Garden College. Sixty-eight of the 83 students volunteering for interviews attests to their ownership of the project. Both teachers and students were able to share in my continued analysis of the data and their voices are articulate and project powerfully to describe life, as they experience it in the classroom. This has enabled me to include a great deal of their own words, as it is these words that breathe life into the picture they paint and capture the complexity of the situations in which they find themselves. I have indicated clearly, whether each response is spoken or written as a response in the questionnaire. I have also included and discussed disconfirming instances. I have clearly indicated sources of the data in the text, by either describing the source or including this in brackets. When the context does not identify the speaker as a student or teacher I have included [S] to denote student and [T] to denote teacher. As I present my data and discuss them in the light of my literature review and using my extended metaphor I reveal the myriad of complex ways teachers and students at Garden College, grow in the shade of each other.

Theme One. Connectedness: Building Caring, Empowering Relationships

Genevieve [S]: "we all sort of get together and care for them – we're all sort of one".

Initial Observations

As a frequent visitor to Garden College I am continually impressed by the sense of care exhibited by the students towards me in this role. There has never been a time when I have wandered very long, looking for a particular room, without a student or group of students, inquiring politely as to my proposed destination. A description of the best route is always accompanied by the offer to personally escort me. On completion of the task, they always smile, wish me well and go on their way. This attitude was demonstrated in March, 2004 by two year seven students, as I indicated I needed to go to the library. Both offered to take me to my destination. I accepted, but it quickly

became apparent that neither student was sure of the geographical location of the designated building. The solution, of course, was to adventure together in this quest. This we did and found the library. I went about my business there, and the students, hopefully, returned to their area.

This sense of care continued to be obvious as I observed student and teacher behaviour in the HCEL classrooms. My field notes, from March, 2, 2004, describe the morning gathering as informal, with students chatting happily together as teachers collected notes, marked the role and pleasantly talked with them. Students were busy organising their materials for their class, and as they engaged in conversation with each other, a number greeted me. There was a calm confidence evident in the group and this general impression continued throughout the observation period. In addition, the feeling that I was accepted in my role as observer grew as time progressed.

This feeling was confirmed when I was told by Bill as I moved around the class: "My mum had a baby yesterday and she's beautiful". This gave me the opportunity to ask after 'Jane' in subsequent conversations with him. Similarly, Jenny, who had been bridesmaid at her sister's wedding in January, had photos she was showing to one of the teachers and some students. She deliberately turned to include me in the conversation. After a Home Economics class, Edward, a somewhat introverted student, offered me some of his freshly baked cookies to try. Bill also came to my rescue, later, when I had a disaster with the demise of a pen. I quietly asked him if he would have a spare. After a long time negotiating the depths of his capacious pencil case, he produced a case containing an engraved pen and pencil set and gave me the pen. Naturally, I commented on the special nature of the instrument and felt quite humbled that I should be allowed to use it. I returned it with thanks at the end of the session.

Factors Enabling the Building of Caring, Empowering Relationships

Enabling Factors Identified by Students

There were four enabling factors that emerged from the data, identified by the students, in the building of caring relationships that empower and so engender a developing sense of belonging to a learning community and ability to act with confidence in order to direct one's own life within the context of the family and school:

- 1. Positive personal and professional attitudes
- 2. The physical setting
- 3. Developing social competence within a learning community
- 4. Students' understanding of teachers enabling the development of a sense of belonging within a learning community

Each of these is discussed in turn.

1. Positive Personal and Professional Attitudes

As a result of general observation over a period of time (Field notes, 2004; Research Journal, 2004) and the observation experience I described in the last section, I felt that there was a developed sense of connectedness, exhibited by the propensity to build caring relationships. I was very interested to see if there was evidence of this in the student responses to the written questionnaire. As previously discussed in Chapter Three, the purpose of the questionnaire (Appendix 12) was to generate data from all students, so I could use this to develop interview questions on the basis of something interesting and relevant in their responses. Eighty-three students completed the questionnaire.

The responses to questions that asked students to list two or three things they liked about students and teachers fell largely into two categories: those that related to personal attributes and those that related to teaching and learning. It is evident that, in this particular situation, these two aspects are inextricably entwined and so provide a description of both elements of a learning community.

When asked to list positive qualities about teachers and students, students had no difficulty in doing so (see Appendix 13). This indicates relationships are very positive. Students are liked for a range of reasons. When describing their fellow students, a variety of descriptors is evident. Table 4.1 gives some indication of responses:

Table 4.1 Student Descriptions of other Students

Numbers of students	Word used to describe other students
34	helpful
15	nice
10	fun
6	kind

There were a number of other written comments on the questionnaire that reflected a combination of these attributes:

The students are great. We help each other out and discuss things together. I've got heaps of good friends which is great too. [Genevieve]

When I'm having trouble my friends or fellow students will always help me. [Richard]

I like most of the people in the class because they help me and are nice to me. [Barbara]

Other comments were specifically related to teaching and learning as well as attributes:

We all have a positive attitude and we are willing and eager to learn what we don't know and prepared to wait for those who are a bit behind. [Andy]

Everyone helps out the people who really don't understand the work. [Denis]

I like how most of the students co-operate and they never laugh at anyone's work. [Frank]

Teachers are also liked for a range of reasons. When describing their teachers, students too used a variety of descriptors. Table 4.2 give some indication of responses:

Table 4.2 Student Descriptions of Teachers

Numbers of students	Word used to describe teachers
36	helpful
25	Explains well(so we can understand)
10	nice

Others used phrases in describing teachers:

They don't pressure you into getting your work done really fast. [Andre]

Great, open to opinions, respectful. [Anne]

Don't mind if you make mistakes and help you if you don't understand. [Mary]

Nice and relaxed. [Tony]

Very supportive; they will help any of us if we need it. [Andy]

In their responses the adjectives, phrases and verbs used by the students indicate that student/student and student/teacher relationships exhibit a high degree of care for each other. The responses also indicate that students understand that teachers take a personal interest in them and respect them. This paints a different picture to that exhibited by the MYRAD data which reports only 21.8 percent of secondary students understand their teachers to take a personal interest in them and only 44.5 percent say their teachers respect them (Russell, MacKay & Jane, 2003, p. 17). All aspects of a functional learning community are reflected here. Support, understanding and involvement are clearly expressed and can be readily aligned with the sense of belonging that Bernard (1991; 1997) and Resnick, Harris and Blum, (1993) understand to be fundamental to student well being, and that Sergiovani (1993) understands as necessary for people of all age groups. There is also a strong sense in the student responses of the teacher being a "guide by the side" and not a "sage on the stage" (Betts, 1997). Complexity also begins to emerge at this early stage, as interconnectedness and the consequent synergistic power described by Macy (1983) are reflected in the above statements. Teachers being described as, "great, open to opinions, respectful"

by Anne in a single statement captures this succinctly. The inextricable entwining of the three concepts in my literature search is also demonstrated very clearly as the students view learning through a relational lens (Queensland School Curriculum Council, 2000). Thus there is an immediate sense that the students view themselves as an integral part of a learning community. A significant number of comments in the questionnaire, relating to both the students and teachers, combine an understanding of learning being enabled through positive relationships. This reflects the very strong recommendations of middle years literature (Cahill, 2000; Cumming, 1996; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Kruse, 2000; Russell, MacKay & Jane, 2003; Schools Council, National Board of Employment, Education and Training, 1993).

2. The Physical Setting

Year seven students at Garden College are housed in a dedicated building. It is a double story building that has two double classrooms, a small interview room and a teachers' study upstairs and a toilet block downstairs. Student lockers are in the double classrooms. The HCEL program as described in Chapters One and Three, utilises the double classrooms, as do a number of other subjects. The only time the year seven students are required to venture beyond this building for classes is to utilise specialist rooms. This physical structure reflects the recommendation that middle years school structures should be smaller rather than larger in order to facilitate effective teaching and learning (Darling-Hammond, 1997; Hill & Russell, 1999; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Schools Council, National Board of Employment, Education and Training, 1993). This necessitated an amount of refurbishment and a decision to make this a timetabling priority.

My observation led me to the understanding that the classroom and configuration of the surrounding area assisted the building of caring relationships as my field notes (March 2, 2004) indicate an amount of pleasant interaction among the students. This seemed to be facilitated by the physical setting in the classroom promoting communication, through the positioning of students so they faced a group of other students while they worked. There was also a relaxed communal atmosphere in the area outside the classroom. This perhaps emanated from the ownership of the area by the students. I was interested to find out from the students I interviewed if that was so.

Of the 68 students interviewed, some were obviously connected to the school through prior experience, through siblings and friends; others knew students who were coming to the school or, if their primary school was in the same town they may have visited over a period of years. Barbara expressed an affinity with the physical appointments of the school by comparing Garden College with another school to the detriment of that school: "because (the other school) has concrete floors but here you've got a good garden and everything". As the gardens are exceptionally beautiful and well-maintained students are justifiably proud of them.

Generally the physical set-up of the year seven area had the admiration of most students. It made their day much easier:

Being able to have HCEL classes up here rather than having to find room five or whatever. [Barbara]

The lockers in the room are good because I didn't have to keep moving around and everything. [Mark]

They also appreciated the fact that at the end of year seven they are prepared for year eight

It's good for the first part of the year and then at the end you can go down and use those other locker rooms-it gets you used to year eight.

[Jim]

As do the students, the teachers appreciate the isolation of the year level as engendering confidence while feeling protected.

Interior Appointments

The tables set in groups in the classroom also helps the building of caring relationships as one student, Peter, describes the factors that assisted him to settle in:

Probably all the groups and the tables and everything and joining up and seeing others and working with different people and stuff like that. [Peter]

The physical setting facilitates team teaching. The program allows for two teachers to work simultaneously with two classes. The students expressed support for the team teaching approach:

If one's busy you've got another to help; you're not waiting as long. It's probably easier because you can ask them. [Anne]

Having two teachers in the room makes it a bit easier; it's a lot easier when we do HCEL subjects. [Charlie]

Here the setting is clearly linked to relationship building and the sense of belonging to a specific community. This link is further developed by the student responses to question 14 (Appendix 13) which asked them to comment on the seating arrangement and its effect on their learning. Almost all commented on the relational aspect and most understood this to assist rather than impede learning. Genevieve, when she writes, "The seating arrangement is good because you mix with other people", reflects this.

The physical setting appears to be one of the aspects of the program that has contributed significantly to the very low degree of absenteeism that has been a result of the introduction of the HCEL program. I noted that students appeared very relaxed and confident in this environment (Field notes, March 12, 2004). William, one of the teachers, with twenty-three years at Garden College, agrees that the physical setting is a contributing factor and says the decrease in absenteeism has been very noticeable to him since the introduction of the HCEL program. Overall, William attributes this decrease to enjoyment of school by the students, but acknowledges the significant contribution made by the physical setting to this overall state. This understanding was corroborated by the other teachers as they described students requesting their section of the school to remain open on a day when a large section of the school was to be pupil free. Once again, this does not concur with the MYRAD data, that says only 43.2 percent of secondary students want to come to school most days (Russell, MacKay & Jane, 2003, p. 17).

Brother Paul's Room

It is my observation that connectedness, in the sense of belonging to a learning community extends beyond the classroom block. Five students spoke enthusiastically about Brother Paul's room. Brother Paul, a welfare officer, provides a link for the students with the charism of the religious order that owns the school. There are no longer any members of the order on the teaching staff. He specifically caters for those students who find it difficult to associate with their peers at recess and lunchtime. Brother Paul, who sends a birthday card to every student, has a relatively small room, wall-papered with interesting pictures of animals and objects that interest the age-group and well-equipped with puzzles for student use. When describing the evolution of the decorated room he acknowledges that "the kids encouraged me to do it so I tried to cover it with almost every aspect of things". Anyone may come to the room at recess or lunch time. Brother Paul further describes his room as:

A place where they discover and because they're learning about relationships they are sort of very hesitant to branch out to anything above their own year level. It takes a bit of exploring I think to feel they can branch out and live up higher. [Brother Paul]

Brother Paul comes from a culinary background and describes himself as "not being a very good school person". Despite this, he exhibits a profound understanding of the way in which students learn as he says "they're learning things with other kids and some kids are very good at things". While he is unaware of Vygotsky's (1978) Zone of Proximal Development, he exercises its principles. Students are very proud of their achievements in Brother Paul's room. This is typified by Louise as she boasts:

I'm the best at doing the puzzles and the hardest ones. I took home two puzzles that no one had ever done before and I got them. [Louise]

Brother Paul describes the mission of adults in relation to children in ecological terms as he says "they're only little plants and we're bigger plants and we've had more experiences in life". The charism of his religious order is to care for students and he simply says:

I have to be the presence of God to them by the way I treat them and am kind to them and the way I spend time here in the lunch hour and recess and writing the birthday cards and stuff like that. [Brother Paul]

3. Developing Social Competence

While structures are important in providing a relatively relaxed scenario in which to develop caring relationships, interactions form the real ground for relationship building. The resilience literature defines traits of a resilient person. One of these is social competence (Bernard, 1991). A socially competent person exhibits:

- Responsiveness
- Cultural flexibility
- Empathy
- Caring
- Communication skills
- A sense of humour.

Richard demonstrates the importance of relationships as he comments on the most memorable social learning for him:

How quick I get to know people. I've never been to another school or moved to another town. I've always been in the same area, and like, you know a lot of people in primary school, but now I know a lot more. [Richard]

Students articulated a range of significant factors, involving responsiveness, empathy and caring, that assisted their sense of belonging to the year seven learning community. In the student interviews I used the terminology of 'belonging to a learning community' rather than only talking about 'developing relationships' or 'feeling a part of the learning community'. They were very able to talk 'in the adult' (MacBeath, 2004) about this subject and from their conversations the students understand the three terms synonymously.

Greetings and responsiveness were acknowledged as fundamental in all situations and student comments included:

Everyone greets you, when you come to school. [Annabelle]

People are nice when you feel down. They'll come and talk to you. [Jim]

Inclusion, affirmation and empathy were also paramount:

Everyone's been very open, like one person doesn't sit in a corner, they'll come over and include everyone. [Melissa]

If you give people an idea and they say, oh yeah that's a good idea. [Charlie]

Care was further exhibited when students articulated their learning about other people. While simple, they demonstrate a depth of understanding of other students, that is hallmark of interconnectedness:

I've learnt about the things they like and don't like. [Louise]

Emotions, how easily they get upset. [Carl]

Just how different we all are. [Richard]

Some people have mood swings. [Mark]

This more complex statement from Suzanne adds Macy's (1983) dimension that each member of an ecosystem knows that each enhances their own and others' capacities:

Some of us have got strengths because we did things in our primary schools that others didn't do that, so we've learnt that if we know what we're doing that we can help them out. [Suzanne]

Care that is really appreciated is articulated here. It is the sort of care that enables students to be themselves and yet develop in the shade of others:

I find that it's really easy to make friends. Just don't try and be someone else to have friends. [Mary]

Everyone's nice and if they find you're not good at anything they just don't worry about it. [Louise]

A common interest is also helpful:

Heaps of people here like shooting and stuff. I'm into trap shooting. [Jim]

Assistance from other students promoted a sense of belonging, specific assistance in different areas:

Other students who might have known their way around because they might have been here quite a few times and knew where the home eco (sic) centre was or that sort of thing. [Barbara]

Go up and talk to them and make them feel part of it. [Max]

Ask them if they want to come and sit with you and join your group and stuff.

[John]

The overall scenario was articulated by Genevieve in her statement, "We all sort of get together and care for them; we're all sort of one".

Links to Learning

While development of social competence was clearly evident, caring relationships were often linked to progress in learning:

Just everyone's just sort of got the same knowledge; everyone's always learning. [Anne]

and again she comments:

Yeah, this person helped me in maths. He showed me how to do it and now I'm just right with it. [Anne]

A socially competent person requires a level of metacogniton, that is the ability to be reflective (Baird & Northfield, 1992; Fogarty, 1997). All students responded thoughtfully when pondering caring relationships and at times, individual students exhibited deep thoughts promoted by reflection on the situations of others:

There's other people that don't have things you have; there's like people who don't have mums and dads and stuff; and you just wonder how they go. Like if I didn't have my mum and dad I don't reckon I'd be as good at school because I'd think about that heaps and stuff. [John]

This comment demonstrates an understanding of the importance of connectedness to family and as well as school and the ability to be very deeply empathic. In a simple way it approaches Macy's (1983) concept that true interconnectedness is such that we cannot distinguish between a responsibility to ourselves and others.

All the material in this section reinforces the understanding that we grow in the shade of each other, and that this happens in good times and in bad. The students exhibit quite a sophisticated understanding of this for their years, and the synergy that is present is reflected strongly in the manner in which they communicate. They are animated in their articulation of their thoughts and opinions which further projects the optimism engendered by their comments. Their sense of humour, another indicator of social competence (Bernard, 1991), is apparent as they discuss these issues with me and their friends. Thus the students seem to be truly empowered as they act with confidence and understand themselves as having control over their lives in the context of the school. They are open to and value the possibilities and new capacities available to them at

school. The experience of listening to these student voices was uplifting and reinforces Zyngier's (2004b) and Mitra and Frick's (2004) understanding of the ability of students to communicate succinctly and accurately when engaged in dialogue that is truly meaningful for them.

4. Teachers Enable the Development of a Sense of Belonging

Responses to question 16 (Appendix 13) of the questionnaire indicated that 59 out of 77 respondents said they talked to the teacher about problems concerned with work. The reasons given for not doing so reflected either lack of problems or the ability to be helped by a friend. None reflected reticence to approach a teacher.

Responses to question 17, which asked about willingness to talk to a teacher about other problems, reflected and wide understanding of the word 'other' (Appendix 13). All of the 68 students interviewed stated they had at least one significant adult to whom they would talk about personal problems. They included teachers, parents and older siblings. This is significant in promoting resilience (Resnick, Harris & Blum, 1993).

Students spoke about the ways in which they were helped by teachers to settle into school life. This was sometimes in a general way, on a personal level:

They came and talked to you. [Annabelle]

They were really nice. [Anne]

They played a lot of games to get to know people's names and stuff. [John]

John also described a specific situation as this interview transcript shows:

[John] When I first came to do it I could hardly organise. I didn't know what to do but after a while I knew what to bring and everything so I didn't have to go back to my locker.

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[Interviewer] Can you think of what helped you to do that?

[John] Probably the teachers telling you that you had to bring all this stuff and then knowing what you probably need in English or Maths or something like that.

Other students commented beyond the personal. Barbara stated:

The teachers involve them. They don't just choose the popular people. They choose a variety of everybody. [Barbara]

Thus the description is that of an "educational ecosystem" as described in the PEEL Project (Baird & Northfield, 1992, p. 6): teachers and students working and growing together. In these instances the shade provided by the teachers is allowing the students to grow significantly.

Enabling Factors Identified by Teachers

Connectedness (is) being human and looking into kids' faces when you talk to them and smile at them. Jill and I if we have a little story to tell, we just butt in and say, 'Excuse me can we tell a little story?' I think we get on very well and it's just being human really. Trying to work out where the kids are at, what's important to them at that very moment and then trying to say, 'How did this go?' or 'How did that go?' And try to relate it to their lives, just to make them feel they're important [Cheryle]

This quotation from one of the teachers highlights the ability to operate from the heart as well as the head (Palmer, 1998). It demonstrates the honouring the little as well as the big stories that is one element of Palmer's paradoxical pedagogical design. This is a valuable way of connecting, empowering and providing balance. I observed many times when all four teachers honoured the little stories to the delight of the students. They also honoured their own little stories and included examples that were built on their own mistakes. This empowers the students as they are encouraged by the fallibility of those who often appear omniscient. It is also exhibiting respect

for the students and taking a personal interest in them. As noted previously, this appears to be a very different scenario from that described in the MYRAD data (Russell, McKay & Jane, 2003, p. 17).

The following points concerning connectedness were articulated by the three teachers who took part in the teachers' focus group discussion and in the individual interviews conducted with the four teachers. Teachers have many specific strategies that assist in developing connectedness in their students. I now discuss these in two sections:

- 1. 'Power with' and
- 2. HCEL Teachers as a Community of Learners

1. Power with

All teachers emphasised the need for students to feel a sense of belonging in their classes. They have an understanding of the resilience literature and its implications for the classroom. They understand connectedness as translating to students feeling happy, confident, and supported:

If they have confidence then they feel the whole group is going to be supportive and not knock them. [Jill]

They also understand it as inextricably linked to the ability to learn:

If kids don't feel they belong they can't learn; unless kids are happy they won't be able to learn. [Cheryle]

Talking to them to ascertain their interests and thus making connections between students and themselves is a key strategy:

Find time to talk to them in Pastoral Care and roll call in the morning.

Like ask them how their footy was on the weekend. Where did you play on the weekend? And the kid who does the motorbike track, you ask them questions so at least they start on the positive. [Maree]

HCEL is regarded by the teachers as extremely successful in the area of transition from primary to secondary school. They maintain the process of building caring relationships commences the year before the students arrive in year seven because students in year six visit a number of times during the year and late in the year come to the school to begin working with their home group and teachers.

The teachers understand the team teaching situation in HCEL to be an advantage, as it allows for multiple foci. It also allows for immediate collaboration. As Cheryle commented,

Two heads are better than one. You may not have noticed something about a particular student and the other teacher will say, 'Have you noticed such and such and then that gets you in tune and you can help that kid. [Cheryle]

Macy's (1983) concept of 'power with' is evident here, in the context of teachers working together for the good of the students. I observed this to be typical within the group of four teachers. There was a great deal of discussion about students, connectedness and learning, but never was there a sense of rivalry. The power relations within the group are synergistic and this encourages experimentation as each person appears to be connected and empowered. At times, when I was included in the discussion, I found the ability to speak with more than one teacher about my observation in specific situations very helpful, as it assisted in validating my conclusions or stimulated me to look more deeply into the situation.

Extended Periods of Time for Learning

The HCEL program also ensures, as recommended by middle years research, extended periods of time with students (Cumming,1996; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Kruse, 2000; Schools Council, National Board of Employment, Education and Training, 1993). Each period is 80 minutes. This assists in developing caring relationships. Within these extended periods of time seating can be arranged to ensure students are placed strategically to form new relationships.

I observed Cheryle voice the expectation that students would use 'some practical problem solving techniques' when asked to form groups of their own choosing. They were left in no uncertainty that all students needed to be included, but were left to their own devices to achieve this. Here is another strategy to enable students to plan, an important factor in the development of resilient people (Bernard, 1991; Victorian Curriculum and Assessment Authority, 2005).

The specific advantage of William, who has been twenty-three years in the school, was acknowledged as distinct. Jill comments: "He knows everybody's father and so many students have quite a rapport with him, particularly as he knows the boys sporting teams". William, in his interview, supported this by saying that while this was true, he was still amazed at how quickly he got to know all students. He maintained this was due to team teaching and the extended blocks of time with the students. This supports the findings of many middle years' projects (Cumming, 1996; Hill & Russell, 1999; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Schools Council, National Board of Employment, Education and Training, 1993).

Specific Strategies to Assist Connectedness

The teachers in their focus group interview also acknowledged specific strategies to assist connectedness for all, such as:

- the acknowledgement of birthdays and the consequent singing of Happy Birthday to everybody
- the signing of a card by everyone in the class
- the year level camp
- sharing jokes with students.

Some of these strategies are only used in primary schools, so it is refreshing to see the use of them in year seven at Garden College. While the teachers understand these strategies as beneficial, they understand the attitudes that pervade all class activities as the greatest impetus for developing a sense of belonging.

Strategies for students who may be deemed 'at risk' of not experiencing a sense of belonging to the learning community, were also acknowledged. Jill commented that swift action is needed:

When Des isolates himself from other kids because of his behaviour, then we have to try extra hard to move him around and help him try to fit in with kids who might accept him. [Jill]

I observed that engendering a sense of belonging in these students was a high priority for the teachers. My field notes (April, 2, 2004) indicate this:

My conversation with Cheryle underscored her interest in connectedness. She appears passionate about this, particularly as Brett has had previous negative experiences and is exhibiting anti-social behaviour. Cheryle sees this as a great opportunity to have him experience a connected environment.

Modifying work requirements for students at risk so they can experience success is understood to be essential. Once again the well being of students is paramount (Resnick, Harris & Blum, 1993; MindMatters, 2000). Beyond this, the wellbeing system within the school is understood to be of great assistance with these students. This involves other team members and coordinators. Consistently within all this, is the articulation of strategies that connect with other students, typified by Jill's comment:

Group work is a great strategy for students at risk. When they've got at least three other people at the table other than themselves, who can actually help them, they can get help before they go to the teacher. [Jill]

In speaking about a specific student, Maree highlighted the extent to which the students are drawn into the problem solving strategies when dealing with a very difficult student. She also commented on the significant progress the students had made in coping with the situation and how

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much this is appreciated by the teachers. This quotation encaptures the specific nature of the advice

and the dedication and time involved in making progress:

They're really good, the kids, with Des and they understand the way

we feel and they help the situation. At the beginning of the year they

didn't, but now they are happy to help him as well. I think the kids in

the class know what he's like and I often talk to them and say he's

having a bad day so can you not push it, can you not antagonise him,

can you not pick on him and they're working with me. He's made big

steps himself in some areas. [Maree]

Here is ample evidence that the teachers use 'power with' to connect students within this

community of learners. They possess a capacity for connectedness and work hard at weaving the

web of connectedness that Palmer (1998) speaks so passionately about. The fabric of life has many

textures and colours, but in the context of their teaching these teachers are able to join themselves,

their students and their subjects in this fabric in a very balanced manner. The balance is further

exhibited through the consonance between student and teacher understanding of student attitudes to

school. There does not appear to be the discrepancy between student and teacher perceptions that

exists in the MYRAD data. (Russell, MacKay & Jane, 2003, p.17). Any discrepancy is minimal.

Thus, there is every indication that these students will be sufficiently empowered to weave their

own web in the way Palmer advocates.

2. HCEL Teachers as a Community of Learners

The four teachers spoke favourably and enthusiastically about themselves as a team.

I think we get on very, very well. None of us are taking a leading role.

None of us really dominates. [Cheryle]

They share ideas, teaching materials, tasks and problems.

Cheryle and I work together; she's helped me through. [Maree]

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They understand their personalities and personal situations to contribute significantly to this. In conversation they spoke of the understanding they had for each other's personal situations and they indicated they compensated for and supported each other as any crisis arose. Thus they do not limit their conversations to teacher practice, a fact that Palmer (1998) decries. They talk about "the human conditions of teachers" (p. 145):

This year we've had a few emotional personal situations with some of our team members, so that draws us together. [Jill]

The advantages of the PEEL project outlined by Smith (2000) are evident here, as the teachers collaborate and affirm each other in times of uncertainty and certainly combine to "maintain momentum through difficult situations" (p. 127).

William comments that it was not always so for him with previous teaching partners but now he sees this team as vibrant. He is also able to translate much of his ability to collaborate to his work in year eight:

Last year when I took science with Pierre in year eight I hadn't done it for a long time. Because I'm used to doing it up here, I'd go and ask for help and we worked together and even did a bit of team teaching. The experience I've had here I've been able to use rather than reinvent the wheel. I've been able to go over and say, "[w]hat are you doing?", rather than doing it by myself. [William]

Thus the concept of 'power with' (Macy, 1983) is again evident among the teachers as a group. They feel a strong sense of belonging to their learning community and certainly they understand that as Macy says, they enhance their own and each others capacities. As far as I can ascertain, as an external observer, they extend their understanding of themselves as a community, to the extent that their responsibility to themselves and each other is hardly distinguishable. As members of the HCEL team, in their mutual relations, by demonstrating professional collaboration and personal concern for each other, they are an example of a connected, empowered learning

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community (Fullan, 1999; Hill & Russsell, 1999; Kruse & Louis, 1995; Marsh, 2001; Stoll et al,

2003). It appears to me that it is the combination of professional collaboration and personal concern

for each other, underpinned by the fact that they accept each other as they are, that enables them as

a team. One team member Jill, described it aptly as "a bit of give and take". It is the 'give and take'

applied to their understanding of themselves personally and professionally that welds them as a

team. My understanding thus described is corroborated by the fact that none of the three team

members who joined the HCEL community after the initial implementation, received any formal

induction or professional development into the team approach that is integral to the model.

Growing in the Shade of Each Other

There is ample evidence here that there are many shady areas in this schoolroom garden

where developing plants may and are encouraged to shelter. Here they are able to grow, unharmed.

As there is increased sunlight and rainfall, that penetrate the shade, they are increasingly able to use

this to their advantage. The entities that provide the shade, are well able to thrive in full sunlight and

rainfall and continue to do so, thus "enhancing their own and others' capacities" (Macy, 1983, p.

31). As a result, there is optimism that all in the garden will flourish and do so in the optimum

manner for each individual.

Factors Students understand as Impeding the Building of Caring, Empowering Relationships

Exclusion from the Group

Exclusion from the group was articulated by all students as the major factor impeding the

building of caring relationships. Students, who generally feel a part of the community themselves,

were well able to articulate their feelings when not part of the group. These are typified by:

Depressed. [Marian]

Pretty down. [Jim]

and were further defined in a somewhat philosophical manner as:

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We all go through those times even if you've got best friends and everything. [Barbara]

Part of life. [Max].

Reasons cited as a cause of exclusion were attributed either to themselves:

When you've hurt someone and the others are yelling at you. [Jim]

to the group:

Because it's (the class) broken up and there isn't much room. [Kevin]

or to a specific more complex problem articulated by Edward:

[Edward] I have had, ever since grade one, a teasing problem. I thought it had stopped this year; it went quiet last year. This year there are some people that think they're the best. They're not too bright. [Interviewer] How do you handle that?

[Edward]I let it out in one go while I'm alone, I ignore them and generally if they keep going just walk away and go somewhere where they can't annoy me.

Strategies to cope with Impeding Factors

Self assistance was strategic for those feeling a little left out. These ranged from the proactive general approach:

Go and talk to other people; follow them around. [Jim]

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to specific strategies, some simple:

In primary school I was always yelling at the top of my voice and I stopped that because other people wouldn't like it. [Bernard]

and others more complex, such as Edward's statement:

In the beginning I was the only one fromI did not know anyone in the class and I sat quietly. Then as the day went on (I) came out of my corner and met people. When I sat and watched I learnt people's names and then got a couple of friends. [Edward]

Generally, as previously discussed, the students exhibited a developed social competence. Consistent with this, are responses that were fairly matter-of-fact, when students were questioned about strategies to include those who may be excluded. This is because exclusion, at some points in life, is taken as part of life. Some strategies involved only one person:

You just go and find someone else. [Jim]

Try not to be bad to them. [Mark]

Say something nice to them or something. [Richard]

but most involved dealing with another person:

Try and get them to talk. [Carl]

Make a funny face. Make them laugh. [Jim]

Just sit for a while and have a chat. [Patrick]

Yeah, have a talk to them and like make up a conversation. [Richard]

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All these strategies articulated by the students are acceptable in most classrooms. The alacrity of

their responses and the apparently high level of connectedness within the overall group, vouches for

their implementation as required. It is interesting to note that Richard, Mark and Patrick maintained

during a focus group interview that they have never felt ostracised from the group. I then asked,

"Would there still be some who are outside the group, even though people are trying?

Yeah a couple. [Richard]

There's always a few. [Mark]

New kids probably. [Patrick]

Do you think they will gradually get into the group? [Interviewer]

Yeah. [All]

I think they will. [Richard]

These reactions reflect life as it exists for these students, with the inevitability of exclusion

at some time. They, therefore, can be considered mature to a degree. Kevin, a student who came

during the year, found it extremely difficult to become part of the community, hence Patrick's

comment about 'new kids'. The fact that they all thought it possible to become part of the group

was spoken in a tentative manner and Richard sounded doubtful when speaking his final comment. I

understood them to be expressing aspirations rather than realities. It is a concern, therefore, that this

thinking does not encapsulate the understanding of the ecological, in the merging of the development of one's own and others' capacities (Macy, 1983). Here, the dominant power may

merely be reinforced (Freire, 1972). While there is a high level of connectedness with the overall

group there are students, albeit few in number, who do not feel they belong to the learning

community. The fact that this is viewed as inevitable by these students is a concern for the

development of a truly functional and balanced web of learning (Lepani, 1994; Palmer, 1998).

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There was also the admission that all people want to be included, but the confusion and perhaps frustration this causes in practice, is well articulated in the comment from Mary:

They have to want to be included because some people are like really quiet and don't seem to mix very well, but if they talk to people they are going to be included. [Mary]

Disconfirming Instances

A very few students felt they were deliberately excluded in an ongoing manner.

I have two friends but the rest seem to ignore me. [Kevin]

New students found it difficult to settle in, if they came during the year. Kevin was such a student and when asked if he found it difficult replied:

It was a little bit hard because like I didn't know anybody at all.

Because we split up for classes the two people who were assigned to show me around had to go to a different place. [Kevin]

Adverse comments were very few and linked to processes rather than personality:

I don't like the teacher because she doesn't always let us make our decisions. [Edward]

While it may be difficult, at face value, to ascertain whether his dislike of the teacher arises from lack of encouragement to participate in decision making or a wise insight on her part, I lean towards the latter. This leaning stems from my observation of teachers working with Edward, and the efforts they made to include him and accommodate his mode of learning in class. The wish on the part of teachers, acknowledged in the MindMatters project (2000), to contribute to the well being of students is evident here.

Edward is a disconfirming instance. He comes from a small rural school, has an anger management problem and so finds relationship building difficult. He stated in the questionnaire, that he liked the students in his class "because they attract attention away from me" (Appendix 13). Thus it is not surprising that Edward likes to work alone as he says "I always like working by myself because two makes it harder because you have to tell the other one what to do and then they don't agree". At times even he acknowledges the benefits of assistance from another person, even if he only acknowledges physical assistance:

The board game would be easier with someone because I'm doing a snakes and ladders type thing and if someone's drawing the circle the other one can be doing the ladder. [Edward]

Edward, from observation, appears connected in a somewhat atypical manner, in that he has few caring relationships, but those he has are significant. His coping strategy is to retreat into his music study. Edward talked at some length about his musical ability and prior and present experience of playing a number of instruments. This seems to be an avenue to promote connectedness. The teaching staff seems to be aware of this. He continues:

I am with a pipe band and marching band and ...
wants me to join the cadet band and the year seven band because I
catch up with her every so often for lessons on the recorder just to
keep me going. [Edward]

Edward's turn of phrase and demeanour is rather adult. I observed that he seems more relaxed in adult company than that of his peers and this may reflect the situation at home. He maintains he has significant adults in his life, with whom he communicates, and this would appear to be his safety valve, as he deliberately seeks out adults who will listen to him (Resnick, Harris & Blum,1993).

Brett, I understand as another disconfirming instance as far as his relationship with other students is concerned. In question 5 he cited "[b]eing called names by other students" (Appendix 13) as something that stops him learning as well as he could, and, in question 15 when asked to name something he would like to change he responded, "[k]ick out anyone who calls me a name"

(Appendix 13). He exhibited surly behaviour in the classroom, but as he was one of the few who declined an interview, I could ascertain nothing further. Brett's response to his teachers is positive, however, and this should prove a protective factor for him as the resilience literature understand connectedness to one caring adult to be sufficient to foster resilience (Resnick, Harris & Blum, 1993).

Time, a Significant Factor for Teachers

Teachers acknowledge they have to consciously find time to talk to students to ascertain their interests and thus make connections between students and themselves in a very busy schedule, with the numbers involved:

In Pastoral Care and roll call in the morning; like ask them how their footy was on the weekend. Where did you play on the weekend? And the kid who does the motorbike track, you ask them questions so at least they start on the positive. And then when you're walking around there's time to talk to them. [Maree]

This is an ongoing problem. Stoll (1999) and Kruse (2000) emphasise the importance of teachers having time to meet and talk in order to improve professional practice and the same is true in teacher and student relationships.

Connection with the Wider Staff Group

The following delineates the HCEL teachers' understanding of their connection with the wider staff group. This is an important as it highlights a number of difficulties the HCEL teachers have encountered in their efforts to establish and maintain a positive relationship with the wider staff group.

I have demonstrated that there is a high level of connectedness, exhibited through the operation of caring relationships, and empowerment among the teachers in HCEL. This, however, does not appear to extend to all facets of the wider teaching community. The manifestation of

connectedness and the consequent sense of belonging to a learning community is inadequate in the context of the relationship between the HCEL teachers and selected members of the wider staff community, particularly some key learning area leaders. In a few instances, it is manifestly one of disconnection and counter productivity.

The teachers in HCEL are not optimistic about their position in the wider staff group as typified by this lengthy exchange with Cheryle and Jill. I document the exchange at some length as this assists in capturing the complexity of the issues involved and the dejection and frustration underlying the dialogue:

We don't really connect very much I don't think. [Cheryle]

Very, very few people come up here and it is a long way away.

We don't go to the staff room a lot either. [Jill]

Cooperation with some staff members also seems a problem. This is the result of physically separating the HCEL program from the remainder of the school. Thus that which is viewed positively by the HCEL community appears to be viewed negatively by some other members of the school community:

I'd go down there and I'd walk into a lab and the lab assistant would come out and would want to know why I was there and it just made things really awkward, and then often there weren't labs available so I did request they were timetabled. [Cheryle]

Jill understands the relationship of the HCEL teachers to the wider staff group to be a significant issue.

[Jill] I do believe that's a big issue (connection with wider staff group). They (some other staff members) do believe that we're doing something up here but I don't think they really know what we're doing and

sometimes I don't think they really care about what we're doing, because they see it as a totally different mini school within the school and they do get to be a little bit pannicky when it comes to taking extras up here. I don't really know the background but I do know there was some angst at the introduction of the program; some teachers have just never really clicked or wanted it to continue.

[Interviewer] What about your key learning area head?

[Jill] June, as far as (the subject) goes, is very supportive on a personal level. She's always very affirming to me. She has taught year seven before. She understands the work that we're doing but because we disagree on integration there is a certain degree of tension there. She does feel that history and geography do have to be separate and we have had arguments, professional arguments.

The manner in which Jill delivered this last sentence, indicated she felt disempowered in this situation. Here is evidence of a sub-culture within the school and those who are extraneous to the group are unable to understand meaning as it is constructed by this sub-culture. This is symbolic interactionism (Bumer, 1969). Thus those outside the sub-culture suffer exclusion and the subsequent 'power over' situation.

Implications for Connectedness and Empowerment

There are a number of interconnected issues involved in this scenario. In the light of this and my observation, I will discuss the implications for connectedness and empowerment.

My observation of the context of the HCEL program in relation to a significant sector of the wider staff group and specifically to some key learning area leaders is relevant. There are a number of issues, where HCEL teachers are at variance with some members of the wider staff group. Most of these highlight lack of understanding of the program, demonstrated by the fact that other teachers only see the dedicated building as an isolating factor in a negative sense. This, as discussed earlier,

differs greatly from the perceptions of the students and teachers in the program. Negativity from selected staff members, attributes the perceived isolation of the HCEL teachers, and consequently, the program, to the nebulous 'they' who should communicate an understanding of HCEL and make time for all to visit the classrooms while classes are in session. My observation is further confirmed by the dejected and at the same time, frustrated tone of Cheryle's and Jill's voices as they communicated their understanding of the relationship. Jill's understanding of personal affirmation, in the context of control of the program, as the *modus operandi* of that particular key learning area leader is corroborated by my observation.

The difference in the interaction of the HCEL students and teachers and that of the HCEL teachers and some members of wider staff group lies in the fact that the former exhibits synergistic power (Macy1983) and the latter does not. The latter exhibits "patterns and flow" that are disempowering as the connections are tenuous. The understanding that we all need connectedness in our lives (Sergiovani, 1993) does not extend into some areas of this section of the school arena. Interconnectedness is not always evident and, therefore, shade in which others may grow is sometimes difficult to find. 'Power over' is also exercised actively and passively. It is demonstrated actively, by certain key learning area leaders as they retain a hold on curriculum development within the program, and passively, by many of the other staff members who appear to ignore, and so impede, curriculum development in the area. In this context the HCEL teachers are disempowered and teacher capacity (Lodge & Reed, 2003) is low. This results in the organisational learning of the school being lowered, as the HCEL teachers have little capacity to augment this. In many respects they are balkanized, as described by Fullan (1993) because they are isolated from the wider staff through the hostility of some staff members. The capacity they have has not been brought forth through the process of living, as described by Maturana and Varela (1992). Teacher learning is also affected detrimentally, as Lodge and Reed (2003) stress organisational and teacher learning are directly affected by teacher capacity. There are, of course, key organisational people, such as the principal, curriculum coordinator and year level coordinator, as well as other staff members who support the HCEL teachers and program. Much of the HCEL teachers' negativity may be attributable to the human trait of concentrating on the negative to the detriment of the positive, in any given situation. My observation, however, would confirm their negative feelings in certain key instances. In addition, it is relevant that the strong sense of belonging to a learning community that exists in the HCEL program is, anecdotally, atypical in a secondary school.

These observations of and conversations with teachers lead me to identify Palmer's (1998) understanding of fear as paralysis, as the major factor underlying the relationships that are dysfunctional. Palmer understands fear to emanate from people viewing each other as aliens. His language is strong as he argues that it is the fear of an encounter with this alien "otherness", which, in this case, is a colleague, that paralyses education. Perhaps relevant, too, is the fact that the development of the HCEL program depends very much on the teachers involved, and so, in reality, is a participatory active research project. This places prominence on teacher knowledge, and, according to Kemmis and McTaggart (2000), may be viewed as problematic by other teachers in the school. Once again 'power over' dominates at the expense of 'power with'.

Present too, is the 'inertial bureaucracy' described by Fullan (1999, p. 31). There exists here, as in most schools, a developed bureaucracy exercised through many protocols. While the concept of team is widely used, I observed that the day to day operating often reflects power play that is definitely 'power over' in its manifestation and is not an example of Foucault's understanding that power should rise (Danaher, Schirato & Webb, 2000). There are notable pockets in the school, such as HCEL, where 'power with' is the *modus operandi*. 'Inertial bureaucracy' also prevents ongoing interaction and connectedness, which, if active, facilitates the induction of all new teachers into the educational life of the school. 'Inertial bureaucracy' also prevents the updating of existing staff and so, very quickly, there develops a gulf between those who are involved and those who are not. Many voices go unheeded. This promotes discrete development at the expense of interconnectedness and has, as its goal, the cohesion of the institution rather than the development of those people within it. While bureaucracy is a fact of life in schools, I think MacBeath (2004) delineates a way forward, by highlighting the competing voices that exist in a school community and stressing that it is through the successful management of these competing voices that schools will flourish. Responsibility for management of competing voices, to be successful, must lie with all sectors of the school community and not be the sole property of the administration team. These issues will be discussed further in the final chapter. This study reveals and identifies these tensions which tend to be undefined in schools.

Growing in the Shade of Each Other

It is evident that in certain areas of the garden, growth is impeded, as sunlight and rainfall are not present to the extent that all are enabled to flourish. Despite this, it would seem that the interconnectedness of all entities means that each has the ability, even though shade, at times seems minimal, to access sufficient nourishment to sustain life and grow. The messiness and overlap of the connectedness, learning and empowerment is well articulated by Jill in the following description of teaching in the HCEL program; it demonstrates that to isolate enabling and impeding factors, as to isolate plants in a garden, is artificial in itself and does not really reflect the paradoxical nature of an ecological model. It also highlights that it is the extraordinary ability of teachers to connect seemingly disparate concepts and events, which enables them to grow in the shade of each other and, despite significant perceived setbacks, to successfully negotiate their role, so that overall, life continues positively and in a balanced manner. Teachers have an amazing ability to focus on the positive, which allows them to thrive, despite adversity. Jill is speaking of her involvement in the HCEL program:

It's very engaging for kids and as a teacher I just love being up here.

I love the interface with the kids. I sometimes find the extent of marking difficult, but that's just a management thing that I have to work through. The running on your feet type thing can be something that connects you, because this year we've had a few emotional situations with some of our team members; so that that draws us together but you need time to deal with that and that impacts on whether you're getting this done or that done. It's a bit of give and take that has to happen there. Yeah, but I enjoy it. [Jill]

Theme Two. Learning: Pedagogy that Connects and Empowers

I will now present and discuss the factors that enable learning and those which impede learning in the context of the second major theme: 'Learning: Pedagogy that connects and empowers'.

As noted previously, I understand learning as a complex co-emergent process of intellectual and social development enabled through the construction of meaning, taking place within a community that is dynamic and robust in adapting to changing circumstances. A full discussion of theory and literature underpinning this definition is contained in Chapter Two, where I identified enactivism as the most appropriate learning theory for this study.

A varied and broad understanding of learning that included the intellectual and social and engaged the whole person was expressed in a group interview by three of the teachers. Although it is not articulated, the accumulated understanding is enactivist, in that multiple domains of human operation are referenced. They built upon each other's understanding:

To stimulate the mind; to understand and gain knowledge and stimulate; to give ideas and process thought, in broad terms. [Maree]

To get a buzz out of doing the activity and learning and you can't learn without getting that buzz. They don't have to have a smile on their face but be interested. [Cheryle]

Learning life skills and I've got to get on and do it whether I like it or not; learning about and with others. They're learning out of school with their parents, on their sporting fields, in their boating, in all out-of-school activities they're doing; it's not just about school. [Jill]

The teachers' understanding of indicators of learning was similarly varied and broad and encapsulates higher order thinking and a lateral approach.

Their (the students) reactions, emotionally especially. If they react, then to see if they think through the reaction before they react. [Maree]

Asking a good question. [Cheryle]

Completing the work, the task in detail, helping peers, showing leadership. [Jill]

Factors that Students Understand as Enabling Learning

Student Understanding of Learning

Students, according to their responses to the questionnaire understand themselves to be learning. The questionnaire asked students to choose one of English, SOSE, Science or Maths to answer the questions. Table 4.3 highlights some relevant and interesting data generated by the 83 students who completed the questionnaire.

Table 4.3 Some Data generated by Student Responses to the Questionnaire

Question	Numbers of students	Description of learning
2. How well do you feel you learn in this subject?	71	'Very well' or 'Well'
4. How do you know you if you are learning well in this subject?	18	Test scores
18. Think of another subject that you do not like as well. Do you learn well in that subject?	63	As well as in the chosen subject

Table 4.3 demonstrates that in their responses to question two of the questionnaire (Appendix 13) 71 students out of 83, described themselves as learning well or very well in the particular subject area they had chosen to write about. It is also interesting that when asked in question 18 to think of a subject they did not like as much and rate themselves as learners in that subject, only 20 students said they did not learn as well as they did in the one they chose to write

about. I also asked the students, in question four to say how they knew they were learning well in that subject. Their responses were wide ranging. Eighteen from the group of 83 students relied on test scores, but the remainder chose other indicators, the description of which resonates strongly with an enactivist approach as they are dynamic and reflect the process of knowing rather than acquiring knowledge. As these responses do not reflect regurgitation of facts (Schools Council, National Board of Employment, Education and Training, 1993, p. 65) and they do not reflect either Freire's (1972) 'banking' system of education or Sfard's (1998) 'acquisition' metaphor, participation, the antithesis of both of these metaphors is evident.

The responses included:

When I understand what I'm doing and I know I can do it. [Claude]

If I find it a challenge and in the end get it right. [Louise]

I am discovering things I didn't know before. [Kevin]

If I have great pieces of work that have all the required content and more. [Annabelle]

When I get the answers right or figure something out by myself. [Richard]

When I go home and tell my mum what I've learnt. [Moira]

These responses also provide evidence of a metacognitive approach to learning (Baird & Northfield, 1992) as all these students are able to reflect on the learning process and articulate its successful fulfilment.

Overall, the data generated by the participants through responding to the questionnaire and in individual and focus group interviews identified a number of factors that enabled learning. Students learn when they:

Chapter 4: Presentation and Discussion of Results

1. understand it as an achievable challenge

2. learn with friends, teachers and family

3. feel the learning is relevant and it is participatory

4. enjoy learning

5. use multiple intelligences

6. experience all of the above in one context.

These factors are discussed below.

1. Achievable Challenge

The concept of learning occurring in the context of an achievable challenge was evident from the number of entries in my field notes that indicated students experienced success in their learning. Louise wrote as her response to the questionnaire, describing how she knew she was learning, "If I find it a challenge and in the end get it right". When this was discussed further in a focus group Annabelle, using a great deal of body language, elucidated further:

[Annabelle]Yeah, I like things that are just a little bit out of reach and you can grab and reach up again (words acted in bodily movement with hands reaching up several times).

[Louise] Yeah, I agree with that.

[Interviewer] So you're not having much trouble grabbing them I gather.

[Annabelle] Not really. (All indicate agreement)

[Interviewer] But they are just that little bit out of reach.

[Louise] Yeah they are. (All nod in agreement)

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Here the concept of learning as a challenge is linked explicitly to scaffolding (Dodge, 1998), progress and increased control over learning (School of Engineering, Burnie College of TAFE, 1989). I observed many examples of teachers offering a challenge, scaffolding tasks and assisting students to progress and thus achieve. A notable example was Jill involving the class in a creative approach to developing the skill of summarising. Not only did she scaffold for the class in general, but also for one student in particular. The task was to create a poster containing a 'blurb', summarising the particular section of the novel the group had chosen. Groups had been negotiated by the teacher and my field notes record, "Students settled quickly to groups, anxious to commence. They worked very amicably, with seemingly no tension" (March 2, 2004). There was evidence of teacher direction when one group decided to 'allow' one student to read and dictate their actions. To avoid this, the teacher intervened and suggested one read and the others took notes. This was achieved successfully.

Jill scaffolded the task very competently by giving explicit directions as to the number of sections to be included in the poster, leading a class discussion on the appropriate and effective use of colour and reminding students of the skills of summarising. As this was early in the year Jim tired very quickly. Jill, in a non-confrontational manner, re-engaged him with the task. He painted really well when on-task and was anxious to assist in the completion of the group's poster. As each group finished they went on with other work. My field notes conclude, "[e]xcellent mix and scaffolding of activities; painting a poster to English rules- all have accepted the challenge and achieved" (March, 2, 2004).

There was additional evidence, however, of student understanding of the scaffolding of learning in HCEL and other areas, through specific comments. Here, too, is the demonstration that skilful scaffolding empowers and enables students to gain control over the elements essential for learning:

I found out that the things in woodwork that you cut it with are not as scary as they look. If you know what the teacher's talking about then you understand what the machine does, like the sander and everything. [Suzanne] He (the teacher) tells you to be careful and everything and I think I don't want to do that and then you get on there and like, oh, seeing as I did the right thing, it's not that bad. Mr Jones makes it so fun. We get so much stuff done. I'm telling Joan about all the things I'm doing in wood work. I got an A+ for my prac (sic). [Julie]

Well in SOSE, geography we had to make a board game where like you had to visit all the places. Well, that kind of helped us learn because you had to get to know the place before you chose the position. [Bernard].

Acceptance of a challenge and scaffolding learning experiences lead to progress and so these students are receiving the 'high expectation messages' advocated in the resilience literature (Bernard (1991; 1997) and are achieving as a result of teachers setting high and achievable expectations advocated in middle years literature (Russell, Mc Kay & Jane, 2003). Underpinning these is a Vygotskian (1978) approach to education. The notion of scaffolding is well articulated in constructivist approaches as teachers lead students to continuously achieve at higher levels. Vygotsky's Zone of Proximal Development is evident here as in the learning situations described by the students, they admit to having difficulties in completing tasks, which range from difficulty in comprehending to difficulty because of fear of the process. Here they articulate what they can do unaided at the beginning of the learning experience and also what they achieved through interaction with peers and other adults. The confidence of their description implies they can now achieve similarly, unaided. Thus the Vygotskian approach combines learning with connectedness and empowerment as students learn in the company of others and in so doing experience greater control over their learning and hence their lives. This understanding also applies to an enactivist approach as Begg (2002) describes an enactivist approach as "a recent development from constructivism" (p. 51).

The Physical Setting

The physical setting assists achievable challenge. My observation of the classroom told me that learning was paramount. Student work was displayed to advantage and the autobiographical poems

on the pin boards reinforced the concept that learning was more than academic pursuits (Field notes, March 2, 2004). These, however were well-catered for as relevant web sites were also displayed for student use. Students always had work to do and seemed interested in finishing pieces efficiently and to the best of their ability. They told me that if they worked really well in class time the amount of homework would consequently be reduced. Their efficiency seemed to result from a combination of interest and pragmatism. This is reflected in William's comment to me that the teachers find the students really appreciate structure when they come into year seven and that feedback from HCEL students in the early years of the program supported this.

The team teaching seemed to me to be a distinct advantage and students agreed with me for different reasons:

If one's busy you've got another to help. You're not waiting as long. It's probably easier because you can ask them. [Anne]

Two teachers in the classroom, one's explaining and the other one's telling people off for whispering and you can get distracted by them and not hear what the teacher's saying. [Carl]

This arrangement provides the flexibility that Gardner (1999) advocates as a successful strategy to cater for large class sizes. It is certainly a flexible approach and I observed the success of this on many occasions as teachers coped with situations, involving student enthusiasm that would be much more difficult and possibly less productive, if there were only one teacher present. Team teaching allows for the pace of the classroom to accelerate quickly and efficiently and also enables the smooth transition to a slower pace if this is required. Thus teachers are able to set greater challenges, for the reason Carl explained, and scaffold more to cater for individuals as Anne explained. All this leads to higher achievement by the students. In addition, because the teachers are also learning from each other, and modelling this to students, the classroom as an ecosystem and a learning web are very real metaphors. John, a struggling student, articulated this concept:

They're (the teachers) always asking how you're going and if you ask them for help you don't feel stupid or anything and they help you out and stuff. [John]

and

Other students, they help a fair bit I think, like if you don't know how to do it and they're going along all right, they'll come and say, what are you doing and stuff and help you out [John]

Many students spoke highly of the eighty minute period allocation, as it assisted them in having time to be absorbed in and finish activities. Some, however, like Jim found the length of time unproductive, "Oh it just seems to go on and on; it seems to and then every minute you just seem to lose concentration and wish you were somewhere else".

Self-organisation

Self-organisation assists progress in achieving a challenge, by giving increased control over learning. Students understood their self organisation to impact on their learning. As Anne, an able student, comments, "You just have your diary up to date and then you look at that each day and then you're right". John, who also has struggled to organise himself, still acknowledges his own responsibility in the matter:

You have to do it yourself. At primary school your teachers would help you with everything and keep you sort of a bit more like a baby but now you look after yourself and stuff. [John]

Students acknowledged themselves as integral to the learning process. This is encapsulated in the response in the questionnaire to the question, what helps you to learn in this subject? Brian responded, "[1]istening and watching and if I don't understand either putting up my hand or asking a friend." Thus learning is also set in a social context. This is also expressed in another response by Claude, "[k]nowing what to do; having a teacher and friends to help me; me learning things we have to." Here students exhibit the traits of resilient people by their ability to seek help and their development of strategies to assist task mastery (Bernard 1991).

Personal interest is also relevant for John:

In science you learn stuff that you want to learn and it's interesting, but then in some subjects you learn stuff like overseas and you don't really get interested in that. Well I don't anyway. [John]

and their understanding of their ability level:

[Louise] I'm the best at doing the puzzles, and the hardest ones.

[Interviewer] What about something like English?

[Louise] Hate it.

[Interviewer] Why do you hate it?

[Louise] Because I'm not re- I don't think I'm good at it.

[Interviewer] What makes you think you're not good at it?

[Louise]. In my exams and I'm not a really good speller.

These comments all reflect a metacognitive approach as described by Fogarty (1997) as knowing what we know and knowing what we do not know. There is also a development of this knowledge by the defining of strategies to deal with what we know and what we do not know. Louise's comments are also interesting because, it would appear that when confronted by a contained, one-off test, she did not experience success. Therefore according to this limited assessment she declares she strong dislike for an entire discipline. This may be because of her relatively immature thinking, but it also highlights the problem of assessing ability in a behaviourist mode (Begg, 2002).

Text books

Text books assist progress in achieving a challenge, by giving increased control over learning. The majority of students interviewed find the textbooks helpful and empowering as did Bernard when asked what helped him to learn: "The text books because you can see it; there are pictures as well as writing". Genevieve, when discussing mathematics, gave different reasons for liking the text book:

I like how you can work out of a book. You don't have to copy stuff down like we had to in primary school. [Genevieve]

While most students find textbooks helpful, there are, however, disconfirming instances:

The discussion with teachers and students helps because I don't understand the text books. [Julie]

This comment highlights the necessity to differentiate between convenience and learning. My observation was that the freedom derived from owning their own book allowed students to work at their own pace, a phenomenon they appreciated very much. I also concur with William, one of the mathematics teachers, who understands their appreciation of the text book as strongly linked with their appreciation of structure, a trait of the developmental stage that most students experience in year seven.

When I discussed textbooks with William he commented:

I think the text books and their explanations have improved; they're simplified. I personally tend to try, not all the time, but if I'm giving an explanation of a particular problem I try and go similar to the text book's examples, mainly because if it goes home the parents can actually look through a worked example and probably explain it to their kids that way.

[William]

Teacher, Cheryle, corroborates his understanding that the textbook is quite accessible. She explains her own approach which she describes as "demystifying the text book":

At the beginning of the year I always do a treasure hunt through the text book so they really understand how the text book is set out and it takes them a while to realise that each chapter is a different topic and that it progresses from chapter one, Q 1.2.3.4.5 and that sort of thing. I find that the explanations at the beginning of the chapters are very, very simple for kids to read. One of my students was away for about two weeks and when she came back she was ahead of the class and I said who taught you that and she said, I just read it! So I think it's a very usable sort of book. [Cheryle]

A combination of Bernard's, Cheryle's and William's comments reveals a 'conversation with a textbook as described by Groome (1998). He, in a section entitled "Conversation with a Textbook" (p. 202), says "it is possible to encourage a conversation-like exchange with written texts" not in the sense of "mastering the text" but by setting up a "to and fro" with the text, hence constructing meaning from the text. While Groome is not speaking specifically of mathematics textbooks, that which he articulates applies to any text which is an aid to learning. While many decry the use of textbooks in classrooms it is because some teachers may be totally dependent on the text book and offer nothing beyond it. Skilful use of a text book however, is a valuable aid to learning as expressed by these students. Their voices certainly provide an alternative perspective to the text book debate.

2. Friends, Teachers and Family

The second enabling factor is the combination of friends, teachers and family in the learning process. At times each helps discretely, but often they impact in the learning process in an interdependent manner.

Friends

Friends enable learning that connects and empowers. Responses to question three of the questionnaire (Appendix 13) indicated students thought friends helped and explained. Often friends are the first option as Anne says, "The first person I would ask is someone at the table and the second person would be one of the teachers". She also emphasises the social aspect by saying:

Well, you work better when you're with friends than when you aren't because, then occasionally you can look up and talk to them or ask them for help and if you don't have friends on the table you don't have any people to talk to. [Anne]

Anne also verifies that student assistance is productive:

Yeah, this person helped me in maths; he showed me how to do it and now I'm just right with it. [Anne]

Once again the Vygotskian (1978) approach is evident. The emphasis is very much on assistance from more capable peers and eventual achievement, unaided. This was reinforced by a number of students and my observation. The ecosystem's 'power with' (Macy, 1983) is also evident as the total community works together to enhance its own and others' capacities. The complexity and synergism of the learning environment could only be captured through direct observation. Members of the class worked in various ways. At times students would opt to work either alone or with a group, but in silence. At other times the same students would work collaboratively and at other times they may allow socialisation to dominate. The time of day and more particularly, the weather dictated the *modus operandi* of the students. Some of the days I observed were unusually warm for the area and this impacted sometimes negatively, on the learning environment. Overall, the desire and enthusiasm to learn predominated, however, and there were relatively few times when I observed disengagement.

The manner in which class members operate was largely left to the students by the teachers provided time was being used productively. There was great emphasis by the teachers on

monitoring the learning process of students and each team was quick to notice and bring to their partner's attention any off-task behaviour. Thus generally, the learning web developed happily and productively as verified by the students. As an on-balance judgment, I am able to state that this evidence supports the understanding that students found the work interesting. Once again, this is a very different finding from the MYRAD data, which states that only 27.4 percent of secondary students find work in class is interesting (Russell, MacKay & Jane, 2003, p. 17). The absence of qualitative data renders this statistic problematic as it can not account for the myriad of situations to which students were responding.

Help or Distraction

In their responses to question five of the questionnaire (Appendix 13), over half the students cited distraction by other students as being the main factor stopping them learning as well as they could. It was necessary to pursue this in interviews. Whether or not students were predominantly a help or a distraction is discussed by this group. They incorporate teacher behaviour in the discussion:

[Annabelle] They're more a help because you can ignore the people that are annoying you. (general nodding in agreement)

[Suzanne] Oh yes at our table there's me and Anne and there's Annabelle and Jenny as well and if we don't understand it we help each other.

[Julie] And the teachers don't give us the answers. Oh sometimes they might but hardly ever and they help us understand. They show us the first part and then they say, now do you get it and you do the last part of it.

It is interesting to note the incorporation of the teacher and how much the students value the 'guide on the side' role and yet at times, also value 'the sage on the stage' role (Betts, 1997). A 'sage on the stage' role is as fundamental to teaching as is the 'guide on the side', but finding

balance between these two roles, as I discussed in Chapter Two, is the hallmark of a successful teacher.

The majority of students understand other students to be predominantly helpful, but all have strategies to prevent distraction. They centre around the ability to ignore and go on working, despite the would-be interruption. Bernard's comment is more complex:

Well mostly they're distracting, but that doesn't mind me because I can do it and then muck around with them, but then they've got to do their work so I try to just calm down a bit for them. But yeah I guess we don't really help each other [Bernard]

While he could be over-estimating his ability as to effect this scenario, as to do so is somewhat typical for boys (Lillico, 2004), this is true for Bernard as he is a capable student, who works hard at being accepted by the other students. Most other students, from my observation and their comments, prefer to use simpler strategies and simply ignore or give direct verbal advice as to their expectations.

Teachers enable Learning that Connects and Empowers

These teachers enable learning that connects and empowers. Students understand teachers as assisting the learning process. Despite their frustration with many aspects of curriculum provision, I observed all of the teachers in the program entering the classroom with clearly articulated goals and constantly providing relevant feedback to the students. They also have a dedicated approach to keeping students on task. My field notes (March 3, 2004) include Jill's endeavour to encourage Jim, who gave the appearance of deflation when he lost concentration. Jim acknowledges the benefits of having two teachers in the room at once when he says, "both the teachers in our room are really good because they know how well you can do it and stuff. They're just really helpful". When asked how the teacher helps students who find it difficult to learn, Jim responds, "gives interesting things like board games and role plays". John further expounds on the notion of empowering helpfulness:

Discussions with teachers, that's good because here they're always asking how you're going and if you ask them for help you don't feel stupid or anything and they help you out and stuff;they give everyone a go and everything and they don't just ask the same kids, they ask you and they ask everyone heaps of stuff not just one or two kids. [John]

When asked for successful strategies to assist students to learn, teachers articulated:

Being consistent and giving encouragement; different activities and give them a bit of a choice so they don't have to just do it one way.

[Maree]

Here is perhaps a veiled reference to Multiple Intelligences Theory (Gardner, 1983), but if so, Maree does not articulate it further.

Being able to explore on their own I guess. I think when activities are open ended, no right or wrong, you can get everyone to experience success. [Cheryle]

I observed constant formative assessment by the teachers. Questions such as 'what category would that come from?' and 'what are you still looking for?' Clarification of students' thoughts in various areas contributed to their learning and assessment for learning. Students are also alerted to links between areas of learning. For example Cheryle, assisting in an English session alerted students to the link between the weather section of the newspaper and their current science unit. I observed many students, of their own volition, making relevant links between various learning areas.

The Role of Families in the Learning Process

Families can enable learning that connects and empowers. Students acknowledge their family assisting positively in the learning process in many different ways. For John it is through the

every day activity of cooking and when asked what he had cooked he responded: "Just cakes and bickies and stuff like that."

[Interviewer] So did you do a lot of cooking at home?

[John] Yeah, I cooked a fair bit with Mum and stuff.

For Anne it is through travel:

Well, mostly it just really good, because like my family and me we've travelled all around the world. My grandparents are in Europe, France, Nice. Dad used to run a travel agent, so we got free tickets for Bali and Thailand and stuff and I would always ask questions about why they wore things. [Anne]

This is reflected as she describes her preferences at school. She finds history easy to learn, presumably because of her travels, and, it would be reasonable to presume that in some way geography would be associated with this, but, when asked, "Do you find anything hard to learn?" she replied:

Geography especially because there's so much stuff, contour lines and graphs. I'm all over the place. But history's pretty easy because it's just learning about countries, but then geography's everything countries, rivers, mountains- just the whole world.

This reflects learning occurring in context (Donaldson, 1978; Vygotsky, 1978; Tharp, 2002) as the material delivered in history is within Anne's direct experience, while that in geography is decontextualised as far as she is concerned and therefore she is unable to construct meaning. This is not so in the following scenario, where participation, the essential component for any educative process is described in a very meaningful way (Bernard 1991; 1997; Cahill, 2002; Cormack, 1996; Cumming, 1996; Freire, 1973; Fullan, 1999; Hill & Russell, 1999; Kruse, 2000; Marciano, 1997;

Marsh, 2001; Russell, Mackay & Jane 2001; Saha, 2002; Shor, 1992; Schweisfurth, Davies & Harber, 2002; Wesselingh, 2002).

In this interview Jim discusses the involvement of family members in the learning process for him which is very significant, in that it impacts directly on his learning at school. When I asked Jim the subject he liked best, I was very surprised at the response. Most students had Anne's reaction to the subject and did not like geography, but Jim replied: "Oh geography is a subject I like". I questioned further: "What makes you like it"?

[Jim] I like maps and stuff.

[Interviewer] Do you use maps much?

[Jim] Yeah, when we travel, me and my Dad, we go fishing a lot and so we use the maps.

This really took my interest, so I continued:

[Interviewer] So where would you go boating?

[Jim] Oh we usually just go to Sometimes we fish along the river and the map helps. It's a fire map-shows every road.

This inspired me to further questioning as, in my experience, fire maps are not particularly easy to read. I asked: "Can you use that knowledge at school"? Jim replied: "Mapping in geography, that type of thing, Dad's taught me about that". We continued talking and then I asked what else he had learned by working on the boat, Jim replied: "[p]robably the joins in wood work, Dad's taught me about that". After my further comment acknowledging his father's contribution to his learning and enquiring as to whether there was any other skill he had learnt from family members he smilingly volunteered: "[p]robably Charlie teaching me how to play the drums and music and stuff". Then as an after thought, he added: "Yeah and Dad's taught me first aid, so I know how to do that sort of stuff." And as a further after thought: "[h]e's taught me how to do knots."

As the interview progressed Jim relaxed more and more. He was impressed that I was impressed and this was the first time he had communicated all of this at school. Because I addressed him 'in the adult' (MacBeath, 2004) he responded accordingly. Jim spent his primary years in a very small school, where the family context is very well known. From some of his other comments I realised he found the transition to a large campus rather difficult, as I noted above, and had indulged in some unacceptable behaviour in the playground. He was still coming to terms with the differences between his new and old schools. Therefore it was important for him to understand that someone else valued the learning that had emanated from his home. He could make the links between that and the more formal learning situation at school, but this had, up until this moment, remained his property alone. This gave me the opportunity to discuss with him areas of learning with which he was having difficulty and to agree to discuss these with him some more, when I would be subsequently visiting the school. I left the interview struck once again by the importance of real life learning that happens in the family context and the relationship between that and learning at school. Learning occurs in Vygotskian terms because it is "directly related to the child's practical dealings with the real world" (Vygotsky, 1975, p. 22). As Donaldson (1978) stressed, learning is enabled when contextualisation involving interpersonal relationships allows tasks to be presented in a way that locates them in the real world of the child. This certainly was Jim's experience as he was easily able to construct meaning and so developed in these areas.

The three areas Jim and I had discussed also coincided, not surprisingly, with his three favourite subjects at school. The concept of learning in family context is inextricably entwined with the concept of relevance and participation in learning at school. I hope, in addition, that he found our conversation empowering. The indications were that this was so.

3. Relevance of and Participation in the Learning Experience

In this the third section, I discuss relevance and participation as students understand these as enabling learning. Relevance to students' lives is identified by middle school literature as particularly important (Cumming, 1996; Russell, Mackay & Jane, 2003; Schools Council, National Board of Employment, Education and Training, 1993). It is the lived experience of the learner and his/her environment. I have noted the acknowledged importance of participation by the family

members in the previous section and have discussed examples also, but relevance and participation must also extend to school activities.

While relevance was understood in many classroom activities, students found activities conducted either outside or off the school premises to be particularly so. These could be described as authentic activities (Borko et al, 1997; Cornford, 1999; Kirshner & Whitson, 1997; Starratt, 2004) as they situate the learning in the experience of the learner and place it in social context. Charlie, a student, describes an activity that was significant for him:

At the start of the year we did like digging; like an archaeologist thing and we just went outside there and we had to make a bucket, because when archaeologists find things they find them in layers so they can tell what the years are; and so we made layers in buckets and gave them to another group and we had to dig and record what we found and had to make a hypothesis or explanation of what we think happened at that time. [Charlie]

Jill, a teacher, and Charlie concur in their understanding of assisting students to learn. Jill says that relating things to the local area in geography is a great help. Charlie comments on a visit to the town cemetery:

Going to the grave yard and learning about that. Getting free time off and just learning outside school. We just saw people that came from outside of ... and over the past 100 years or something. [Charlie]

It is interesting to note that time outside the classroom is often described as free, presumably because of the absence of four confining walls.

I observed the preparation for an activity that Charlie describes as "that hatchet thing and we made our own lunch and everything, that was good." Jill was preparing the whole group for 'Survival Day', which is connected to the students' novel 'The Hatchet'. The day was to include input from the Country Fire Authority and the State Emergency Services, as well as incorporating a meal, cooked on an open fire by the year seven students. The preparation included:

- Description of speakers from Country Fire Authority
- Directions on how to build fires, cook damper for morning tea and the need to bring spades, wood, cooking pots, utensils, crockery, cutlery
- Description of the operations of the State Emergency Services, who would talk about their rescue operations
- Students being put into gender groups so jobs are not allocated according to gender stereotypes
- Suggestions to create recipes and the need to decide the menu today
- Differences between recipes that are suitable for an open fire and those cooked at home
- Examples given from previous years.

Both teachers, Jill and William discussed with the students what sort of things cook well. Both were very clear in giving their directions, and empowering for each other and the students by the manner in which these directions were delivered. The students were anxious to discuss. I noted their obvious ease in a group situation and the involvement of all members. My notes (March, 2, 2004) record that there were, "quite a few 'creative recipes' from boys, but by the conclusion they all had realistic expectations."

The participation metaphor (Sfard, 1998) was certainly dominant and there was certainly no silence or monologue (Freire, 1973), rather the room was alive with suggestions and information. Here was an example of citizenship education using an inquiry approach, although neither was formally articulated. The problem of designing a recipe and executing the design was investigated and resolved in a very enjoyable atmosphere. Students and teachers worked collaboratively and experienced the real belonging and interconnectedness of a learning community. The value given to this type of activity is enactivist as it explicitly values multiple domains of human development (Maturana & Varela, 1992).

4. Enjoyment of Learning

Learning is often enabled when students enjoy learning. This is the fourth enabling factor identified by students when listing the qualities they liked about their work and classroom activities.

A great number of students had 'fun' as a major trait contributing positively to the learning process. Fun is also understood to be significant in middle years' approaches to curriculum development (Brown, 2001). This in science was explicitly linked to experiments. As students spoke of learning and having fun in science, Claude's comment was typical, "I like science because we do cool experiments- like the candle and crushing the can." Kevin also understands science experiments to be 'cool', "[m]ost of the time you're able to do cool work with chemicals and things. It's real interesting." Bernard describes his experience further, "Oh like microscope, we had to – we were learning about flies and stuff and what's inside them – and then we got a microscope and then we could actually see it".

In interviews students elaborated further on the element of fun. Examples were given from the areas they chose to write about:

Debating, that's real fun in the classroom. We learnt all the things we had to include in our debate. [Annabelle]

Barbara, when describing maths said: "I love it – I love it. It's so fun I reckon."

Other subject areas were included too:

I love woodwork and metal work, cooking and maths, it's fun, You're always normally doing something different. [Anne]

and fun was explicitly linked to the learning that occurred. Bernard described a Physical Education learning experience.

It was kind of a theory/prac (sic), because we got to go outside and see how fast we could sprint and then record it a see, up against students how well they were doing, who was doing better, how strong we are. [Bernard] When asked, "Do you learn better if you're having fun while you're learning?" students were adamant that this was the case and gave a range of reasons and described fun in a number of ways. Bernard understands it as intrinsic:

Oh well it depends what the subject is. In music that's definitely the case because you're having fun with the instruments, but whereas you're doing it from a book and you're learning what the instruments do and stuff it's not as fun. [Bernard]

For Kevin it accompanies work:

Yeah, you do. It has to be fun with the work. It can't be outside fun. Having fun while you're working. [Kevin]

while for Peter it is a catalyst:

It seems to be when you're having a really good activity you're learning at the same time and then somehow, of course it's fun if it's a learning activity, it's educational, because you can remember its two parts, the fun and the educational bit. [Peter]

Bill links fun to enjoyment, "[b]ecause we're enjoying ourselves so we take in more probably", as does Charlie, "[b]ecause I remember things I've enjoyed." And the opposite is understood as boredom, as Louise comments, "[w]hen it's boring you get bored with the work and then you don't do it, and if it's fun, like you want to get finished", while Matilda adds, "[i]f it's really boring it goes in one ear and out the other."

I realised from all these comments that students understand fun as occurring in learning situations that they enjoy because they feel they are achieving. Achievement is enhanced by the relaxation that enjoyment engenders. They are also articulating an emotional response and the accompanying engagement of the affective as well as the cognitive. As Egan (1992) notes, this in turn stimulates the imagination, which is evident in all the scenarios the students described as fun.

These teachers understand the importance of having fun in learning and link this to relaxation, immersion and their sense of connectedness. Cheryle, speaks of enjoying the task:

We had a maths task the other day and kids were saying. 'This is so relaxing doing this'. It was just a bit different. It was actually algebra but it was hands on algebra and they said, 'This is fun.' And then I thought, this is fun, this is relaxing, this is algebra. How many kids would say that about algebra? I think that's learning when they can say, 'I'm having fun', and they're completely immersed in the activity. They can't be immersed in the activity if they're not feeling connected or respected and able to express your point of view and take risks. [Cheryle]

Immersion was evident when Maree gave her class the task of creating their own newspaper. She had given a number of specific, short tasks that involved the collection, collating and discussion of various types of newspaper articles. This led to the compilation of a list of all people required to produce a newspaper. Groups were negotiated and roles adopted. The students were thoroughly absorbed in their negotiations and only one student, Edward was outwardly annoyed at not being given his coveted role. Apart from this, the groups worked cooperatively and the enjoyment the students felt in developing their project was evident. In both of these learning situations just described it is relevance, problem solving and participation that ensure immersion and enjoyment.

Having fun was also linked with producing as Jim refers to his favourite out- of-school activity in the context of learning at school:

Woodwork, that's pretty fun, wood and metal. [Jim]

This link with producing, introduces the concept of Multiple Intelligence Theory (Gardner, 1999), which I understand as enabling learning in the context of my study, even though it is not articulated by teachers. It is this that I now address explicitly.

5. Multiple Intelligences

Learning is enabled when students use multiple intelligences. Students choosing to write about science in the questionnaire responded significantly, when asked in question 15 (Appendix 13), to suggest changes. Nine responses indicated lack of preference for written work and 15 responses requested additional experiments.

When interviewed, a great number of students spoke about a 'hands on' activity as their most significant learning time. They understood this as 'doing'. In reality, they were speaking about their use of an intelligence, other than or in tandem with, the linguistic or logical-mathematical intelligence (Gardner, 1999). Kevin and John comment:

Well, science is a bit more doing because of microscopes and things, but we still have to write a lot about the experiments when we've already just seen it, but it's all right to write the observations so you know how it's done [Kevin]

Probably on orientation day we put this bit of paper that was burning in a bottle and stuck an egg on top of the bottle which was really small and the egg got in there somehow. I still can't work out how that happened [John]

These two students are describing their use of their body-kinaesthetic intelligence. Kevin includes the linguistic as he describes a science class, while John was probably not asked to record this experiment on orientation day. Both acknowledge, in their different ways the use if the intrapersonal intelligence as they try to understand the process and result of the experiments. While it is evident that John did not complete the learning process in this instance that fact that he is remembering and pondering is significant.

I observed the keen interest of the students in experimental work as they dissected a flower when studying sexual reproduction. The session had commenced with them going into the extensive school gardens and picking their samples. All listened attentively as the teacher explained the process of dissection and what to look for. The task was to dissect and then draw the results into a note book. Cheryle, the teacher, had to combat the fact that the laboratory assistant, who was absent for the day, had forgotten to leave out the equipment, so substitute dissection tools had to be found. This did not deter the students as they were engrossed in their task. The groups of two or three worked around the laboratory and were relatively unaware of each other as each was totally captivated. All students had a turn at a dissection and were very precise in the use of their implements and in the subsequent drawing. Thus, their body-kinaesthetic and spatial intelligences were well in use as manipulation of implements requires precise use of the body and drawing requires an understanding of arrangement in space. As I discussed in some detail in Chapter Two, this separation in description of both these intelligences is artificial. Each student is using both intelligences simultaneously in order to successfully complete the task

The body-kinaesthetic and spatial intelligences were also mentioned by a number of students, who understood themselves to be good at and learn well in sport, woodwork and metal work. In a focus group interview Bill linked sport to fun and when asked about the learning, he replied, "[i]t teaches you new skills and stuff." Jim chose the musical intelligence when asked to describe a learning situation, even though he could not articulate very clearly, "[p]robably in music, I don't know why. I learnt the instruments. That's something I learnt". Even when he thought aloud about woodwork, saying, "[w]oodwork's the course", it was Brian who provided the reason for the statement, "Yeah, because you can turn scrap into something". This resonates clearly with Gardner's (1999) understanding that one of the purposes of using our various intelligences is to create something that is valued by a community.

Mary understood public speaking to have increased her confidence. Here she was really describing her interpersonal intelligence as well as her linguistic intelligence. Role plays were also designated to be significant in the learning process as Charlie said when expressing his liking for drama classes, "You've got to do role plays and it teaches you a lot". When asked how they accomplished that, he described the process and the use of the intrapersonal, interpersonal, body-kinaesthetic and spatial intelligences:

Well, first we have to study the story, about the Trojan Horse, and then we have to find out what each character had to do. You found out a lot about it and then you had to act it out. [Charlie]

The resultant video of the role play revealed the truth of the statement. Another focus group stresses the 'up and doing' nature of the drama class. When asked how drama helped them learn they responded:

[Julie] You actually get in there and do it.

[Louise] Without having to sit down all the time.

[Mary] It lets you have your own ideas about what you want to do. There's no real guidelines about what you have to do.

[Annabelle] Instead of being a kind of shy person you can be out there acting.

[Barbara] Drama and music- you're split up into groups and you get to go and(gesture to show great things)

[Anne] You get used to speaking up in front of people and act in front of the class and it was good how they brought the St Philip's four, fives and sixes down for our play.

These statements exhibit learning behaviours described by Gardner's Multiple Intelligence Theory (Gardner, 1999), the body-kinaesthetic as 'up and doing', the spatial as setting the performance space, intrapersonal in having your own ideas, interpersonal as communicating with an audience and logical mathematical as a successful performance requires an organisational approach beforehand. They also highlight creativity, the creativity that Groome (1998) calls "humanitas pedagogy" (p. 103). In these descriptions of the drama class the students have engaged the heart as well as the head so as their whole persons, cognitive and affective, are developed. Groome emphasises that educators must ask appropriate questions to ascertain learner knowledge, feelings and actions. Here, the students recognise and welcome the opportunity to do this themselves without undue reliance of their teachers. They become both the educators and the educatees as they

"draw out" (*e-ducare*)" (Groome, 1998, p. 200) each other and by so doing enhance their own and each others' capacities (Macy, 1983). Teachers and students in this context become "critical coinvestigators in dialogue with the teacher" (Shor, 1992, p. 54).

Carl appears convinced of the value of this approach to learning, even to the point of advising teachers:

[Carl] I like metal work, wood work, drama – just all the things you don't have to be in a classroom for. It teaches you better skills and how to use your hands better for, you know, like hands on jobs.

[Interviewer] So you like the getting up and actually doing things?

[Carl] Yeah I reckon people who get bored with things that's the best way to teach them.

Cheryle, in her role as maths teacher had already taken this advice as she acknowledges the value of a participatory approach in learning: "[i]f you ever give Edward a problem solving activity as a 'hands on' thing he's the first to get it, so you've got to go with the different ways people learn, different sorts of activities". Once again I note that while the practice is evident, there is no articulated understanding of Multiple Intelligence Theory as promulgated by Howard Gardner (1999), by the students, which would be expected, but neither from the teachers as already described (p. 169).

6. Experience of All of the Enabling Factors in the One Context

The sixth and final enabling factor is different from the others in that it highlights their synthesis for optimum learning. Gabrielle, Anne, Suzanne, Barbara in their focus group discussed their learning in mathematics. It would appear that mathematics lessons fulfil the four requirements of a successful lesson (Lillico, 2004):

- Exciting, before
- Enjoyable, during
- Rewarding, on completion
- Satisfying, looking back.

These criteria are enabled through a combination of all that has been discussed in sections one to five. The excitement before, except for the first lesson, emanates from the experience of past lessons. Of course, the first lesson may be eagerly anticipated on the testimony of past students. The lesson is enjoyable during, if students understand they are receiving a challenge and that this challenge is achievable. Enjoyment is furthered when students understand the scaffolding provided by the teacher and feel they are progressing and so have increased control over their learning. They also enjoy the involvement of friends, teachers and family into the learning experience, which, in turn, increases the relevance of the learning. Participation in as many ways as possible also augments enjoyment. The lesson is rewarding on completion and satisfying looking back, if students feel they have progressed and so have increased control over their learning. All these factors constitute the context as meaningful (Donaldson, 1978; Lyle, 2000; Tharp, 2002).

Barbara responded first when I asked the group why they had chosen mathematics to write about in their questionnaire. She offered, "[b]ecause Mr Smith is very good and if you have a question he'll answer it and you can understand it". The other three nodded in agreement. Here, already we see the positive attitude to the involvement of the teacher and student recognition that learning means understanding. Suzanne had an additional reason and explained:

[i] chose maths because I hated maths before I came to Garden College and now I really enjoy it. I think because it's of Mr Smith and if you need a question he'll take you aside and explain it all to you by yourself.

[Suzanne]

Implied here, is the understanding that through this Vygotskian approach, Barbara is making progress and having greater control over her learning than she did at primary school. This is confirmed later in the interview as she added that she liked:

The 80 minute periods because it means we can get a bit more done and he can give us a bit more work [Barbara]

I asked the others if they concurred and they did. This statement implies that Suzanne and the others are all achieving and enjoying the process. I also pursued their enjoyment of mathematics at primary school with the others. Anne declared:

I didn't think it was bad in primary school. [Anne]

while Gabrielle said:

I used to be very bad at maths. Now I'm getting better. [Gabrielle]

Barbara concurred with Gabrielle. It is interesting to note that while Suzanne and Gabrielle attended the same primary school, Barbara attended a different one. My observation supported the understanding that students enjoyed and understood they were achieving in their mathematics classes.

Textbooks were also valued as giving them more control over their learning as Gabrielle said this was:

because we get one each and you don't have to keep looking up at the board for each question. [Gabrielle]

Anne added:

I like the way Mr Smith puts up the exercise and all the numbers you have to do, and then all you have to do is go to your text book and work at your own pace. [Anne]

The others indicated their agreement. They understand their self direction to be extended to homework as Suzanne describes Mr Smith as saying:

Well maybe do that exercise tonight, for homework if you haven't got it finished. Don't worry about the other ones. [Suzanne]

When I commented on the obviously collaborative approach, all agreed that they really valued this, and Suzanne elaborated:

Just as long as he knows we understand what we're doing. If he knows we don't understand he'll take you aside from everybody and go through it, like I had trouble with fractions and now I know my fractions. [Suzanne]

From my observation I can verify that Suzanne, through the learning experiences provided, bases her increased knowledge of fractions on more than manipulation of figures (Field notes, April 27th, 2004). Here she highlights achievement through understanding. Understand is the operative word. Here-in lies the difference between an approach that involves mastering the text and that which develops a 'to and fro' relationship with the text (Groome, 1998). Their understanding was also enhanced by other students as Suzanne volunteered:

At our table there's me and Anne and there's Annabelle and Jenny as well and if we don't understand it we help each other. [Suzanne]

Barbara concluded this segment of the interview by highlighting the enjoyment inherent in the classes:

I love it; I love it. It's so fun I reckon. [Barbara]

The other three agreed and in my mind there is no doubt that 'fun' was inextricably entwined with achievement, relevance and control over learning.

William, their teacher, independently discussed his approach to teaching and learning, validating all avenues which the students may gain understanding, and in doing so highlights the learning web that exist in his classroom:

With the group situations, as long as it doesn't get out of hand, I'm quite happy for the kids to get the explanation no matter where it comes from; and a lot of the time their friend next to them or on the other side of the table can actually give them the explanation that I may not be getting through. [William]

Team teaching is also acknowledged as significant as William says "[t]he other teacher will often give them an explanation which may be slightly different but maybe more understandable". He also values the modelling that happens for students:

Sometimes the other teacher will say, 'Mr Smith I don't understand this can you go over it again'? We can then go over it again or in some other way and it also shows the kids that if there's a problem that's when you ask for help, and that's where the team teaching situation is really good.

While the students feel very much that they are participants in the learning process in all mathematics classes, I observed William presenting a practical class on the estimation of fractions. Students fondly referred to this activity as "the rope and peg thing". The activity was highly collaborative and students were busily engaged in the exercise. As I talked with the groups they certainly gave indication they were progressing in their understanding of the concepts involved as their estimates were improving as the class progressed. They were also obviously enjoying the process. William agreed they were making a great deal of progress but confided to me that some student would still maintain, "we had a great time but we had a great bludge". He further commented, "It surprises me that the kids when they come out of primary school sometimes don't really think they're doing maths unless they've got the text book". William links this observation to student development at this particular age, as he notes they value structure very much.

The data generated from these interviews and observations indicate students understand mathematics as a relevant, achievable challenge. Both teacher and students are quite explicit about their understanding of scaffolding provided by the teacher as they participate in the learning experience. They can also differentiate between feeling they are progressing and having achieved. It

is obvious that they both enjoy and feel they have control over their learning and they also value the incorporation of friends, teachers and family into the learning experience. Thus the approach that has the 'right mix', successfully contextualises learning and creates an environment that connects and empowers both teachers and students. It is in the creation of this environment that learning is enabled.

Growing in the Shade of Each Other

This section highlights the productivity that results from the presence of sunlight and rainfall in optimum amounts. If they are present in the right amount at the right time all entities flourish and there is plenty of shade in the garden. It is the shade that ensures that all plants develop either immediately or over time, according to the relationship between their individual growth patterns and the environment in which they find themselves. The particular manner and rate of growth of each individual plant must be accommodated and diversity valued, if the garden and all in it is to reach full potential.

Factors that Impede Learning

In this section I will highlight some important factors that students and teachers understand as impeding learning at Garden College. It was noted earlier that these need to be acknowledged and worked with, just as much as those factors that enable learning.

I have discussed the factors, identified by students and teachers at Garden College, as enabling learning that connects and empowers. Conversely, learning is impeded by approaches to learning and teaching that do not incorporate these enabling factors or incorporate them to a limited degree under some conditions. Students are unable to construct meaning and so they do not develop to an optimum level. To a certain extent, this understanding is subjective, and the consequent complexity of the identification of these approaches must be acknowledged. For some students, that which is viewed as an achievable challenge by others, is not so for them. I now discuss three approaches that are viewed by a significant number of students and teachers as lacking in the enabling factors.

1. Difficulties with Literacy

Students

The first approach is that used in the component of the HCEL English program which addresses the learning of English grammar rules and spelling. This is called 'Literacy'.

Students generally can recognise activities they think are irrelevant and impede learning. Their understanding may, of course, differ from that of the teacher. They are quick to condemn these activities as Kevin demonstrates with his comment, "[w]hy would you need to learn how to do a crossword when you're doing something else?" I probed further by asking the reasons a teacher may give a crossword. He replied, "[t]o fill the period because they didn't have any other work". He elaborated on the nature of crossword and by doing so highlighted the futility of such an exercise for him, with, "[j]ust the names of the words really." The problem, however, is more extensive than the provision for literacy as information technology at Garden College is also taught discretely instead of being implemented across the curriculum in a connected manner.

Student views of the teaching of English language rules were discussed by Jim, Carl, Brian, Bill and Claude in their focus group interview. They did not view this learning as an achievable challenge. Carl commenced by declaring English rules unnecessary and defined them as, "nouns and verbs and all that like you learnt in primary school." Immediately there is a sense of lack of progress. The ensuing conversation requires reporting in full and in narrative form, as each contribution is significant as well as the order of contribution. Brian, throughout the conversation, sure he has the answer, persists and eventually triumphs. He ignores Carl's comment and relates the rules to their context, "But I reckon if we did more story writing you wouldn't need to do English rules." As there was no response from the others, I clarified by questioning, "['c]ause you'd use them in your stories?" Brian responded in the affirmative and the others, who had obviously been thinking about the concept, agreed by nodding their heads. Brian continued, contrasting the collaboration of story writing, to the isolation of rote learning and merely mastering the text (Groome, 1998). The tension between the constructivist and behaviourist approaches, of which Begg (2002) speaks, is highlighted. "English rules you're just sitting down doing your work; stories you're not." They all agreed again that story writing was the way forward. Bill, however,

interjected, "and without English rules." Carl reiterated Brian's statement and understanding, "English rules is just sit down by yourself and just do it; like with the stories you can sit down and talk about it with your friends." At this point Brian added the dimension of creativity by saying, "and use your imagination more." Claude then contributed, explicitly introducing the concept of learning, "[i]t's better if you can work in pairs, because you can discuss it more and then you really learn'. As a conclusion Carl supported the approach through story writing, because, "We'd all be involved with it and want to get finished."

As well as the lack of specific enabling factors already mentioned, this group does not see the present method of learning English rules as relevant and they do not understand it as a scaffolding process for creative writing. They view it as a non–participatory activity that they do not enjoy. Without the explicit connectivity being made between the product and the mode of creating it, they may not learn. The student comment recorded by Zygnier (2004b), indicating the benefits of teaching in a manner that enables student learning, was reflected in this conversation. If these experiences were used to ascertain the level of interest these boys find in this class, the results would be very negative. This supports my view that such data needs to be generated in context. The subjectivity of the situation is highlighted, however, by another group of boys who expressed a mixed but largely opposite opinion when discussing the benefit of learning English Rules.

Patrick declared them to be "[p]retty easy I reckon – sometimes." Richard continued, "Sometimes it's pretty hard. You just get to learn more rules. Some of the rules you've never heard of or anything like that." Mark then added another dimension, "Then you're in trouble for not doing them." I then asked if they used the rules elsewhere. They all declared they had and Richard added, "You always use the rules." I also asked if they thought learning the rules had improved their writing. They all replied in the affirmative.

This group of boys obviously saw the challenge as achievable and largely relevant and connected to another enjoyable aspect of literacy, creative writing. They felt they were making progress and understood the scaffolding process as leading to achievement. It would appear that a sufficient number of the enabling factors were present for them to learn.

Teachers

The teachers also expressed frustration with provision for literacy, albeit in a different manner. Maree and Jill expressed frustration with:

- The timing
- Student interest
- Lack of student progress
- Large class size
- Lack of time to give individual assistance to weaker students

My field notes (April 21, 2004) described teaching and learning approaches in this area as very mechanistic and reflecting the understanding that the relationship between teaching and learning is direct, causal and linear (Petrosky & Delandshere, 2004). Cheryle supported this when she said,

I'm starting to feel there's too many text books sorts of activities. We've got English Rules; we've got literacy; the amount of English has dropped quite considerably. We're not having many very creative lessons because we've got to get this sort of stuff happen. It's getting more and more, less flexible, less creative sort of teaching. [Cheryle]

Thus the constructivist approach, on which the HCEL program is built, is not in evidence here. It is also worthy of note that while this component of the total English program is relatively small it still manages to draw a considerable amount of criticism.

2. Difficulties with Information Technology

Similar frustration with rigidity was identified in the information technology program. The information technology component of the curriculum had only this year been implemented as a discrete component. Jill describes it:

It was given to us with no introduction. Here's a program.

Go and teach it. It's a process that we had no discussion into at all,
which seems the main way it works. We are told, do it and have no input into it at
all. Often you are told the day before and off you go for the rest of the year with no
time to plan or prepare and put things down on paper [Jill]

As well as highlighting the problem of curriculum provision, Jill is articulating the effect of the dysfunctional relationship that exists between the HCEL teachers and some members of the wider staff group as a result of 'inertial bureaucracy' (Fullan, 1999) discussed earlier. 'Inertial bureaucracy' impedes the development of a collaborative learning community and in turn impedes the implementation and maintenance of change (Fullan, 1999). My field notes (21 April, 2004) on an information technology class reflect Jill's description. During the class she decided to ask the students to articulate their computer skills. My notes include a list of 33 skills. All students contributed. The fewest number of skills processed by any student was three. Jill concluded the discussion saying that they would work in this class according to the students developing needs and as long as they were enjoying themselves. This is an example of the tension the HCEL teachers live with in their professional lives. They are constantly being asked to juggle the imposed demands of a 'power over' situation with the 'power with' situation that exists between themselves, and themselves and their students. My observation is that they manage this extremely well, but the disempowerment and the resulting disenchantment with provision for learning is most time consuming and a great tension for all of them.

In the car on the way home it occurred to me to ask Jill to experiment with the concept of a learning community within this class. I reflected, "Why not involve the students and have the group consist of a number of groups, some students and others teachers? In some instances, roles can be reversed as the teaching and learning progresses. There must be end products in all instances. These

can provide evidence of learning. The 'teachers' in each instance devise and assess these." Jill accepted this advice, even though she expressed doubt about the attitude of the key learning area leader. The next class commenced the process and successfully continued as a learning community. This was interesting for me as Jill had the courage to ignore the dictates of the key learning area leader and try an approach that she knew would promote rather than stifle learning. This gave her the courage to successfully promote an integrated approach for 2005. Through this collaborative process she was empowered.

3. Provision for Integrated Learning

As I described in Chapter One, the HCEL program aims to provide for an integrated approach to learning. The curriculum areas to be integrated include, English mathematics, science, SOSE and information technology. In reality this approach has been eroded as already noted by the interviewer. It has also been thwarted by the mandating of a discrete treatment of geography and history.

In the absence of a truly integrated approach fragmentation of learning occurs. Students are critical of this approach they describe as boring, demonstrated by Bernard when he says:

Well we do something and then we don't finish it; like SOSE is both geography and history and once we've started on history we can't finish what we were doing because we've got to do geography and then it kind of splits up all the learning. [Bernard]

When I asked if there was another possible method he replied, "You could like learn something in geography and once we've finished that go to history then." Peter also described learning in SOSE:

We only did a tiny bit on ancient China, like two lessons and then we went to ancient Greece. [Peter]

When queried further about the amount of research undertaken, he said:

Yes, we did for ancient Greece. We did a PowerPoint. Ancient Egypt we did some project, I'm not sure what. Oh yes we had to do 300 words on some kinda subject to do with ancient Egypt. [Peter]

This concurred with my observation that noted a lack of depth in learning in this area. Here, learning appears as an object to be acquired (Freire, 1973; Sfard, 1998)This is the antithesis of the recommendations of middle years research (Darling-Hammond, 1997; Department of Education, Employment and Training in Victoria & the Centre for Applied Educational Research at Melbourne University, 2000; Hill & Russell, 1999; Jane, Mackay, & Russell, 2003; Kruse, 2000; Schools Council, National Board of Employment, Education and Training, 1993). Lack of depth and fragmented learning may also be the reason why only nine students out of 83 chose to write about SOSE as their chosen area and the fact that none of them rated themselves as learning very well in the subject.

The major reason for the use of an integrated approach is the response of society to the fragmentation of learning. This has already been described by students as a barrier to learning. Students in a global society are required to be able to access knowledge rather than acquire it. Integrated learning reflects approaches that advocate participation by students in long-term projects based in their community (Starratt, 2004). These vary from "practices that demonstrate social commitment, care for the environment, fund raising, civic competencies, practices of critical consumerism, the developing or building of one's own opinion, practices of representation" (Wesselingh, 2002, p. 29). Integrated learning prepares students to "cope with the plurality, differences and conflicts that are an inevitable part of democracy" (Wesselingh, 2002, p. 24). This is at the opposite end of the spectrum from contained units addressing specific skill development in either history or geography. By adopting an integrated approach to learning, the program would address the exponential growth of knowledge that has occurred in recent years.

The teachers are frustrated by the discrete approach but there is a lack of ability to articulate the true nature of an integrated approach. The teachers' lack of this ability leads them to believe that their particular discipline will be 'lost' if anything but a discrete approach is taken. This was discussed in quite some depth with Maree, Cheryle, William and Jill. Jill favours an integrated

approach. Maree, an English teacher, declared, when describing such an integrated approach, that "English is the one that gets sacrificed." Empowerment is also an issue here as Maree underscores the rift with certain key learning area leaders with the comment that, "I just think it (integrated learning) will come from the curriculum group and then we'll be given it and then we won't do it right."

Cheryle and William have a more positive understanding of an integrated approach in mathematics as they discuss the possibilities for mathematics within the topic of Ancient Egypt. William says, "Yes shapes and you could also bring in some of your fraction work there because they had fractions; a bit different, they were unit fractions." Cheryl also expresses the possibility of linking and integrating maths and science.

Relevance becomes integral in an integrated approach as there is scope for teachers and students to select their topic. Through an integrated approach students and teachers can use the extended periods available to them to learn in a manner that is not concerned with blocks of time but able to address learning in the manner in which it occurs everywhere but in schools. It is only in schools that we carve up time and learning.

Growing in the Shade of Each Other

Evident in this section is that the growth within the learning community is being impeded by drought, not total drought, but one where rainfall is sufficiently intermittent for some plants' development to be experiencing difficulty at certain times. There is shade in which they may languish for a while, but conditions require rejuvenation so as all member of the learning community can continue to grow in the shade of each other. In human terms this requires the reeducation of the heart which Palmer (1998) says can only happen in community as "community is the essential form of reality, the matrix of all being" (p. 97).

Conclusion

The data clearly demonstrates a very high level of connectedness within the HCEL community. The level of responsiveness of all participants attests to this, even before the material they present is analysed in any way. Their contributions reveal a significant number and variety of strategies to build and maintain caring relationships within their learning community. Disconfirming instances are few and the community has cause to celebrate this. The relationship with certain members of the wider teaching staff however, is somewhat disconnected and requires attention. This, however, does not seemingly detract in any way from the caring relationships that exist within the HCEL learning community.

Learning, that is, the ability to bring forth meaning and develop accordingly, is apparent and the data has revealed enabling and impeding factors. It is evident that learning is enabled when students understand it as an achievable challenge. In order to be achievable, the scaffolding provided by the teacher must be understood so the students feel they are progressing and increasingly have control over their learning: then learning is enjoyable. The challenge also needs to be relevant, as students learn in the context of friends, teachers and family. Relevant learning also needs to embrace a number of intelligences as this is the context of contemporary society. It is the teacher's challenge to provide the 'right mix' of all of these factors so that learning may be enabled for all students.

The data has also revealed deficiencies in the pedagogical delivery of some learning areas. The fact that these deficiencies were not present in the original design of the HCEL program attests to the original program addressing change as advocated by middle years research. This change occurred, but was not maintained at an optimum level. This is another area to be addressed in Chapter Five.

Some of the notions contained in this chapter go some way to gain insight into my research questions:

What factors do students and teachers in year seven at Garden College understand as assisting or impeding connectedness, empowerment and learning?

and

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

In the final chapter, I complete the story by answering the research questions, drawing some relevant conclusions and making recommendations, so that the HCEL program at Garden College may assist students and teachers in continuing to build and maintain caring, empowering relationships and enable learning, by employing pedagogy that connects and empowers.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Review of Purpose and Process

At the beginning of this thesis I defined the purpose of my research to explore teachers' and students' understandings of connectedness, empowerment and learning in the year seven HCEL program. This exploration led to the development of a rich picture of the classroom as it presents in year seven at Garden College. It has identified ways in which teachers and students build and maintain caring relationships within their classroom communities and encourage participation, contribution and the setting of high and achievable expectations. It has also exposed areas where further work is needed to integrate the HCEL teachers and program into the wider school community and to provide for integrated student learning. Student/teacher and teacher/teacher relationships and the reflection of these relationships in the teaching and learning strategies in the classroom have been the focus of my research. I also focused on the empowerment of teachers and students as my review of the connectedness and learning literature led me to an increased understanding of the importance of this concept for my research.

I noted in the initial stages of the study that the Middle Years Research and Development Project (MYRAD) highlighted in its findings that change in teaching and learning approaches recommended by extensive middle years' research was slow to happen at the classroom level (Russell, MacKay & Jane 2001; 2003). I also noted that students' sense of belonging to school, attitudes to learning and their relationship with teachers tend to be very positive in year five and from there decline until they reach their lowest point at year nine (Russell, MacKay & Jane, 2003). I declared, in the light of these findings, my interest in exploring teacher and student understanding of connectedness, empowerment and learning in year seven, in this particular context, in order to better understand the context and generalisability of these findings.

To achieve this purpose I framed a research question:

What factors do students and teachers in year seven at Garden College understand as assisting or impeding connectedness, empowerment and learning?

From this question the following sub-questions emerged: What assists or impedes:

- teachers and students building caring relationships?
- student learning?
- the empowerment of teachers and students?

and the further research question that goes beyond the immediate context:

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

In order to develop pertinent questions for the participants, I separated student learning into the two sections 'setting high and achievable expectations' and 'opportunities for participation', which were delineated in the resilience literature. With building caring relationships, these are understood as factors contributing to students' development of a sense of connectedness (Bernard, 1991; 1997; Fuller, 1998; Resnick, Harris & Blum,1993). Thus I developed tools to generate data under the headings:

- 1. Building caring relationships
- 2. Setting high and achievable expectations
- 3. Opportunities for participation
- 4. Empowerment.

For the purposes of discussion and to facilitate an iterative spiral (Creswell, 1998), unhampered by needless reiteration, I subsequently analysed the data using two themes. These two major themes are:

Theme 1. Connectedness: Building caring, empowering relationships

Theme 2. Learning: Pedagogy that connects and empowers.

Within these themes, I identified and discussed factors that connect and empower students and teachers within a learning community and factors that impede that connection and so disempower. I also identified and discussed approaches to teaching and learning that both enhance students' sense of belonging at school and enable or impede their learning and so prove either empowering or disempowering.

I also declared at the outset that my general experience of the school was one of a connected learning environment. This was further elucidated by my description in chapter four of my initial experiences with students and teachers.

Validation and Biases

Triangulation

Because of my personal involvement with the school in an ongoing positive manner and my bias against that which could be perceived to be an unfairly negative portrayal of the performance of secondary teachers in the MYRAD data (Russell, MacKay, & Jane 2003), I needed to ensure through the use of multiple data sources and methods, that the data was able to be verified (Stake, 2000). This has been accomplished internally, by my use of observation, questionnaire and interview as three different avenues of data generation. These three methods, the inclusion of a large number of student and teacher points of view and the reporting of disconfirming instances, have provided a level of triangulation that has validated the conclusions I have drawn and thus achieved a satisfactory level of internal validity. They have also addressed the areas in which I declared bias. As I noted in Chapter Three, I consciously reflected, while conducting data generation and in data analysis, on areas where I may exhibit a degree of bias and compensated accordingly.

While this study reveals a few traits peculiar to Garden College, I am confident that this research project reveals many traits of this college that it shares with similar settings and some traits it shares with some different settings (Miles & Huberman, 1994). However, in the end this will be

for others who know their contexts to judge and make relevant judgements according to the degree of alignment of their context with that of Garden College. To this extent, the findings may be generalisable and hopefully will encourage similar research projects in other settings.

Iterative Spiral

This chapter is the completion of the iterative spiral (Creswell, 1998). The iterative spiral commenced in Chapter One, continued though my review of relevant literature in Chapter Two, the adoption of a research framework in Chapter Three and developed rapidly to the completion of Chapter Four, where I gained insights to assist me in answering my research questions. In this chapter I answer the research questions, present conclusions from the research and using my answers to the research question I recommend possible action to be taken. I do so under the following headings:

- Connectedness, empowerment and learning: Responding to the Middle Years
 Research and Development Project (MYRAD)
- 2. Learning: Articulating a theory
- 3. Empowerment and connectedness: Listening to student and teacher voices
- 4. Balance and paradox

Within each section I make recommendations for the college community and education systems, thus completing the iterative spiral. At various points in the discussion I will stake some claims for new ideas that may help learning become more connected and empowering for our young adolescents.

Answering the Research Questions

1. Connectedness, Empowerment and Learning: Responding to the Middle Years Research and Development Project (MYRAD)

In this section I answer:

To what extent are the MYRAD findings, outlined as part of my research problem, applicable to the HCEL program and year seven students at Garden College?

and

What assists or impedes:

- teachers and students building caring relationships?
- the empowerment of teachers and students?

High Level of Connectedness

My presentation and discussion of the data in Chapter Four, demonstrates a high level of connectedness and empowerment within the student population at Garden College. There is ample evidence of students developing social competencies as they are responsive to each other and their teachers, and caring in the great majority of instances. They also communicate effectively and do so with a sense of humour. Teachers' positive personal and professional attitudes empower and also promote connectedness among the students. It is evident that connectedness and learning are inextricably entwined in year seven in this College. These enabling factors are augmented in the context of the physical setting as this contributes markedly to a connected, empowering environment. While there are disconfirming instances among the students these are very few and both teachers and students have developed specific strategies to cope with students who are excluded. These strategies are successful in most cases. The involvement of Brother Paul with the year seven students contributes significantly to the development of caring, empowering relationships among those who experience difficulty in adjusting to life in Garden College. Overall, students exhibit a strong sense of belonging to a learning community and have the ability to act with

confidence in order to direct their own life within the school context. It is clear that not only does the documentation of the College state this as an aim, but that the teachers actively work for such a climate.

Importance of Researching a Specific Context

As previously noted the Middle Years Research and Development (MYRAD) data stated that students' sense of belonging to school, attitudes to learning and their relationship with teachers tend to be very positive in year five and from there decline until they reach their lowest point at year nine (Russell, MacKay & Jane, 2003). This is not true of this particular context as students spoke enthusiastically of their learning within a learning community. For example, when discussing their mathematics classes some declared their year seven experience to be superior to their experiences in the primary school. They certainly found their class work interesting. There is also additional evidence that does not reflect the MYRAD data. My findings demonstrate that in year seven at Garden College:

- students understand their teachers as respecting them and taking a personal interest in them and
- very few students do not want to come to school on most days

It is possible/likely however, that the discrepancy between the situation at Garden College and the image projected by the MYRAD data occurred because the college had directly responded to the findings of earlier middle years of schooling project findings while significant numbers of participants in the MYRAD project had not done so (Russell, MacKay & Jane, 2001). Or alternatively given the variety of contexts the MYRAD data came from it may be that many other colleges, not so self-contained in a rural setting as Garden College may well take longer to respond or show evidence of change. What has happened at Garden College however, gives hope and insights of how and what to look for in more refined future studies.

In the area of student interest and the ability to have input into what is done in class in year seven at Garden College, there is sufficient evidence to demonstrate that this will vary according to the context and nature of the learning, and that it is counter productive to make any global statement

about this. This leads me to the conclusion, that while empirical data, such as that generated by MYRAD, is relevant for direction in the broad sense, each specific context requires research into its particular situation, in light of that data. This enables the specific context to ascertain the level of consonance between its particular situation and the generalisable data. Assigning resources for this purpose is difficult for schools as their budgets are constrained. If a school, however, prioritises this research, it would be beneficial for system authorities to prioritise assistance in this area. Thus teacher capacity and organisational learning (Lodge & Reed, 2003) would be significantly augmented.

Change at Classroom Level

Change in classroom teaching and learning approaches and strategies has occurred in year seven at Garden College, as a direct response to recommendations arising from research into middle schooling (Garden College, Office of the Principal, 2000) and this is highly commendable. The students particularly appreciate the physical setting and learning from the range of approaches in mathematics, including the use of text books. They also appreciate the experiments of the science class as enabling learning, as well as the 'hands on' activities in history and geography and interactive activities in English. The opportunity to use a broad range of intelligences, purposefully engineered by the teachers, in all learning situations is highly valued by both students and teachers. Thus there are many examples of relevant learning occurring at Garden College both within and also without the HCEL program. There are, however, significant examples of learning situations within the HCEL program that are deemed irrelevant by the students and from which, a significant number fail to benefit. These learning situations can be broadly described as non-participatory. It is also relevant to comment, that, while students are participating in their learning in a range of contexts, the level and result of this participation is not that envisaged either by Shor (1992), Starratt (2004) or Murdoch and Hornsby (1997) in their Inquiry Approach, where students instigate and organise their own inquiries into areas that have real meaning for them.

Thus, while change has occurred and is exerting an overall positive influence on student learning, there is room for improvement, because some changes have not been sufficiently extensive or, if extensive, have not been maintained in all facets of their implementation. It would appear that 'inertial bureaucracy', a factor that impedes the development of a collaborative learning

community and so impedes the implementation and maintenance of change (Fullan, 1999) may be the cause. The MYRAD conclusion that change is slow to happen in the classroom is not true in this setting because significant changes have happened. Maintenance of these changes however, which is part of the change process requires attention. In this respect the MYRAD conclusion applies to the HCEL program. I will address possibilities for improvement in this area in the next three sections of the chapter.

2. Learning, Connectedness and Empowerment: Articulating a Theory of Learning

This project began in part as a response to the MYRAD results as has been shown in the previous section. In this section I concentrate on the sub-question:

What assists or impedes student learning?

and move to articulate a theory of learning based on the data collected in this study as well as the literature reviewed. While I concentrate on student learning in this section I reiterate the consistent emphasis of this study on the interrelatedness of connectedness, empowerment and learning.

Appreciation of Learning

The students at Garden College appreciate learning and my data indicates the majority are learning as they are able independently and interdependently to articulate the meaning they make from the learning situations they encounter. Authentic dialogue is taking place (Shor, 1992). They learn, particularly when they work together and find learning relevant and enjoyable. Relevance and enjoyment are closely dependent upon students being able to use a number of intelligences both when learning and demonstrating understanding of various concepts (Gardner, 1999). The extended blocks of time throughout the entire school day and the dedicated physical space and team teaching within the HCEL program promote learning. The level of articulation of their learning experiences demonstrates the students' ability to engage in metacognition. From my research there is, at Garden College, evidence of a complex co-emergent process of intellectual and social development enabled through the construction of meaning, taking place within a community that is dynamic and robust in adapting to changing circumstances. This is further corroborated by the increase in student numbers

from 75 to 100 by 2002. The fact that numbers have remained in the nineties in subsequent years may be attributed to the program. As noted previously, the principal believes this to be the case (Principal, personal communication, 8 March, 2004). While this finding is to be celebrated, there are notable areas where student learning is not at an optimum level. It appears from the data that this is linked to the theory underpinning certain learning experiences offered to the students.

Competing Theories of Learning

The discussion in Chapter Four, highlighting provision for literacy, information technology and integrated learning within the HCEL program, demonstrates that competing theories of learning coexist within the school. They do not do so harmoniously. People often act inconsistently with their espoused philosophy as other factors, such as outside powerful influences may prevent consistency. It may be cognitive dissonance that allows competing theories of learning to co-exist at Garden College, or the fact that interest in the articulation and adoption of a consistent approach is lacking. This situation continues however, to the extent that it could render the HCEL program dysfunctional if the status quo remains. This problem emanates from fragmentation of learning through a key learning area structure, and is compounded by the HCEL teachers' inability to articulate any explicit theoretical approach to learning. This is problematic, especially as the HCEL program, from the outset, explicitly incorporated constructivist learning. As demonstrated in Chapter Four, teacher understanding of learning is implicitly constuctivist or even enactivist, but they often use behaviourist approaches because they either, have them imposed upon them or understand them to be executed more quickly and so to be more 'efficient'. This situation reflects the conflict between behaviourist and contructivist approaches described by Begg (2002) and the dualistic thinking that permeates our society (Palmer, 1998). As noted previously, dualistic thinking is the syndrome by which we categorise according to perceived opposites and so repeatedly make choices on an either/or basis, ignoring complexities within situations and the possibility of embracing these complexities and working with them, rather than against them. More often than not, the elements of choice are not mutually exclusive and can and do co-exist harmoniously. The situation also highlights the problem of teaching in the HCEL program without being inducted into its original educational philosophy. Further professional learning would assist teachers to understand and explicitly articulate their approaches to their craft. However, this in itself is not enough. Professional learning opportunities should challenge teachers such as those in HCEL to

explicitly articulate their personal learning philosophies to themselves and the wider staff group. This will ensure a higher degree of consistency and ownership of the philosophy.

Integrated Learning

The HCEL program, in theory, emphasises student learning using constructivist methods and trans-disciplinary tasks. This integrated approach is a response to fragmentation of curriculum as neither students nor teachers live compartmentalised lives, but rather negotiate each day in a myriad of ways that reflect the context of their existence and their ability to learn in this connected environment.

As I have discussed already, there are commendable pedagogical approaches used extensively in the middle years that are consistent with constructivist/enactivist theory and require an integrated approach. These approaches encourage students to take action to make their world a better place, become active citizens, become creative and critical thinkers, to be meta-cognitive and to self-assess (Baird & Northfield, 1992; Costa, 2004; De Bono, 1992; Fogarty, 1997; 2001; Holdsworth, 2003; Murdoch & Hornsby, 1997; Murdoch, 1998; Pohl, 2004). Teachers are encouraged to use these approaches and also provide variety for their students by designing curriculum according to the principles of Howard Gardner's Multiple Intelligence Theory or Bloom's revised Taxonomy, incorporate creative and critical thinking into classroom planning and be metacognitive and reflective learners themselves (Baird & Northfield, 1992; Costa, 2004; Fogarty, 2004; Pohl, 2004).

The articulation of these approaches is dynamic in that it implies the continuous process of 'becoming' rather than only acquiring knowledge (Begg, 2002; Davis & Sumara, 1997; Davis, Sumara & Luce-Kapler, 2000), which is ideally suited to an holistic, integrated approach. The articulation of this is mine however, and not that of the teachers. Unfortunately, an integrated approach is often relegated to the primary school. The concept in the secondary school setting is slowly becoming accepted. Slowly is the operative word. This, in itself, conveys the relative unimportance attached to these approaches at an organisational level, which is perhaps once again, a result of 'inertial bureaucracy', a factor that impedes the development of a collaborative learning community and in turn impedes the implementation and maintenance of change (Fullan, 1999). If

teachers however, were more aware of the theoretical underpinning of the approaches they enact it may facilitate change at a faster pace; a change that is deeper and lasting for the whole school.

A Way Forward: Enactivism

As there is confusion among the teachers a way forward may be, an exploration of enactivism. This exploration would highlight the dichotomy and enable a re-thinking of theory of learning and curriculum delivery that allows teachers to develop teaching and learning practices that are theoretically consistent, and acknowledge learning as a complex web of interaction. Enactivism, by its very nature, values learning in all domains of human existence. This is not necessarily true of constructivism, as teachers may apply constructivist learning only in a particular area.

Such exploration by the teachers would also enable organisational learning to increase. A complex web of interaction increases teacher capacity (Lodge & Reed, 2003) as all members of the web are equally valued. This is empowering for all stakeholders. An enactivist approach does not exclude teaching approaches that emanate from the understanding that the relationship between teaching and learning is direct, causal and linear (Petrosky & Delandshere, 2004), as sometimes this is an appropriate teaching approach. What it does however, is highlight that if used, this approach must still be learner-centred (Murdoch & Wilson, 2004). It is the learner who determines it appropriate or otherwise with the teacher closely and insightfully monitoring student choices and reactions. If this concept were applied in situations such as these at Garden College, provision for literacy and information technology would be learner-centred and located within an integrated approach.

If learning theory is re-explored in enactivist terms this would support the development of the whole child and delineate the school as a learning web, by:

- encouraging teachers and students to reflect deeply on their practice to understand the purpose of all actions
- encouraging teachers and students to research in their own classrooms and develop appropriate approaches to learning that value the development of students holistically

- supporting learning and assessment procedures that value all the domains in which students operate
- encouraging student self assessment in order to improve learning
- encouraging processes and procedures that obviate dualistic thinking
- valuing the rational but not at the expense of other (sensual) ways of knowing.

This is the manner in which enactivism takes constructivism a step forward (Begg, 2002; Davis, Sumara & Luce-Kapler, 2000). Enactivism differs from constructivism in that it explicitly, rather than implicitly, values learning in all domains. It is "effective action, that is operating effectively, in the domain of existence of living beings" (Maturana & Varela, 1992, p. 29). A rethinking of constructivist theory in enactivist terms may lead to an understanding of the Zone of Proximal Development as Vygotsky promulgated it. If so, the focus would be on what a student can do with and without assistance, but would not focus on that which a student is unable to achieve. This would occur in all domains and value a multiplicity of ways of knowing. It would also enable exploration of the understanding of telos as elastic and not limited to language development only (Smagorinsky, 1995). In addition, teachers and systems would value assessment for learning, in performance, within a range of contexts, over time, rather than a single 'snapshot' developed according to very narrow criteria. It is the explicit valuing of learning in all domains and in many ways that enables an enactivist approach to take constructivism a step forward.

Continuing Forward: Whole School Design, Monitoring and Evaluation

In the context of Garden College, the administration team proposed and implemented, through the team of teachers, a program (HCEL) that required an integrated approach to learning. The continuation of this program according to that plan was partly thwarted initially, by the insistence of two key learning area leaders, not members of HCEL, on the inclusion of discrete history and geography courses. This insistence was soon followed by two other key learning area co-ordinators. Adopting a whole school design from the outset and ensuring continuing monitoring and evaluation may have obviated this problem.

Effective teaching and learning should be achieved within a whole school process (Hill & Russell, 1999; Russell, MacKay & Jane, 2003; Schools Council, National Board of Employment,

Education and Training, 1993). It would benefit the school to adopt the Hill-Crevola Whole School Design for Improvement in Teaching and Learning (Figure 2.2, p. 46). The design provides the conceptual base for developing specific programs. It has nine interdependent elements. Beliefs and understandings, about the way students learning, are at the centre and the expression of the other eight elements emanates from these and all work consonantly to facilitate the operation of an effective learning community. The articulation and adherence to these nine elements will facilitate a return to the original design of the HCEL program.

Once the program has been reconstituted using this method, the program requires continued monitoring and evaluation by the teachers, curriculum coordinator, English, mathematics, science, SOSE and technology coordinators and the person responsible for the timetable. Monitoring professional learning and evaluation would ensure that:

- All teachers exhibit an understanding of an enactvist approach to learning
- Teachers recognise and understand the importance of embracing the paradox
- the HCEL teachers, the key learning area coordinators and through them, the wider staff group, are involved in the planning, implementation and evaluation of an integrated approach in the HCEL program
- New members to the college staff, no matter at what level they teach, are inducted into the operation of the HCEL program
- All teachers in the school are continually updated on the developments and achievements of the HCEL program
- Staff members are encouraged to become involved where possible in the HCEL program and specifically encouraged to visit the HCEL classes
- Ways are found for the HCEL staff and students to maintain a presence in the wider school community without compromising their separation.

This procedure, if implemented, addresses the related concerns discussed in chapter four and address the problem of 'inertial bureaucracy' (Fullan, 1999).

Continuing Forward: An Holistic Planning Model for Teachers

From a teacher's perspective effective implementation of the whole school design depends on planning that includes the development of a scope and sequence including concepts and skills, pedagogy that includes discipline and interdisciplinary learning experiences and authentic tasks and assessment procedures and an evaluation scheme. An approach such as that advocated by Murdoch & Hornsby (1997) which includes the aspects of action and reflection and the stages of:

- Tuning in and preparing to find out
- Finding out
- Sorting out
- Going further
- Reflecting and making conclusions
- Taking Action.

would provide a sound basis for design and implementation.

The topics for integrated units should be authentic, that is relevant in the real life of the students. Once the whole school design is achieved, teachers require a planning model that allows them to develop units of work in a holistic integrated manner, documented on a suitable planning proforma (Appendix 14 & 15). The proforma might include a relevant topic for the unit, the significant amount of material from this unit taught across key learning areas, possible learning activities and formative and summative assessment, the embedding of thinking and information technology skills, the use of extended strategies and theories such as web quests, multiple intelligences, broad, inclusive assessment procedures all in the context of the Victorian Essential Learning Standards.

This approach allows for the demonstration of student learning using multiple intelligences, the value of which I discussed at some length in chapter four. The reaction of students to various modes of learning certainly corroborates Howard Gardner's statement that Multiple Intelligence Theory is:

a ringing endorsement of an ensemble of propositions:

we are not all the same: we do not all have the same kinds of minds:

education works most effectively for most individuals if these
differences in mentation and strengths are taken into account
rather than denied or ignored. (Italics in original) (Gardner, 1999, p. 91)

I stated in Chapter One that this study is significant for my role as I journey with the teachers at Garden College. The teachers have asked me to assist in the implementation of this recommendation and the principal, curriculum coordinator and year level coordinator have asked me to continue working with this group of students as they progress to year eight. Thus the study has proved significant for me in my role, as it has allowed me to work with all participants in depth in a way that is sustainable.

Continuing Forward: Valuing of Broad Methods of Assessment by Systems and Governments

Integrated learning is largely constructivist but, in my experience, teachers often find assessment too difficult as the understanding of formative and authentic assessment is limited and undervalued by systems and governments. Only behaviourist forms of assessment, such as the Victorian Achievement Improvement Monitor (AIM) undertaken state-wide by all students in year seven, are truly valued by systems and governments. Relevant in this context is Begg's (2002) comment, "when learning is based on constructivism and assessment on behaviourism we have conflict" (p. 53). This is problematic as assessment is the path to student improvement and the absence/ inappropriateness of assessment denigrates the learning area. In other words, the area is not valued. Dualistic thinking is evident, as the perception prevails that only one form of assessment is reliable and therefore desirable. This emanates from a mechanistic world-view that thinks in terms of linear causal relationships. Governments and systems have the opportunity, as they set direction, to value assessment that enables students to demonstrate understanding in as many ways as possible. The Victorian Essential Learning Standards (Victorian Curriculum and Assessment Authority, 2005) and the accompanying support materials are a progression in a positive direction by providing a framework that explicitly values the interrelatedness of all areas of learning and broad inclusive assessment procedures, but it will take a great deal of professional development and learning by

teachers in order to devise, monitor and value multiple modes of assessment. In practice, this means teachers need to be supported by governments and systems in this valuable venture.

3. Empowerment, Connectedness and Learning: Listening to the Voices of Students and Teachers

I turn now to another crucial outcome of the study. In this section I discuss the benefit of listening to the voices of the student and teachers and make recommendations accordingly.

Student Voice

The ability to listen to the student and teacher voices is the most significant enabling factor for the building of caring, empowering relationships and the development of a learning community. During the data generating period I became increasingly aware of the powerful articulation of student voice within this student community and the benefit of inclusion of all students, as so much research is based only on specific groups as evident in the work of Vygotsky (1978) and Resnick, Harris and Blum (1993). I deliberately included as many voices as possible and was increasingly impressed by the degree to which the vast majority of students were willing and able to express informed opinions. As a result, in the presentation of my results, I allowed the students to speak for themselves at some length about factors that enable them to develop a sense of belonging within their school learning community and factors that enable their learning. They also speak of the factors that impede this development.

The key reason for listening to student voice, is to improve student learning by allowing the students to articulate their thoughts, so that teachers are able to co-plan learning experiences that suit their students' needs. While Keighley-James (2002) states that within the educational community students are the most disenfranchised group, I found this not to be true in year seven at Garden College, as many of the factors that Trafford (2004) says occur as a result of listening authentically to student voice, are evident. Relationships are generally very good between students and between students and teachers in year seven and the students are motivated to learn and take a high level of responsibility for their own learning. The challenges offered them are readily accepted. They feel connected to the learning environment and the attendance rate has increased markedly since the

introduction of the HCEL program. Student relationships are generally inclusive and students are confident and most understand themselves to be learning well or very well in the areas they described. Teachers exhibit an understanding of student capabilities and are sensitive to the need to change practice in accord with this understanding. In addition, it is rewarding to hear students as they speak respectfully, honestly and openly with no inhibitions or prejudices. They are obviously empowered to act with confidence within their learning community.

From this description it could be perceived that at Garden College listening to student voice is not tokenistic as described by Dutson-Steinfeld, (2004) and that student voice is really being heard. As a result, students are empowered. The conclusions I have drawn and already articulated in this Chapter encourage further, deeper listening to student voice regarding curriculum design and delivery at Garden College. David Zyngier (2004b) and Mitra and Frick (2004), as described in Chapter Two (p. 52), delineates a valid way forward, by truly listening to student voice in this area. I support his approach as I have been privileged to listen to students who understand and can articulate the factors that enable and impede their ability to learn, particularly in the areas of literacy, information technology, and some aspects of history and geography. They were not daunted by my questioning, but happily and enthusiastically communicated their understandings both verbally and non-verbally. As I noted in Chapter Four, they were well able to communicate 'in the adult' (Macbeath, 2004) and they know which approaches to learning, actually enable their learning. Why, therefore are they not consulted more often and in a much wider context than Garden College?

The answer generally proffered to this question is the scarcity of time to listen productively. Certainly, Garden College considered my involvement in this project a welcome luxury. From my observation of teachers in the HCEL program and the dialogue of students as they spoke about other teachers, teachers are generally pro-active and skilful in using questioning techniques to successfully scaffold learning experiences for students. The students are capable of responding metacognitively and do so. If these metacognitive responses were formalised, using simple techniques recommended by educationalists (Fogarty, 2004; Pohl, 2004), teachers could then avail themselves of the opportunity to listen to student voice more effectively to promote student learning. These techniques enable teachers to imbed metacognition into their learning program. While this requires time, it is far less time-consuming than an interview process. Teachers could then use these reflections, which give them an enhanced opinion and understanding of their students' capabilities, to develop teaching and

learning approaches that enable students to make their own meaning within all areas of the curriculum. This, in turn, enables teachers to develop the confidence to challenge governments and systems by providing their own dependable data because they have developed the capacity to examine this data and make sense of it (Pekrul, 2004). This empowers both teachers and students. Achievement of this goal, if prioritised, is desirable and attainable.

Teacher Voice

Garden College, as does any school, has many voices, both harmonious and competing. The teachers in my project were very articulate. Their voices are very significant, both as sources of description and as statements that are generally consonant with student understanding. As I stated in Chapter Two, a successful school allows all teachers' voices to be heeded (Evans & Songer-Hudgell, 2003; Fullan, 1993; 1999; Lodge & Reed, 2003; Stoll, 1999). My overall conclusion from the research is that the HCEL teachers' voices are heeded in their daily dealings with each other and the students, but often go unheeded within the total staff group and specific sections thereof.

The ability to heed each other's voices within the HCEL team is demonstrated at both the professional and personal level. These two areas intersect in interactions within the group and it is sometimes difficult to separate the two. They are a high performance team as there is that element of enjoyment permeating all their interactions. The interconnectedness and consequent empowerment that Macy (1983) describes is evident. Thus, I understand the combination of professional and personal to contribute very significantly to the ability to heed each other's voices and to promote a 'power with' situation (Macy, 1983). Their voices, too, are heeded by the principal, the curriculum co-ordinator and year level co-ordinator.

The HCEL teachers' voices, however, are unheeded by certain individuals and groups of staff members. The lengthy passages I included in Chapter Four underpin this conclusion. The 'power with' situation within the team quickly changes to 'power over' in certain other settings, disempowering the HCEL teachers and furthering the 'inertial bureaucracy' so powerfully described by Fullan (1999). Competing voices of staff members are loud and some are very strident. This is typical of many school communities and in order to address this there needs to be successful management of these competing voices (MacBeath, 2004). The possibilities I have delineated in the

second section of this chapter, concerning the use of a whole school design approach and the development and implementation of an holistic planning model address this significantly.

As stated in Chapter One, the significance of my research lies in demonstrating the value of broadening the concept of student voice, as it is currently understood in much of the literature, and in highlighting the value of truly listening carefully and respectfully to both student and teacher voices. This will ensure that the dissonance of competing voices will be minimal and empower rather than disempower members of the school community. If this is so the denigrating effect of symbolic interactionism will not impede student learning.

4. Balance and Paradox in a Learning Community: A Challenge

In this final section I deal with two crucial ideas that have emerged in this study; balance and paradox.

Balance

Balance is an essential element in interdependence as life develops in complex ways within natural systems. This understanding has emerged from my reading and analysis of the data and leads me to conclude that this is the essential component of any learning community. Too often, we lose sight of this concept and see ourselves in isolation rather than as part of an interdependent community. In forming and articulating my conclusions, I have necessarily isolated certain elements, although I have tried to maintain perspective and context. A balanced approach in any domain obviates dualistic thinking; likewise in a balanced approach progress is not linear but an, often messy, combination of circuitous routes, along which we are often required to bungy jump in the way Fuller (1998) describes. Progress is furthered by interaction along the way and, as most of us are resilient, we successfully progress in a more or less balanced manner through life.

The majority of the students and all the HCEL teachers in my study exhibited a high degree of connectedness and may be described as resilient people, who are able to successfully rebound from any adverse occurrences in their lives within their learning community. While they expressed many concerns to me either verbally or in written form, they, with very few disconfirming

instances, expressed an overall satisfaction with the development of the learning community. While they seek improvement, they are able to intelligently take effective action in most areas of their professional and student lives. This is significant as "[e]ffective action leads to effective action: it is the cognitive circle that characterizes our becoming" (Maturana & Varela, 1992, p. 241). There is no single way to accomplish anything and, often, that which appears adverse at first, eventually exerts positive influence. There is, in the learning community, the recognition of the interdependence of all and that it is this interdependence that enhances each individual and consequently the whole. Power relations within the HCEL community are mutual and synergistic and the radical change that occurred in the concept of schooling, with the introduction of the synergistic HCEL program into year seven has contributed to this. It is both unproductive and impossible to endeavour to isolate in an effort to attribute the successful development of this community to the structure of the program or the people who live and work within the program or indeed, any other element. All elements combine to make the entity and the synergistic interaction of these elements constitute its nature.

Paradox

Balance often involves paradox. Within the HCEL program there exist paradoxical situations, some peculiar to this program and others, components of any school structure. It is these paradoxical situations that concern students and teachers daily (Palmer, 1998). While I may have mentioned some in other contexts, I think it beneficial to highlight them in this context as they are situations that constantly confront the learning community.

- i The perceived need to cocoon year seven as well as allowing them to be part of the total school community
- ii The ability to teach and assess in a way that is student centred, holistic and provides flexible pathways as well as having to use teaching and assessment methods that are prescribed/imposed by governments and/or systems
- iii The desirability of challenging students in their learning as well as having them work in a relaxed atmosphere

- iv The development of learning approaches that students find relevant and interesting as well as introducing them to traditional epistemologies
- v The development of students skilled in communication as well as reflection
- vi The requirement to be accountable to the whole school community as well as being accountable to the demands of a specific program

These are paradoxical situations. The two concepts contained in each are not mutually exclusive but according to our western propensity to think in dualities, are often described as such. Accommodating these situations is a constant challenge for the HCEL community and that is why a whole school exploration of the theory of enactivism would situate these ecologically, thus enabling teachers to find truth, "not by splitting the world into either-ors but by embracing it as *both-and*" (Italics in the original) (Palmer, 1998, p. 63). Thus, in viewing through the lens that is paradox, (Palmer, 1998), the community may make relevant choices that ensure all elements of the community enhance their own and others' propensities and in so doing, embrace the paradox. If the HCEL community accepts this as a continuing challenge, all will demonstrate continued improvement.

Summary of Recommendations

In gathering together these various themes there seems to be two levels which can be commented on; that of Garden College and, more tentatively, the wider education system within which it is embedded. For the College the following are now self-evident in my thinking and so I recommend Garden College:

- 1. Re-visits its understanding of learning theory, in the light of enactivism
- 2. Implements a whole school design approach to curriculum design and delivery
- 3. Develops procedures to monitor the implementation and maintenance of this approach
- 4. Develops procedures to update all staff on the progress of the HCEL program
- 5. Implements a relevant planning model for teachers

- 6. Continues to listen to student and teacher voices as a means of developing and implementing strategies for improved student learning
- 7. Embraces paradox in the manner described by Palmer (1998).

Given that my study is a case study as noted earlier there are problems for me to claim generalised recommendations that reach beyond this context. That is for others to do if they may. However, it seems that two strong points can be made. I therefore suggest that it would be beneficial to student learning for education systems and governments to:

- 1. Provide resources for schools to research within their own community and
- 2. Support teachers in implementing broad assessment procedures that value all domains of student learning

The rich ideas that have flown from this study and would give such deep insight into systemic studies such as MYRAD give great support to both of these suggestions.

My Personal Journey

I began this thesis with a short reflection on my personal journey and it is fitting that I conclude with a similar reflection. This journey has continued as this study has progressed and I have researched the scenario that is year seven at Garden College. There are a number of ways in which I have grown professionally as I have learned a great deal from sharing the professional lives of the teachers and the daily lives of the students. I have been encouraged by listening to student voices as they spoke so freely and insightfully of their learning community, and articulated ways in which they built caring relationships and learned in the context of these relationships. I have been particularly impressed by the way the teachers understand interdependence and face their lives holistically by embracing paradoxical situations. The difficulties they encounter in their learning community are never regarded as insurmountable as together they work to develop the best learning community they can. The power of the HCEL community is synergistic. This has empowered me to view my professional life in a similar manner, by reinforcing and further developing my understanding that achievement is very rarely a linear process, but is most often effected through a circuitous, repetitive and often 'messy' route travelled in the company of others. To embrace this concept happily, as does the HCEL community is in itself a great achievement, and one to which I

aspire as my professional journey continues. Immersion in the data generated by the HCEL community has also given me a heightened awareness of learning as a co-emergent process involving all contexts in which the learner operates. This is proving invaluable in my work with other school communities. Thus it is very evident that members of the HCEL community have provided shade in which I have been able to grow.

Conclusion: We Grow in the Shade of Each Other

"We only have the world we bring forth with others, and only love helps us bring it forth" (Maturana & Varela, 1992 p. 248).

Education is concerned with life and is a process by which, "learners might become fully alive human beings who contribute to a society of the common good" (Italics in the original) (Groome, 1998, p. 72). This statement encapsulates the unity of connectedness, empowerment and learning as I have explored them in this thesis. The title of my work, as it included my extended metaphor, provided impetus for reflection as I wrote. It emanated from my experience, as an interested but largely unaccomplished gardener, that plants failing to reach maturity when they stand alone, succeed amazingly well when placed in the shade of another plant. After a period, sometimes short, sometimes longer, they can thrive alone if the other plant is removed.

Having completed my iterative spiral, I understand that high productivity exists in the year seven garden at Garden College. The presence of sunlight, shade and rainfall in optimum amounts and at the right times ensures this. There is sufficient shade to ensure that all the plants develop either immediately or over time, according to the relationship between their individual growth patterns and the environment of year seven. Mostly they grow unharmed. The plants that provide the shade, are well able to thrive in full sunlight and rainfall and continue to do so, thus "enhancing their own and others capacities" (Macy, 1983, p. 31). The particular manner and rate of growth of each individual plant is accommodated and diversity valued, and so the garden generally thrives as power is mutual and synergistic.

At times, in certain areas of the garden, growth is impeded, as sunlight and rainfall are not present to the extent that all flourish. Despite this, the interconnectedness of all plants, means that

each has the ability, even though shade appears minimal, to access sufficient nourishment and shelter to sustain life and grow. No plant requiring shade is isolated. Sometimes, lack of rainfall turns to drought and this dry shadeless arena impedes growth within the learning community. Even in these conditions very few plants' development is significantly impeded.

Overall the garden has flourished and it has done so, because the relevant members of the learning community, the teachers, have accepted the challenge of promoting a balanced approach to the development of the garden, which is the year seven learning community. I am confident, given the level of synergy evident in the HCEL community that they will successfully continue to negotiate the challenge as:

Good teachers possess a capacity for connectedness. They are able to weave a complex web of connections among themselves, their subjects, and their students so that their students can learn to weave a world for themselves. The methods used by these weavers vary widely: lectures, laboratory experiments, collaborative problem solving, creative chaos. The connections made by good teachers are held not in their methods but in their hearts – meaning heart in its ancient sense, as the place where intellect and emotion and spirit and will converge in the human self (Palmer, 1998, p. 11).

Thus, I am also confident that the members of this community, as they continue their process of life-long growth will provide and access shade in the many gardens they inhabit, and, that the continued development of the eco-systems of which they are a part, will attest to the statement, "We grow in the shade of each other".

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APPENDICES

Appendix 1	Ethics Approval Document
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Human Research Ethics Committee

HREC Expedited Review Panel Approval Form

Principal Investigator/Supervisor: Dr Caroline Smith Melbourne Campus

Co-Investigators:

Student Researcher: Mauricette Hamilton, Melbourne Campus

Ethics approval has been granted for the following project:

We grow in the shade of each other: an exploration of connectedness and learning

for the period: 01.03.04 - 30.09.04

Human Research Ethics Committee (HREC) Register Number: V2003.04-48

The following standard conditions as stipulated in the National Statement on Ethical Conduct in Research Involving Humans (1999) apply:

- that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
 - security of records
 - compliance with approved consent procedures and documentation
 - compliance with special conditions, and
- that researchers report to the HREC immediately any matter that might affect the ethical (ii) acceptability of the protocol, such as:
 - proposed changes to the protocol
 - · unforeseen circumstances or events
 - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than minimum risk. There will also be random audits of a sample of projects considered to be of minimum risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a Final Report Form and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an Annual Progress Report Form and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

Signed

Research Services Officer, Melbourne Campus)

Appendix 1

Ethics Approval Document



Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000 Facsimile 03 9953 3005 www.acu.edu.au

INFORMATION LETTER TO THE DIRECTOR

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and

learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Mr Larry Burn Director of Catholic Education P O Box 576 BALLARAT, 3353

Dear Mr Burn

I seek your permission to undertake some research at Garden College on connectedness and learning in the middle years of schooling. In the last ten years there has been a great deal of research into the middle years of schooling and I am interested in asking the students and teachers at Garden College what it is that makes them feel a part of the school community and what assists students to learn. I am conducting the project as part of my Doctor of Education programme. This project is an exploration of teachers' and students' perceptions of connectedness and learning in year seven.

For this study I require teachers and students in the HCEL program to participate if the project is to be successful. I am asking teachers and students to be observed in their classroom and be interviewed. In addition, students will be asked to complete a questionnaire. Parental consent will be obtained prior to any research contact with the students.

The project will have the following components.

• Observation. During a six week period commencing March 2004, I will observe HCEL classes at the College. This will take place over a two day period each week. At this time I will videotape classes and take notes. The resulting tapes will be kept secure and will only be viewed by me and my supervisors. After a period of five years they will be destroyed.

- Questionnaire. At the conclusion of the six week period I will administer a questionnaire of approximately one hour's duration, to all year seven students. At this time students who would like to be interviewed may volunteer to do so. Other students may be requested to participate in the interview segment of the project. Their assent would be essential for participation.
- Interviews. In August 2004, I will interview the teachers of the HCEL program and twelve students. All of the students being interviewed will be given code names, so as they are unable to be identified. Teachers may also have a code name if they wish, but you and they need to be aware that, because of the few teachers in the program, they may be able to be identified by the views they share with us. All interviews will be audiotaped and participants will be able to view the transcript of their interview to ascertain the veracity of the material and the desirability of inclusion in the report.

If you agree to the study being conducted at Garden College, I assure you confidentiality will be maintained both during the study and in any report of the study. All participants will be given a code and names will not be retained with the data. At any time during the study you would be welcome to seek clarification in any area.

If you have any questions about the project, please contact the Staff Supervisor, Dr Caroline Smith, on telephone number 03 9953 3281 in the School of Education, St Patrick's Campus at the Australian Catholic University, 115 Victoria Parade, FITZROY 3065.

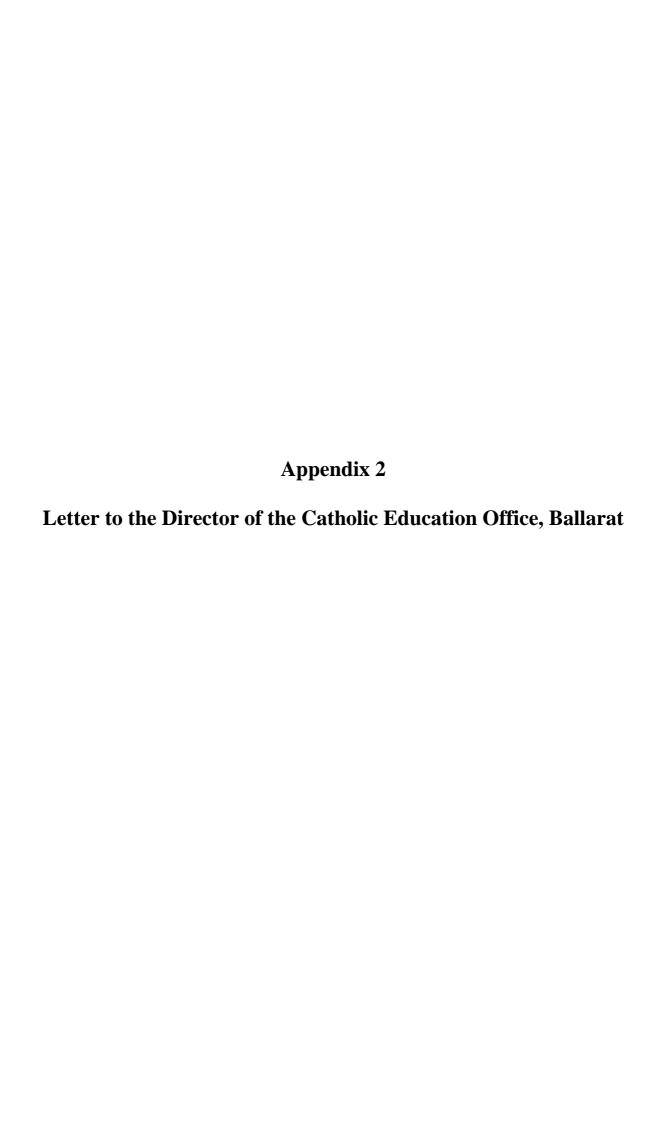
This study has been approved by the Human Research Ethics Committee at Australian Catholic University. In the event that participants have any complaint or concern about the way they have been treated during the study, or if they have any query that the Student Researcher and Staff Supervisor have not been able to satisfy, they may write to:

Chair, Human Research Ethics Committee
C/o Research Services
Australian Catholic University
Locked Bag 4115
FITZROY VIC 3065 Tel: 03 9953 3157 Fax: 03 9953 3315

Any complaint will be treated in confidence and investigated fully. The participant will be informed of the outcome.

If you are willing for me to undertake this research at Garden College, please sign the attached, informed consent forms. You should sign both copies of the consent form and retain one copy for your records and return the other copy to me as student researcher. Your support for the research project will be most appreciated.

Mauricette Hamilton Student Researcher Dr Caroline Smith Staff Supervisor





Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000

Facsimile 03 9953 3005

www.acu.edu.au

PERMISSION FORM Copy for CEO Records

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

PRINCIPAL RESEARCHER: Dr Caroline Smith

STUDENT-RESEARCHER: Mrs Mauricette Hamilton

Dire	ctor's Permission
Education Office. Any questions I have asked	rovided in the Information Letter to the Director, Catholic have been answered to my satisfaction. I give permission Hamilton, an Office employee to participate in this research
Name: (block le	etters)
Signature:	Date:
Principal Researcher: Dr Caroline Smith	Student-researcher Mrs Mauricette Hamilton
Signature:	Signature
Date:	Date:



Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000 Facsimile 03 9953 3005 www.acu.edu.au

PERMISSION FORM

Copy to Submit to Principal Researcher

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

PRINCIPAL RESEARCHER: Dr Caroline Smith STUDENT-RESEARCHER: Mrs Mauricette Hamilton

Director's Permission I have read and understood the information provided in the Information Letter to the Director, Catholic Education Office. Any questions I have asked have been answered to my satisfaction. I give permission for Garden College, Hamilton and Mauricette Hamilton, an Office employee to participate in this research activity.						
Name:Signature:	(block letters)	Date:				
Principal Researcher:	Dr Caroline Smith	Student-researcher	Mrs Mauricette Hamilton			
Signature: Date:		Signature Date:				

Appendix 3

Consent form: Director of the Catholic Education Office, Ballarat



Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000 Facsimile 03 9953 3005 www.acu.edu.au

INFORMATION LETTER TO THE PRINCIPAL

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and

learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Mr John Gardener Principal, Garden College PO Box 000 GARDEN CITY 0000

Dear Mr Gardener

Garden College is invited to participate in some research on connectedness and learning in the middle years of schooling. In the last ten years there has been a great deal of research into the middle years of schooling and I am interested in asking the students and teachers at Garden College what it is that makes them feel a part of the school community and what assists students to learn. I am conducting the project as part of my Doctor of Education programme. This project is an exploration of teachers' and students' perceptions of connectedness and learning in year seven.

For this study I require teachers and students in the HCEL program to participate if the project is to be successful. I am asking teachers and students to be observed in their classroom and be interviewed. In addition, students will be asked to complete a questionnaire. Parental consent will be obtained prior to any research contact with the students.

The project would have the following components.

• **Observation**. During a six week period commencing March 2004, I will observe HCEL classes at the College. This will take place over a two day period each week. At this time I will videotape classes and take notes. The resulting tapes would be kept secure and would be only viewed by me and my supervisors. After a period of five years they will be destroyed.

- Questionnaire. At the conclusion of the six week period I will administer a questionnaire of approximately one hour's duration to all year seven students. At this time students who would like to be interviewed may volunteer to do so. Other students may be requested to participate in the interview segment of the project. Their assent would be essential for participation.
- Interviews. In August 2004, I will interview the teachers of the HCEL program and twelve students. All of the students being interviewed will be given code names, so as they are unable to be identified. Teachers may also have a code name if they wish, but you and they need to be aware that, because of the few teachers in the program, they may be able to be identified by the views they share with us. All interviews will be audiotaped and participants will be able to view the transcript of their interview to ascertain the veracity of the material and the desirability of inclusion in the report.

If you agree to the conducting of this study at Garden College, I assure you confidentiality will be maintained both during the study and in any report of the study. All participants will be given a code and names will not be retained with the data. At any time during the study you would be welcome to seek clarification in any area.

If you have any questions about the project, please contact the Staff Supervisor, Dr Caroline Smith, on telephone number 03 9953 3281 in the School of Education, St Patrick's Campus at the Australian Catholic University, 115 Victoria Parade, FITZROY 3065. Before commencing, you will have the opportunity to ask any questions about the project. You will also have the opportunity to discuss your participation and the project in general after the completion.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University and the Director of catholic Education in the Ballarat Diocese, Mr Larry Burn. In the event that participants have any complaint or concern about the way they have been treated during the study, or if they have any query that the Student Researcher and Staff Supervisor have not been able to satisfy, they may write to:

Chair, Human Research Ethics Committee C/o Research Services Australian Catholic University Locked Bag 4115 FITZROY VIC 3065 Tel: 03 9953

FITZROY VIC 3065 Tel: 03 9953 3157 Fax: 03 9953 3315

Any complaint will be treated in confidence and investigated fully. The participant will be informed of the outcome.

If you are willing for the College to participate please sign the attached informed consent forms. You should sign both copies of the consent form and retain one copy for your records and return the other copy to me as student researcher. Your support for the research project will be most appreciated.

Mauricette Hamilton Student Researcher Dr Caroline Smith Staff Supervisor

Appendix 4

Letter to the Principal



www.acu.edu.au

PERMISSION FORM

Copy for Principal's Records

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

PRINCIPAL RESEARCHER: Dr Caroline Smith STUDENT-RESEARCHER: Mrs Mauricette Hamilton

Principal's Pe	rmission	
I have rea	d and understood the in	nformation provided in the
Information Letter to the School Principal. Any question satisfaction. I give permission for Staff and selected studies research activity.		
Name:(block letters)		
Signature:	Date:	
Principal Researcher: Dr Caroline Smith	Student-researcher	Mrs Mauricette Hamilton
Signature:	Signature	
Date:	Date:	



PERMISSION FORM

Copy to Submit to Principal Researcher

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

PRINCIPAL RESEARCHER: Dr Caroline Smith

STUDENT-RESEARCHER: Mrs Mauricette Hamilton

	Principal's Pe	ermission		
I have read and understood the information provided in the				
Information Letter to the School Principal. Any questions I have asked have been answered to my satisfaction. I give permission for Staff and selected students at <i>Garden College</i> to participate in this research activity.				
Name:				
	(block letters)			
Signature:		Date:		
Principal Researcher:	Dr Caroline Smith	Student-researcher	Mrs Mauricette Hamilton	
Signature:		Signature		
Date:		Date:		

Consent form: The Principal



INFORMATION LETTER TO PARTICIPANTS

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and

learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Dear Participant

You are invited to participate in some research on connectedness and learning in the middle years of schooling. In the last ten years there has been a great deal of research into the middle years of schooling and I am interested in asking the students and teachers at Garden College what it is that makes them feel a part of the school community and what assists students to learn. I am conducting the project as part of my Doctor of Education programme. This project is an exploration of teachers' and students' perceptions of connectedness and learning in year seven.

For this study I require teachers and students in the HCEL program to participate if the project is to be successful. As you are a teacher in this program you are invited to participate. I am asking teachers and students to be observed in their classroom and be interviewed. In addition, students will be asked to complete a questionnaire of approximately one hour's duration. The project would have the following components.

• **Observation**. During a six week period commencing March 2004, I will observe HCEL classes at the College. This will take place over a two day period each week. At this time I will videotape classes and take notes. The resulting tapes will be kept secure and will only be viewed by me and my supervisors. After a period of five years they will be destroyed.

- Questionnaire. At the conclusion of the six week period I will administer a questionnaire to all year seven students. At this time students who would like to be interviewed may volunteer to do so. Other students may be requested to participate in the interview segment of the project. Their assent would be essential for participation.
- Interviews. In August 2004, I will interview the teachers of the HCEL program and twelve students. All of the students being interviewed will be given code names, so as they are unable to be identified. You may also have a code name if you wish, but you need to be aware that because of the few teachers in the program you may be able to be identified by the views you share with us. All interviews will be audiotaped and participants will be able to view the transcript of their interviews to ascertain the veracity of the material and the desirability of inclusion in the report.

Participation in this research project is voluntary. You can withdraw from the study at any stage without giving a reason. Confidentiality will be maintained during the study and in any report of the study. All participants will be given a code and names will not be retained with the data.

The research will be explained in greater detail as we approach each stage. At this point in time you are free to ask any questions regarding the project.

If you have any questions about the project, before or after participating, please contact the Staff Supervisor, Dr Caroline Smith, on telephone number 03 9953 3281 in the School of Education, St Patrick's Campus at the Australian Catholic University, 115 Victoria Parade, FITZROY 3065. Before commencing, you will have the opportunity to ask any questions about the project. You will also have the opportunity to discuss your participation and the project in general after the completion.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University. In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Student Researcher and Staff Supervisor have not been able to satisfy, you may write to:

Chair, Human Research Ethics Committee
C/o Research Services
Australian Catholic University
Locked Bag 4115
FITZROY VIC 3065 Tel: 03 9953 3157 Fax: 03 9953 3315

Any complaint will be treated in confidence and investigated fully. The participant will be informed of the outcome.

If you are willing to participate please sign the attached informed consent forms. You should sign both copies of the consent form and retain one copy for your records and return the other copy to me as student researcher. Your support for the research project will be most appreciated.

Mauricette Hamilton Student Researcher Dr Caroline Smith Staff Supervisor

Appendix 6 Letter to the Teachers



www.acu.edu.au

INFORMED CONSENT FORM

Copy for Participant to keep

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

PRINCIPAL RESEARCHER: Dr Caroline Smith

STUDENT-RESEARCHER: Mrs Mauricette Hamilton

Participant Consent I have read and understood the information provided in the Information Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree that the interview with me can be audiotaped and that my classes may be videotaped. I agree to participate in this research activity, realising that I can withdraw my consent at any time. I also agree that research data collected for the study may be published or provided to other researchers in a form that does not identify me in any way. Name: (block letters) Signature: Date: Principal Researcher: Dr Caroline Smith Student-researcher Mrs Mauricette Hamilton Signature Signature: Date: Date:



INFORMED CONSENT FORM

Copy to Submit to Principal Researcher

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

PRINCIPAL RESEARCHER: Dr Caroline Smith

STUDENT-RESEARCHER: Mrs Mauricette Hamilton

	Participa	nt Consent			
I have read and understood the information provided in the Information Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree that the interview with me can be audiotaped and that my classes may be videotaped. I agree to participate in this research activity, realising that I can withdraw my consent at any time. I also agree that research data collected for the study may be published or provided to other researchers in a form that does not identify me in any way.					
Name:	(block letters)				
Signature:		Date	:		
Principal Researcher:	Dr Caroline Smith	Co-researcher	Mrs Mauricette Hamilton		
Signature:		Signature			
Date:		Date:			

Consent form: Teachers



INFORMATION LETTER TO PARTICIPANTS

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and

learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Dear Participant

You are invited to participate in some research on connectedness and learning in the middle years of schooling. I am interested in asking the students and teachers at Garden College what it is that makes them feel a part of the school community and what helps students to learn. I am conducting the project as part of my Doctor of Education programme.

For this study I need students in the HCEL program to participate if the project is to be successful. As you are a student in this program I invite you to participate. I am asking all students to agree to be observed in their classroom and complete a questionnaire. Also I will interview some students. The project will have the following sections.

• **Observation**. During a six week period commencing March 2004, I will observe HCEL classes at the College. This will take place over a two day period each week. At this time I will videotape classes and take notes. The tapes will be kept secure and only be viewed by me and my supervisors. After a period of five years they will be destroyed.

- Questionnaire. At the conclusion of the six week period I will ask all year seven students to fill in a questionnaire. This will be completed at school and take about one hour. After this, students who would like to be interviewed may volunteer to do so. Other students may be requested to participate in the interview segment of the project. Students do not have to be interviewed if they do not want to.
- **Interviews.** In August 2004, I will interview twelve year seven students. All of the students being interviewed will be given code names, so as they are unable to be identified. All interviews will be audiotaped and students who are interviewed will be able to view the written version of their interview in order to see that it is correct.

Participation in this research project is voluntary. You can withdraw from the study at any stage without giving a reason. Confidentiality will be maintained during the study and in any report of the study. All participants will be given a code and names will not be retained with the data.

If you agree to participate the project will be explained to you in greater detail as we approach each stage. At this point in time you are free to ask any questions regarding the project.

If you have any questions about the project, before or after participating, please contact the Staff Supervisor, Dr Caroline Smith, on telephone number 03 9953 3281 in the School of Education, St Patrick's Campus at the Australian Catholic University, 115 Victoria Parade, FITZROY 3065. Before commencing, you will have the opportunity to ask any questions about the project. You will also have the opportunity to discuss your participation and the project in general after the completion.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University. In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Student Researcher and Staff Supervisor have not been able to satisfy, you may write to:

Chair, Human Research Ethics Committee C/o Research Services Australian Catholic University Locked Bag 4115 FITZROY VIC 3065

Tel: 03 9953 3157 Fax: 03 9953 3315

Any complaint will be treated in confidence and investigated fully. The participant will be informed of the outcome.

If you are willing to participate please sign the attached informed assent forms. You should sign both copies of the assent form and retain one copy for your records and return the other copy to the school. Your support for the research project will be most appreciated.

Mauricette Hamilton Student Researcher

Dr Caroline Smith Staff Supervisor

Letter to the Students



INFORMED CONSENT FORM

Copy for Participants to Keep

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

STAFF SUPERVISOR: Dr Caroline Smith
STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Participants section	1				
I (the participant) have read and understood the information in the letter inviting participation in the research, and any questions I have asked have been answered to my satisfaction. I agree to participate in this activity, realising that I can withdraw at any time.					
I agree that research data collected for the study may be published or provided to other researchers in a form that does not identify me in any way.					
Name of participant:(block letters)	Phone:				
Signature:	Date:				
Research Student: Mrs Mauricette Hamilton					
Signature:	Date:				
Staff Supervisor: Dr Caroline Smith					
Signature:	Date:				



INFORMED CONSENT FORM

Copy For Participant to Submit

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Participant section		ad and understood the			
I (the participant information in the letter inviting participation in the research have been answered to my satisfaction. I agree to participate withdraw at any time.	ch, and any	y questions I have asked			
I agree that research data collected for the study may be published or provided to other researchers in a form that does not identify me in any way.					
Name of participant:(block letters)	Phone:				
Signature:	Date:				
Research Student: Mrs Mauricette Hamilton					
Signature:	Date:				
Staff Supervisor: Dr Caroline Smith					
Signature:	Date:				

Consent form: Students



INFORMATION LETTER TO PARENTS/GUARDIANS

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and

learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Dear Parent/Guardian

Your child is invited to participate in some research on connectedness and learning in the middle years of schooling. In the last ten years there has been a great deal of research into the middle years of schooling and I am interested in asking the students and teachers at Garden College what it is that makes them feel a part of the school community and what assists students to learn. I am conducting the project as part of my Doctor of Education programme.

For this study I need students in the HCEL program to participate if the project is to be successful. As you are a parent or guardian of a child in this program I need your permission before we may invite your child to participate. I am asking all students to agree to be observed in their classroom and complete a questionnaire. In addition, I will interview some students. These interviews will be audiotaped. The project will have the following components.

• **Observation**. During a six week period commencing March 2004, I will observe HCEL classes at the College. This will take place over a two day period each week. At this time I will videotape classes and take notes. The resulting tapes will be kept secure and will only be viewed by me and my supervisors. After a period of five years they will be destroyed.

- Questionnaire. At the conclusion of the six week period I will ask all year seven students to fill in a questionnaire. This will be completed at school and take about an hour of the students' time. After this, students who would like to be interviewed may volunteer to do so. Other students may be requested to participate in the interview segment of the project. They do not have to be interviewed if they do not want to.
- **Interviews.** In August 2004, I will interview twelve year seven students. All of the students being interviewed will be given code names, so as they are unable to be identified. If interviewed, they will be able to view the written version of their interview in order to see that it is correct.

Participation in this research project is voluntary. You can withdraw your child from the study at any stage without giving a reason. Confidentiality will be maintained during the study and in any report of the study. All participants will be given a code and names will not be retained with the data.

The research will be explained in greater detail as we approach each stage. At this point in time you are free to ask any questions regarding the project.

If you have any questions about the project, before or after participating, please contact the Staff Supervisor, Dr Caroline Smith, on telephone number 03 9953 3281 in the School of Education, St Patrick's Campus at the Australian Catholic University, 115 Victoria Parade, FITZROY 3065. Before commencing, you will have the opportunity to ask any questions about the project. You will also have the opportunity to discuss your participation and the project in general after the completion.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University. In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Student Researcher and Staff Supervisor have not been able to satisfy, you may write to:

Chair, Human Research Ethics Committee C/o Research Services Australian Catholic University Locked Bag 4115 FITZROY VIC 3065

Tel: 03 9953 3157 Fax: 03 9953 3315

Any complaint will be treated in confidence and investigated fully. The participant will be informed of the outcome.

If you are willing for your child to participate please sign the attached informed consent forms. You should sign both copies of the consent form and retain one copy for your records and return the other copy to the school. Your support for the research project will be most appreciated.

Mauricette Hamilton Student Researcher

Dr Caroline Smith Staff Supervisor

Letter to the Parents of Year Seven Students



Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000

Facsimile 03 9953 3005

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INFORMED CONSENT FORM

Copy for Parent/Guardian to Keep

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

	Parent/Gua	rdian Consent	
I information provided	(the I in the Information Letter to Pa	e parent/guardian) have rearticipants. Any questions	
answered to my satis realising that I can w audiotaped and that r	faction. I agree that my child rithdraw my consent at any time research data collected for the satisfaction that does not identify my child	nominate below may partice. I agree that my child matudy may be published or p	ripate in this activity, be videotaped and
Name of Parent/guar	dian:		
C	(block letters)		
Signature:		Date:	
Name of child:			
_		l Assent	
	(t		
	is designed to explore. What I voject, realising that I can withdr		
Name of child:			
	(block letters)		
Signature:		Date:	
Staff Supervisor:	Dr Caroline Smith	Student Researcher	Mrs Mauricette Hamilton
Signature:		Signature	



INFORMED CONSENT FORM

Copy to Submit to Researcher

TITLE OF PROJECT: We grow in the shade of each other: An exploration of connectedness and learning.

STAFF SUPERVISOR: Dr Caroline Smith

STUDENT RESEARCHER: Mrs Mauricette Hamilton

COURSE: Doctor of Education

Parent/Guardi	an Consent
	rent/guardian) have read and understood the
information provided in the Information Letter to Partic	
answered to my satisfaction. I agree that my child nom	
realising that I can withdraw my consent at any time. I audiotaped and that research data collected for the study	
researchers in a form that does not identify my child in	
	, ,
Name of Parent/guardian:	
(block letters)	
Signature:	Date:
Name of child:	
Child As	
this research project is designed to explore. What I will	participant aged under 18 years) understand what
to take part in the project, realising that I can withdraw	
decision.	at any time without having to give a reason for my
Name of child:	
(block letters)	
Signature:	Date:
Green Constitute Const	
Staff Supervisor: Dr Caroline Smith	Student Researcher Mrs Mauricette Hamilton
A	
Signature:	Signature

CRIOCOS registered provider: 00004G. 00112C. 00873F. 00885B

Consent form: Parents

Student Questionnaire

the classroom activities

other activities that are done outside the classroom

other things do you like about the subject

2.	2. Circle the words which best describe how well you learn in this subject						
Very v	well	Well	Medium	L	LOW	Very low	
3.	What helps	s you to learn in	this subject?				
4.	How do yo	u know if you a	re learning we	ell in this subj	ect?		
_							
5.	What happ	ens that stops y	ou learning as	s well as you c	could?		
_							
6.	What do yo	ou find hard to l	earn in this su	bject?			
7.]	Do other stu	idents you knov	v in the class l	earn a lot in tl	nis subject?		
	your answe n why you o	r circled Yes, Sor	Yes ne do, No or	Some do Don't Know.		Don't know	
	•	way for two or t	•		achers talk t	to you	
Circle	your answe	r	Yes	No	Don't kn	ow	

9.If you have been away for two or three days has one of the teachers helped you with any problems you have? Circle your answer Yes No Don't Know 10. How does the teacher help students who find it difficult to learn in this subject? 11. How do other students help those who find it difficult to learn in this subject? 12. Do you help the teacher decide what you are going to learn in this subject? Circle your answer Yes **Sometimes** No If you circled **Yes or Sometimes**, how do you help? 13. In this subject are you offered a number of varied activities? Circle your answer Yes Sometimes No Explain why you circled **Yes**, **Sometimes** or **No**.

5. If you could change some	thing about this	subject what w	ould it be?
16.Do you talk to the teacher this subject?	about problems	s you are having	g with the work in
Circle your answer	Y	es Somet	imes No
17. Do you talk to the teacher	about other pro	blems?	
17. Do you talk to the teacher	about other pro	oblems? Sometimes	No
Circle your answer	Yes	Sometimes	No
·	Yes Sometimes or I	Sometimes No.	
Circle your answer Explain why you circled Yes , 18. Think of another subject	Yes Sometimes or I	Sometimes No.	

19.	What has be Garden Co		learning time since you have been at
). Describe a n fun.	time since, you ha	ave been at Garden College, when learning has
Int	<u>erviews</u>		
Nex	xt term I will	be interviewing s	ome students.
You	by yourin a groboth bynot all.	self	group
Ple	ase Circle ei	ther would or wou	ıld not:
I	would	wound not	like to be interviewed by myself
I	would	wound not	like to be interviewed as part of a group.
	n the group	be interviewed in	a group, list 2 or 3 people you would like to
Tha		illing in this quest	ionnaire.
Ma	uri Hamilton	1	

Appendix 13 Collation of Student Questionnaire

Collation of Questionnaire

Question	English: 21	Mathematics: 30	Science: 24	SOSE: 9
	students	students	students	students
1. In the subject	easy 1111	good, not too easy 1111	got a perfect score	you learn heaps
you have	we do different things	sometimes fun 11111111	experiments	of new and
chosen, list 2 or	get the work done in	makes you think lots so	111111111111	interesting facts 1
3 things you like	time or finish it for	you learn more	I know a lot	that you wouldn't
about each of	homework	challenging 1111	Interesting 11	know otherwise
the following:	journal writing 1 as it is a break from	when we do different	Work at our oven	assessment is
The work	other homework and is a	things other than worksheets	Challenging Listening to the	pretty cosy and straightforward
THE WOLK	way to let loose our	easy 11111111	teacher talk about	enjoyable 1 and
	thoughts and feelings in	well explained 1	scientific things	easy 1
	our writing	some easy because of	Easy 11111	challenging 1
	it's fun 11111111	primary school and some	Learn a lot	not too hard 1
	learn a lot 1 in a short	hard	Creative and fun 11	learning about
	time	maths games	Work sheets 1	ancient stuff
	do plays and projects in	not too hard 1111	Answering questions	fun 11
	groups	easy to do homework	Watch videos 1	not so easy
	the activities we do1 we get to do our own	1because it is out of the book	Doing things at home for science	activities research on
	things	learn a lot	We can get up and do	Ancient Egypt
	not that hard	sometimes you only have	something	I molent Egypt
	challenging 11	to do half the questions	We use chemicals	
	debating	don't get much homework	We use fire	
	public speaking	get to talk about maths	Fun 111 and exciting	
	writing	it will help me in the	Learn a lot	
	I understand what to do 1	future	Projects	
	Interesting 1	learning strategies that	Not much homework	
	Reading	can be used often	It's pretty simple	
	Not too easy not too hard	understandable 111 I'm good at it	Easy Hands on	
	Different from normal	I ili good at it	Trailus Oil	
	Helps you think outside			
	the square			
	Hands on			
	Get to share ideas			
	Time to get ideas into			
	our heads			
	Grammar			

	English	Mathematics	Science	SOSE
Tille and the state of	The students are all nice	They are fun 1	They are helpful	Enjoy working
The students	1111and some are my	They listen and are good	1111	with friends 1
	friends 1	to be around 11	Easy to work with 11	They are helpful
	willing to help each	They help	Like doing	11
	other 11111111	1111111111111111	experiments 1	Nice 111
	All have different	without actually giving	Like fun 11	Cooperative,
	thoughts normally	the answer	Are happy 1	Fun 1
	Everyone loves to learn	Good 11 and well	Are my friends	Friendly
	about different things	behaved	Work in groups 1	Can discuss
	Being with them in	Positive,	Nice to each other	things
	groups	Eager to learn,	111	Listen
	are fun 111	Prepared to wait for those	Can have a chat	Have great ideas
	They cooperate and	who are a bit behind	Good	They're all right
		Talk a lot 111		
	never laugh at anyone's		Friendly 11	Share thoughts
	work	Easy to work with	Set a good working	and help each
	Relaxed	Friendly 1	environment	other expand our
	Supportive	Work with each other	Sensible	answers
	Kind 11	Good attitude to each	You can speak freely	
	Great	other	Some are nice	
	Can discuss	Don't annoy	Able to work with	
	Friendly 1	Nice 1	different people	
	Work well in groups 11	Kind 11	Like watching videos	
	Have fun while working		Good working	
	hard		Sort of loud	
	Good to share thoughts		Boit of loud	
	with			
	Loud			
	Attract attention away			
	from me			
	Polite			
	1			

	English	Mathematics	Science	SOSE
The teachers	Nice 111 and explains	They are good 1	Explains herself and	because
	the work well 111	They help you	the work well 11 so	she is a good
	explains things	11111111111111 if your	we know what we are	teacher 11 and
	in a way we can	friend isn't	doing	makes jokes and
	understand 11111	Makes things fun 1	We don't get much	tells stories
	is ready to assist	Understanding	homework 1	is always
	when needed and can	is good 11 - the	nice to you 11111	happy and never
	control silly people while	best man teacher I've ever	helps you	angry
	teaches	had	understand better	Nice 11
	because she is a	Very informative 1 and	11111 and never	Helpful 1111 and
	good teacher	explain well 111	grumpy	guide
	is never angry	Nice 11 and thoughtful	Makes the work fun 1	Makes it fun
	Good and helpful	Very helpful both maths	and a challenge	They explain
	111111111	and non maths teacher	Strict, nice, funny	properly
	Funny	Supportive 1	Explain well 11	
	Kind	Understand your	He is a cool science	
	Give good ideas	problems 1	teacher 1	
	Calm and relaxed	Explains things on the	They help 11	
	and have a	board	Doesn't pressure you	
	joke and help me with	Helps groups of kids	into getting your	
	my work	Involves everyone	work done really fast	
	Caring	Don't favour	Fantastic	
	Don't mind if you make	Great to me 1	Approachable	
	mistakes	Allow you to chat quietly	OK	
	Give lots of ideas	while you work	Kind	
	Great, open to opinions,	Explain well 11		
	respectful	Relaxed		
		Work in pairs		
		Clear		
The classroom	English	Mathematics	Science	SOSE
The classroom activities	English They are fun 1111 e.g.	Mathematics Maths book 1111		SOSE Fun 111 and
	They are fun 1111 e.g.	Mathematics Maths book 1111 Fun activities	Fun doing	SOSE Fun 111 and enjoyable
	They are fun 1111 e.g. making newspapers 11	Maths book 1111		Fun 111 and
	They are fun 1111 e.g. making newspapers 11 and doing speeches	Maths book 1111 Fun activities	Fun doing experiments	Fun 111 and enjoyable
	They are fun 1111 e.g. making newspapers 11	Maths book 1111 Fun activities 111111111111111	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1	Maths book 1111 Fun activities 111111111111111 Hands on	Fun doing experiments	Fun 111 and enjoyable Educational 1 Discussion Good to do other
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed Get to know people more Good	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed Get to know people more	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed Get to know people more Good Helpful Hands on	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed Get to know people more Good Helpful Hands on Group work 1	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed Get to know people more Good Helpful Hands on	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments
	They are fun 1111 e.g. making newspapers 11 and doing speeches They are fun and different 1 read great books group activities 111 Not too hard and not too easy Speeches 1 Internet Educational Newspaper assignment Orals Story writing 1 Journal Debating Public speaking Can get help if needed Get to know people more Good Helpful Hands on Group work 1 Don't just have to sit and	Maths book 1111 Fun activities 11111111111111 Hands on Maths sheets Games 11 Enable getting involved with others 1 and compare maths skills 1 Only work from book Help understanding Work in groups 1 Brain benders Easy 1 They're just OK Peg and rope 1 Everyone gets involved 1 Not many activities only bookwork	Fun doing experiments 111111111111111111111111111111111111	Fun 111 and enjoyable Educational 1 Discussion Good to do other stuff than just sit at a desk and write stuff Watching videos Projects and assignments Questions and assignments

	T 1: 1	36.4	g :	aoar.
Other activities	English We don't do any 11111	Mathematics	Science	SOSE
that are done	We don't do any 11111 Alternate education	Don't do anything outside the classroom 11111111	Going outside to pick flowers and leaves	We don't do
outside the classroom	days1	Go to the library but I like	1111111111	activities outside the classroom 1
CASSI COM	Always get time to research on the computers 1 Write stories	the classroom better Sometimes go to the computer room 1111 Fun 1	Going to the highway to collect data about cars 1 I learn lots	Warren Falls activity Adds to the subject and you
	Fun 1 Educational Homework activities 1 I learn more because I actually do the questions Not much group work, unique, allows own view	The fraction thing with a rope and peg 1 None Exciting You can talk to your friends and still get the work done Maths games	Moon 1 log book was a great way to keep me on track 1 Get fresh air, a change, open area You can make things and learn outside the square We don't do activities outside 111 Listen to the noises	learn more Archaeological dig 1 Assignments
Other things do you like about the subject	Nothing The homework Always looking forward to it Always having a good time 1 Journal writing and debating I just like doing English The stories everyone tells Not that hard and not that much writing You can learn in it For most activities we can choose what and how we do it Public speaking and research projects Watch a video Talk quietly while you're working Having fun and working at the same time Reading the different books English Assignments Story writing A great number of people in the class to help you	Being able to ask my friends for help Being allowed to talk during the lesson Rope and peg thing to learn fractions Easy 1 I can do what I'm good at The way the teacher explains well 11 Computers Speedy maths sheet because it challenges us on speed and accuracy None You are given plenty of time to complete the work Questions Tests It's fun Mathematics Work out of books 11rather than from the board as in primary school Can work at own pace as long as you keep up Never too easy or too hard and we get better and better Sometimes we get lollies It's interesting Being able to change with the people in the other classroom Activity sheets Lots of sums to see if I know the answers Puzzles/problem solving	Using Bunsen burners 1 and all the science stuff involving fire You don't sit on the floor Allowed to talk to each other Teacher's explanations It doesn't focus on writing, spelling and punctuation Posters Watch a video 11 Do a project Experiments and friends You have fun Mixing chemicals land using all of the equipment 1 Doing things with friends Because you have fun and don't do much work Learning about space and the reproductory system	Learning new things every lesson It tells us about the world around us You learn things about different countries Learning about how people lived back in history Not too much homework Ancient Egypt

	English	Mathamatica	Caianas	SOSE
2.Circle the	English	Mathematics	Science	SUSE
words which	VW W M L VL	VW W M L VL 16 14 0 0 0	VW W M L	VW W M
best describe how well you	5 13 3 0 0	10 14 0 0 0	VW W M L	L VL
learn in this			4 13 6 0	6 3
subject			0	
VW WM L VL	Total 21 students	Total 30 students	Total 23 students	Total 9 students
	Total 21 students			
3. What helps	English	Mathematics	Science	SOSE
you to learn in	The teacher 11111 and	Teacher demonstration 11	The teacher	Learning new
this subject?	students 1111	and explanation 111111	explaining 111 and	things in a fun
	The homework I do each	Rope and peg thing	drawing diagrams	way
	night The ability to speak to	Discussing with friends 111	When you bring props and do	The environment around me
	the teacher whenever we	Teachers 111111	experiments	I don't know
	want 1	Patrick helps me	I learn stuff that I	Books 1
	My listening skills Teachers' explanations	understand the question so I can get the answer	want to learn Other people	Information I'm interested 1
	111 not dull 1, talks with	Teachers and friends	Books 111	Going out and
	expression	Teacher and the text book	Teacher 1	doing activities
	Sheets and activities	1111	Class discussions –	Clear and loud
	I know it My family	Feeling confident 1 making it easy	teacher and friends Experiments 111	explanations The teacher and
	It's fun	by showing you how to	Different ways of	me
	When the teachers and	do it 1	working	
	students describe it to me	The teacher and my	My interest	
	in a way I would hear it I'm good at it	calculator Other students 1	My Mum and Dad Physical setting of	
	I enjoy it	Listening and watching	the classroom	
	Getting out and doing it	and if I don't understand	Knowing what to do;	
	and researching	either putting up my hand	having a teacher and	
	When teachers speak clearly	or asking a friend The help I can get and the	friends to help; me learning things we	
	Going over things a	different ways I can do	have to	
	couple of times	the task	Use all our senses	
	Being able to be	Being able to work	Work in a group	
	different and sit alone The teacher	through things with the people on my table	The way we do it Fun 1 and interesting	
	The toucher	Having two teachers in	I learn with friends so	
		the room	I am comfortable	
		80 min periods	The teachers 1	
		Having a good	Quiet environment Watching videos	
		relationship with my teacher	Choosing what you	
		Games 1	want to do	
			Extended focus for a whole lesson	
			TV	

4. How do you know if you are learning well in this subject?

English From reports 1 Tests 111 English rules and spelling sheets We always feel as though we are learning I tell my Mum and Dad what I have learned When I get the answers right or figure something out for myself By how much you actually learn I know it well Because I understand it well 1111 the questions and problems Good marks 11 It's fun If I have great pieces of work that have more than the required content Teacher telling me 11 Work seems to get easier Doing the work without needing help Because I can answer the questions I remember and understand

Mathematics Chapter review Look back through the book Tests 1111111 Correcting sheets Get most questions right Don't have much trouble understanding Good at tables I have new skills 1 I can tell you things I didn't know before Understanding when I do my homework I have improved since last year and am getting more correct 1 Because whenever we do a revision sheet I know what to do The amount of work being produced I get through the work quickly The work is easy and I know the answers straight away I get it all right Getting good marks Can answer questions I rarely need help Understanding what I'm doing If I find it a challenge and in the end get it right When I can do the homework If you finish when others If you're not always doing your maths for homework I start thinking it's hard and then fly through

Science Because I now know the difference between revolving and revolution If it is interesting or fun 1 I got a good report 111 = 100% and an award I get all the answers right Test scores 11 Remembering1 You feel like you've done well in the class you've done that day We can do something we couldn't do before 1111 When I understand what I'm doing and when I know I can do it Asking questions Because I am always concentrating and I like Science so I always listen to the teacher and write it down Explain to Mum and Dad what I have learnt 11 I don't 1 In the experiments if I know what I'm doing When I'm learning something I didn't know When I don't have trouble with the work I can do the homework

SOSE
Test results 1
I don't really
know, I just think
it's fun/ feel as if
I'm there
Good marks 11
By seeing if you
understand a lot
of the tings the
teacher says
You enjoy it 1
I can do the work
and get it
finished

Nothing 1 Talking in front of people and language and	5. What	English	Mathematics	Science	SOSE
Stops you learning as well as you could? Cassroom 1 Noisy people, including me 1 Nois					
classroom 1 Noisy people, including me 1 Noisy people including may may so to do it. When they tell you too many ways to do it. When I don't know how to do something when people including may may so do it. When I don't know what something me including may may so do it. When I don't know what something me including information I uninterested students it is sometimes in the classroom Talking and listening to may what the work what something means sometimes the transport of the classroom					
as you could? Noisy people, including mel Long periods Hunger at the end of the period Insufficient attention to the teacher Italk too much Distracting people				•	
me 1 Long periods Hunger at the end of the period Insufficient attention to the teacher I talk too much 1 Distracting people 11111 There is a lot of it and it can be hard Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because I think I know the stuff Nothing 11 Not much 11, unless it's sometimes in the learn in this subject? 6. What do you find hard to learn in this subject? 6. What do you find hard to learn in this subject? 6. What do you find hard to learn in this subject? 7. Do other students you know in the class learn a lot white hashes awared to the class room and hings Mathematics Yes 1 Not much 12 Mathematics Yes 2 Mathematics Yes 7 Mathematics Yes 7 Some do 12 Some do 16 Not in in the class look in time and keeping up with the work Sometimes the writing Talking in front of people English rules 11 Punctuation 1 and Puntiation Grammar 1 and Grama Speeches 1 The amount of reading All the different nouns and things Not mount the class look in time and keeping up with the work Sometimes the writing Talking in front of people English rules 11 Punctuation 1 and Puntiation Grammar 1 and Grama Speeches 1 The amount of reading All the different nouns and things Not mount the class look in the leas look look by and the look of the class look in the look in the look of the class look in the look of th					
Hunger at the end of the period Insufficient attention to the teacher Italk too much 1 Distracting people 11111 There is a lot of it and it can be hard Having heaps of homework while doing the project assignment Holidays and frun activities Not listening because I think I know the stuff Not much 11, unless it's something very different from what we did in primary school Reading the class book in time and keeping up with the work Sometimes the writing Talking in front of people English The amount of reading All the different nouns and things Not other students and things Not sure Some do 12 Some do 16 Some do 15 Some do 5 Some do					
Insufficient attention to the teacher I talk too much 1 Distracting people 11111 There is a lot of it and it can be hard Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because think I know the stuff Not much 1, unless it's something variety different from what we did in primary school Reading the Lass book in time and keeping up with the work Sometimes the writing Talking in front of people English rules 11 Punctuation 1 and Puntitation Grammar 1 and Grama Speeches The mount of reading All the different nouns and things Some do 12 Some do 16 Some do 15 Some do 5 Some do 11 Some principles Some strain of the class room making wear always adiong stuff in the class room what something means Sometimes don't know what something means Sometimes and strain what something means Sometimes and strain what something means Sometimes don't know what something means Sometimes and strain what something means Sometimes of the class room means and strain what something means Sometimes and strain what something means Sometimes don't know what something the for answers/help 11 Lack of concentration 1 Some the class room means and thing students alking Sometimes to what something means Sometimes don't what something means Sometimes to Month the class room means something the project assignment something means something the project assignment something means something the project assignment something means something mean		Long periods	Nothing 1111	When people talk	When we don't
Insufficient attention to the teacher Italk too much Italk Ita		Hunger at the end of the	Talking to my friends	When the lesson is	do stuff outside
the teacher					
Lack of concentration 1 Distracting people 11111 There is a lot of it and it can be hard Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because I think I know the stuff Mothing II Lack of concentration 1 Uninterested students talking Sometimes loud boys Not getting information Teacher over - explaining Teacher over - texplaining Teacher over - texplaining Teacher over - texplaining Teacher over - texplaining Teach					
Distracting people 11111 There is a lot of it and it can be hard Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because I think I know the stuff Not much 11, unless it's something very different from what we did in primary school Reading the class book in time and keeping up with the work Sometimes the writing Talking in front of people English rules 11 Punctuation I and Puntiation Grammar I and Grama Speeches 1 The amount of reading All the different nouns and things The bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the bear in the class learn a lot to the whither? Some do 12 Some do 16 Some do 11 Some do 5 Some do 15 Some do 16					_
There is a lot of it and it can be hard Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because I think I know the stuff 6. What do you find hard to learn in this subject? 6. What do you Really hard problems Notistening because I think I know the stuff Nothing 11 Not much 11, unless it's something very different from what we did in primary school Reading the class book in time and keeping up with the work Sometimes the writing Talking in front of people English rules 11 Punctuation 1 and Puntiation Grammar I and Grama Speeches 1 The amount of reading All the different nouns and things 7. Do other students you know in the class learn a lot to the least book of work with the work Some last pool whow in the class learn a lot to the least book of the class learn a lot to the least book of the class learn a lot to the least bood? 7. Do other students you know in the class learn a lot is the class learn alot i				_	
Can be hard Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because I think I know the stuff					_
Having heaps of homework while doing the project assignment Holidays and fun activities Not listening because I think I know the stuff 6. What do you find hard to learn in this subject? Fractions Ill Il					
Noise that is sometimes in the project assignment Holidays and fun activities Not listening because I think I know the stuff Talking and listening to music while doing homework When I can't understand Things I have done in earlier years					
the project assignment Holidays and fum activities Not listening because I think I know the stuff 6. What do you find hard to learn in this subject? Not much 11, unless it's something very different from what we did in primary school Reading the class book in time and keeping Talking in front of people English rules II Punctuation I and Puntiation Grammar 1 and Grama Speeches I The amount of reading All the different nouns and things 7. Do other students you know in the class learn a lot to this cable are a lot to the cable are a lot to th					
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7. Do other students you know in the class learn a lot in this gubient? English Yes 7 Yes 7 Some do 12 Some do 16 Some do 11 Some do 5		and things			
7. Do other students you know in the class learn a lot in this subject? Yes 1 Yes 7 Yes 7 Yes 3 Yes 0 Some do 12 Some do 16 Some do 15					
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7. Do other students you know in the class learn a lot in this gubient? Yes 1 Yes 7 Yes 7 Yes 3 Yes 0 Some do 12 Some do 16 Some do 15		English	Mathamatica	g .	COCE
students you know in the class learn a lot in this gubient?	7. Do other				
know in the class learn a lot in this gubient?		165 1	165 /	res 5	165 0
class learn a lot	_	Some do 12	Some do 16	Some do 11	Some do 5
in this subject? $\begin{vmatrix} N_0 & 0 \end{vmatrix}$ $\begin{vmatrix} N_0 & 0 \end{vmatrix}$ $\begin{vmatrix} N_0 & 0 \end{vmatrix}$				Some do 11	
	in this subject?	No 0	No 0	No 0	No 0
Don't know 8 Don't know 7 Don't know 9 Don't know 4		Don't know 8	Don't know 7	Don't know 9	Don't know 4
Total 21 students Total 30 students Total 23 students Total 9 students		Total 21 students	Total 30 students	Total 23 students	Total 9 students

Explain why you	English	Mathematics	Science	SOSE
circled Yes,	Because I think they	Because some people I	Because they are all	Because some
Some do, No or	work well	know ask me what to do	interested in what she	understand it a
Don't know.	Some think it's boring 1	and I know	is saying 1	bit better
	Because I am normally	Because some of my	It's just what people	Some muck
	sitting near them and can	friends learn well and	enjoy, some have	around and don't
	tell	others have trouble 11	different tastes to	try, some do their
	Because I know some	Ticks in their books	others	best
	people who learn well in	Because the table I sit on	Some do, Some don't	Because when
	this subject	gets it done fast and	1 because they muck	they answer
	Because they are trying	others don't	around 11	questions they
	to do their best	Because not many people	Some do because	get them right
	Because they are pretty	are constantly putting	they are trying	We talk about
	smart	their hands up	Some don't want to,	what we're doing
	Some do but others	Because some don't get	some do and some	I don't ask
	muck around 1	their work done	are just plain smart	because it's a
	Some people like it and	Because the teachers	Some people finish	personal thing
	are good at it and others	explain and all the	before I do	Because they
	aren't	students help each other	Because they tell	listen and try
	Because they tell me	Because some are good at	other people	Because some
	Because they look	maths and some aren't	They have fun	don't like Egypt
	interested and come up	Most do, some struggle	They don't look	
	with great ideas	and some don't try their	stressed	
		hardest	Because I don't go	
		Some people work well	around asking	
		Because I ask my friends	everyone if they are	
		Mathematics	learning something	
		Because they do their	Because of what they	
		work and don't talk much	can tell you	
		Because I sit on a table	Because they read	
		with them and they do	and get information	
		well completing set tasks	from books	
		Others at my table don't	Some muck around	
		get it in the beginning and	Science	
		then they fly through	I can't read their	
		Some people just can't get the nick for maths	minds	
		Because if the teacher is		
		busy one of the other		
		students always knows		
		how to do it		
		Some people finish		
		before others		
		Because I don't know		
		Some listen and some		
		don't		
		Because of this they find		
		it hard		
			l	

			T	T
8. If you are	English	Mathematics	Science	SOSE
away for two or three days will	Yes 7	Yes 8	Yes 5	Yes 2
one of the	Sometimes 0	Sometimes 1	Sometimes 0	Sometimes 0
teachers talk to you and find out if you have a	No 3	No 2	No 4	No 2
problem because of this?	Don't know 9	Don't know 15	Don't know 11	Don't know 5
because of this.	Total 21 students	Total 30 students	Total 23 students	Total 9 students
Comment volunteered	I haven't been away 1	I haven't been away 1111111	I haven't been away	No responses
9. If you have been away for two or three	Yes 11	Yes 11	Yes 9	Yes 4
days has one of the teachers	No 4	No 5	No 15	No 4
helped you with any problems you have?	Total 21 students	Total 30 students	Total 24 students	Total 9 students
Comment volunteered	I haven't been away 1	I haven't been away 1111111111 I have only had one day off this year	Because I haven't been away 111	I haven't been away 11
10.How does the	English	Haven't had a problem Mathematics	Science	SOSE
teacher help	They try to help them do	Sit next to them and	Sit down and talk	Sit down with the
students who	their work when they are	explain 1111111 or tell	about their problems	student and try to
find it difficult	stuck 1111	them to read a book	and how they are	teach them the
to learn in this	Walks round and helps	Explain it differently/ to	going 11	easiest way
subject?	or calls them to the board Give them the	the whole class Help at lunchtime	Go different ways to solve the mystery but	possible 1 Show them how
	information they need to	Talk to parents	first you have to tell	to do their work
	learn	They help you lout and	them	1
	1Watches them more	explain what to do 1111	The teacher tells	They explain it
	closely and tries to help	Get them in a group and	them and builds their	11 a bit better 1
	Show them examples or talk to the whole class	teach them with more detail 111	confidence They explain it 1111	and give another example
	about it	She does one for them	in a different way	Help them 1
	Explain it or write it on	Go through the problems	111to the way they	One on one
	the board	with them one on one	did with everybody	teaching with
	Talks to them and helps them understand 111	Show them again until they know	else 1 Takes a small group	them
	Explain it 1so it's easier	They give them strategies	They come over and	
	to understand	and do sums with them	help you 11 with	
	Gives extra help 1	Come to table when we	what you're stuck on	
	Don't know Explain it to them and	put our hand up and explain it in more detail	The teacher will explore it the best of	
	make them feel comfortable	Teaches it on the whiteboard 11	their ability Help them out	
	Try to get them	Explain it in a simpler	someway	
	interested/Show them their answer and tell	way	I don't know	
	them how they got it			

			_	1
	English	Mathematics	Science	SOSE
11.How do other	They explain it to them	Explain it	Show them how to do	They try to
students help	111111, but if they still	111111111111111 in an	things 11111111	explain it to them
those who find it	don't understand they	easier way than teachers	Help their friends 1	to the best of
difficult to learn	ask the teacher	do/so they can do the next	The students tell	their ability 111
in this subject?	Help them 111111 or	one themselves	them and builds their	I'm unsure
	give them my sheet	Get a teacher if the	confidence	They tell them
	when I've finished	student still has trouble	They work with them	how to do it
	Help them try to work	Talk to you and help you	until they get it right	Try to help them
	out the answers	find the answer 1	By giving them some	understand1
	I don't know 1	I don't know 1	answers to get them	Don't know
	Talk to them	Help 111 without giving	going	because no one
	Help them so they know	the answer 1	Play with them	helps me
	how to work it out	Encourage	By explaining it	
	Give them ideas, help	They do one for them	11111 better than the	
	them, ask them what	I'm not really sure but I	teacher did	
	they don't understand,	think they will help the	They don't	
	explain it Give them ideas	people out	I don't know	
	Give them ideas	Either tell you the answer		
		or help you work it out Tell them what to do		
		Ten them what to do		
12. Do you	Yes 0	Yes 3	Yes	Yes
help the	100		2	2
teacher	Sometimes 0	Cometimes 1	2	4
	Sometimes v	Sometimes 1	G 4	g
decide what			Sometimes	Sometim
you are going	No 21	No 23	1	es 1
to learn in				
this subject?	Total 21	Total 30	No	No
		10tui 30	210	- 10
	students	students	19	6
	students			
	students			
	students		19 Total 23	6 Total 9
	students		19	6
If you circled		students	Total 23 students	6 Total 9 students
If you circled Yes , or	students No responses		Total 23 students I explain	6 Total 9
Yes, or Sometimes how		students	Total 23 students	Total 9 students By telling the
Yes, or		students	Total 23 students I explain By talking to her and	Total 9 students By telling the teacher what we
Yes, or Sometimes how		students	Total 23 students I explain By talking to her and	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas
Yes, or Sometimes how		students	Total 23 students I explain By talking to her and	Total 9 students By telling the teacher what we enjoy doing We sometimes
Yes, or Sometimes how do you help?	No responses	No responses	Total 23 students I explain By talking to her and asking	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them
Yes, or Sometimes how do you help? 13. In this		students	Total 23 students I explain By talking to her and	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas
Yes, or Sometimes how do you help?	No responses	No responses	Total 23 students I explain By talking to her and asking	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of	No responses English Yes 14	No responses Mathematics Yes 11	Total 23 students I explain By talking to her and asking Science	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English	No responses Mathematics	Total 23 students I explain By talking to her and asking Science Yes 14	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of	No responses English Yes 14 Sometimes 1	No responses Mathematics Yes 11 Sometimes 2	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14	No responses Mathematics Yes 11	Total 23 students I explain By talking to her and asking Science Yes 14	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1	No responses Mathematics Yes 11 Sometimes 2	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1 No 8	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2 No 4
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1 No	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2 No 4 Total 9
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1 No 8	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2 No 4
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1 No 8	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2 No 4 Total 9
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1 No 8	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2 No 4 Total 9
Yes, or Sometimes how do you help? 13. In this subject are you offered a number of varied	No responses English Yes 14 Sometimes 1 No 4	No responses Mathematics Yes 11 Sometimes 2 No 13	Total 23 students I explain By talking to her and asking Science Yes 14 Sometimes 1 No 8	Total 9 students By telling the teacher what we enjoy doing We sometimes give her ideas I work with them SOSE Yes 3 Sometimes 2 No 4 Total 9

Explain why you	English	Mathematics	Science	SOSE
	Because sometimes we	Because we do the same	We go on with the	Archaeological
	are asked do we want to	thing in every single class	one subject	dig; map reading;
	do English rules or	Yes write on sheet or	She plans it and we	videos
	imelines or stuff	books 11	learn it	Because some
V	What to write about or	When we finish we	Some days you can	days we have
s	speak about	always have something	catch up if you need	activities and
F	Because we only have	else to do	to	some days we
C	one choice 11	Don't normally have	You can choose your	don't
F	Because we do a lot of	alternatives	group	Sometimes you
	different activities 11	Yes because there are a	Yes – experiments	get to choose
	Because you have a	lot in the text book	and theory	Because we do
	choice of what activity	Yes, as some people have	No we have set work	the same thing
	1111	different strategies of	11	Assignments and
	Debating, story writing	learning	Lots of different	groups
	work sheets and much	Because we get set work	experiments 11	No, except for
	nore 1	11	Because we go	projects Because it's
	Because we have a lot of options 1	We just go through the book 11111	outside But we have to get	mostly the same
	Our work is chosen for	Because every time we	them all done	activities
	us but we might have a	have maths we do	anyway, we just	activities
	choice of topics	something different	choose the order	
	Study different books	So we learn more	No the teacher just	
	and things to do	Maths has lots of different	picks an activity1	
	The teacher decides	parts	We do what we are	
		We have a few different	instructed o	
		activities 1	Because we get no	
		We go through it in a	choice	
		group	Because you learn	
			heaps of different	
			things	
			Choose from related	
			activities	
			Science has a lot of	
			different parts and we	
			do all of them	
			Choose from different sheets	
			different sheets	
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14. In this subject how does the seating arrangement affect your ability to learn?	English If you are next to people who distract you, you can't learn It kind of feels like we're in groups but we're not It doesn't 111 because if you sit next to someone you don't know you don't talk as much Sometimes 1 I have silly people on my table and sometimes I don't If you sit next to your friends you talk a lot but still learn a lot 1 Friends help you learn 1 Good because you mix with other people Sometimes I talk too much or have too many people asking me questions Annoying if you can't see the board 1 When I'm alone I am more comfortable I get distracted	Mathematics I would learn more sitting with my friends Doesn't affect my ability to learn 111111111111 because everywhere I go I am happy 1 Sometimes my friends distract me 1111, at other times they help me learn Maybe I talk too much to my friends Fine – sometimes chat but get plenty of work done too Doesn't because I'm with my friends Sometimes you can't see the board 1because you are on 180 angle to it Helps me	Science It doesn't really affect my ability to learn 111111111 because I get on with most of the class If you are at the back you might not hear/see I sit up the front 1 with my brother and nothing to distract me You talk a lot to your friends 1 Because we can help each other I always concentrate on what the teacher says If I was sitting by myself I would have trouble learning You can bounce ideas off one another	SOSE Doesn't affect 11 except when I'm trying to make new friends/learn Not much If I'm not with friends I won't be having as much fun and I won't learn Doesn't as we get to pick The good sitting groups because then you can discuss things and get some help Fun Sometimes I can't see the board or TV
15. If you could change something about this subject what would it be?	English No homework 1 Not much Not have a class novel or English rules Make it a bit more interesting Nothing 11 Less homework All the reading More story writing Less English rules and tests Less theory The amount of work More modern novels Have more fun Change the seating so we are facing the board Seating people in groups that don't work I would read a lot more than I do	Mathematics Do something else rather than just do sums out of the book Nothing 11111111111 because I'm learning heaps Do more outside activities Some of the activities No Fractions More games 11 Not as many lessons in the week More variety in what we do Everyone sits by themselves A bit less work-because if we don't finish we have to do it for homework More problem solving	Science Don't write in books too much 1111111 More experiments 111111111111 Limit homework Get to choose what we would like to do The teacher asking us if we all know something and then moving onto something new The people Nothing	SOSE Nothing 11 One more lesson in the week Have more activities Don't know Do more things outside and watch more videos Kick out anyone who calls me a name No tests Always getting stuck in groups with people I don't like

	English		Mathematics		Science	SOSE
16.Do you talk	Yes	12	Yes	20	Yes	Yes
to the teacher	Sometimes	3	Sometimes	1	17	6
about problems you are having	Sometimes	3	Sometimes	1	Sometimes	Sometimes
with the work in	No	3	No	6	0	0
this subject?						
					No 6	No 3
	Total 21 students		Total 30 students		Total 23 students	Total 9 students
Explain why you	English		Mathematics		Science	SOSE
circled Yes,	Because if I don't ge	et	Because I don't hav		No, because it's easy	So I can do the
Sometimes or No.	something I get the teacher to help me 1	11	many problems 111 Because the teacher		Yes, because if you	work with no hassles
	If I don't understand make sure I ask the teacher so I understa when I do tests and exams Because I need help Because I do If my friends can't h me I talk to the teach Sometimes because I don't have many problems 11 Because they unders it I ask the person next me So I can do it proper and understand it They'll talk me throu it Because I can fix the problem by looking another way Because I would be sitting there doing nothing	nd it 111 elp ner I tand t to ly ugh	always help 111111 Because if you don won't learn 11 and will get a bad repor I don't normally ne much help, but I ge when I need it Usually my friends me I don't have problet Because it's easy an more enjoyable Because she tells us to do So I can do the wor If I have problems I always ask a teache friend Because the teacher helpful to anyone w asks I don't much I get through it mys	ft you you t 111 ed t help help ms nd s what k r or a rs are	don't get it you never will understand it 11 Because if I don't know how to do something I ask for help 1111 Because they can help me1 Because last term I was away sick Because I want to stay with the class Because I want to finish my work I haven't had a problem yet 11 So you will do well in the test If I have a question I will ask	No I don't really know why I haven't had any problems So they can help 1111 My friends and my mum help me
17. Do you talk	Yes	7	Yes	6	Yes	Yes
to the teacher		_		_	2	2
about other	Sometimes	4	Sometimes	3	C4	C 4*
problems?	No	9	No	19	Sometimes 0	Sometimes 1
	110	,	110	1)		
					No 21	No 6
	Total 21 students		Total 30 students		Total 23 students	Total 9 students

Explain why you	English	Mathematics	Science	SOSE
circled Yes ,	I sometimes talk to the	Because I don't have any	I don't really need to	I haven't any
Sometimes or	teacher about problems.	other problems	talk to the teacher	other problems 1,
No	She is easy to talk to	111111111 but if I did I	I've got a personal	but I would if I
110	No because I don't have	would tell them	life and so do they	had any
	any problems 111 that I	Yes but not when they are	I don't have any	There's other
	need/want to talk about	personal	other problems	people than the
	Because I don't	Because you can talk to	111111	teacher
	My friends help me	someone else if you need	Because I have Mum,	If I am being
	Because certain	to	Dad and 2 sisters to	bullied or
	problems don't affect me	In other subjects	talk to	someone has
	She understands	Only if my friends can't	Because the	done something
	So they know what's	help me	homework is	to me
	happening	Because you can trust	sometimes extended	Depends what it
	Because it's not his or	teachers and they will	Because I can sort	was
	her business	most likely solve the	them out myself and	I just don't
	Because I get bullied	problem	they go away after a	It would be
	I ask my mum	I only talk to the teacher	while	embarrassing
	Because it doesn't feel	about work 1	Because I don't really	
	comfortable	Because then I can do my	like to share my	
	Because she likes to talk	work and learn	problems	
	to you	Because she tells us what	Because I would be	
	Because she could do	to do	embarrassed and I	
	something about it	Because I just don't	don't want them to be	
	straight away	They will help with	in my social life	
		personal problems	Because they might	
		Because I talk to my	be personal problems	
		friends about my	Because I don't want	
		problems	to	
		You tell someone else	I ask the people next	
		I don't like to share my	to me	
		problems with others	If there is a problem	
			with equipment or	
			something went wrong with the	
			experiment	
			They involve me not	
			the teacher	
			the teacher	
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18. Think of	English	Mathematics	Science	SOSE
another subject	Yes 10	Yes 21	Yes	Yes
that you do not like as well. Do	Sometimes 6	Sometimes 4	15	5
you learn well in	Sometimes 0	Sometimes 4	Sometimes	Sometimes
that subject?	No 5	No 5	1	1
			No	No
			7	3
	Total 21 students	Total 30 students	Total 23 students	Total 9 students
·				

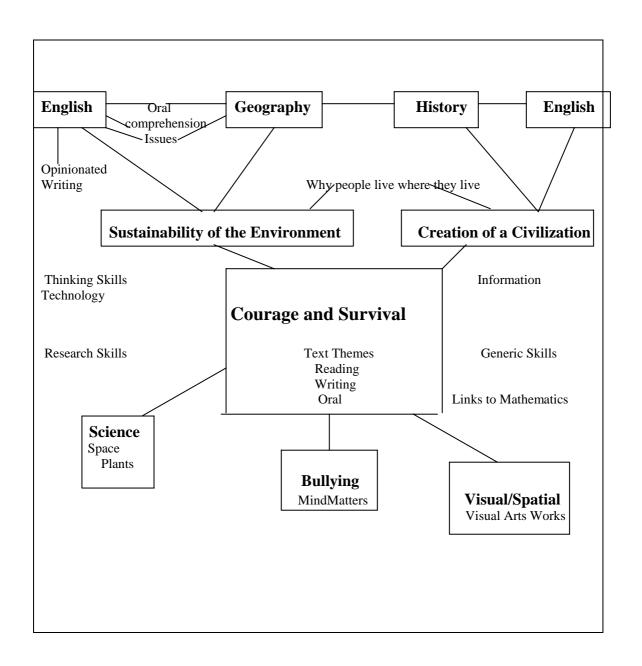
Explain why you	English	Mathematics	Science	SOSE
circled Yes ,	Yes because we learn	Because I don't like the	Maths, because I like	I do well in all
Sometimes or	lots	teacher	doing it 1	subjects here
No	No because I don't like it	I do, but I don't like it as	More people and	I don't pay much
110	Because I learn most	much	harder work	attention
	things		I don't like it/it's	Because I
	_	Haven't had in primary schools	hard	understand it
	Because I find it hard to	Because the teachers are	Because I am not	
	concentrate			I can get
	Because it is easy	great/very supportive1	good at it	complicated and
	Because it's all right	I have a bit of	I learn quite well in	frustrating
	Because I'd like to be	understanding1	maths 1	Because it is
	good at that subject even	Because we get taught	I try hard and do	boring1
	if I don't like it	lots	good work	
	Sometimes it is	Too much and it's boring	Yes, but sometimes	
	interesting, sometimes it	Because it is explained to	it's hard to	
	is boring	us1	understand what we	
	Even if I don't like it I	Because I'm not good at it	have to do	
	still learn a lot	Because it is a great	Because I try hard 1	
	Because the teachers	subject	I try to stay positive	
	help us	I don't understand the	about my schooling	
	Because I can't keep up	subject 1	Because people talk	
	I learn, but it doesn't	Because I do not enjoy it	to me a lot and I	
	stick in my head as much	very much and don't think	don't hear the	
	Because I'm not	it will help me in the	instructions	
	good/extremely bad at it	future	Because I don't	
	Because I'm not	I don't give it my best	understand 1even	
	interested	All of my teachers teach	after the teacher has	
	Because I try my hardest	well	explained it to me	
	in everything	Because my class is	Because it's hard to	
	, ,	helpful in all subjects /	concentrate	
		it's easy	Because the teacher	
		There is no subject I don't	makes it enjoyable	
		like	even though I don't	
		I try hard in all my	like it	
		subjects	Art because I'm good	
		Yes but sometimes it is a	at it	
		little bit boring	I'm not interested so	
		In English it's harder but I	I blank out	
		learn much better in it	I can answer the	
		104111 114011 00441 111 14	questions	
			I go out there and do	
			the work and get it	
			over and done with	
			and dollo will	

19. What has	English	Mathematics	Science	SOSE
been your	I have got better teachers	Doing literacy because I	In term 1 because we	At the start of
favourite	that explain it better	am with my friends	had easy work	second term
				~
learning time	Just being in the	Science or maths 11	I have learnt the most	when I knew all
since you have	classroom	Wood and metal work	in SOSE 1	of the people in
been at Garden	Watching videos that	1111	Learning about the	my class
College?	help us learn 1	Survival day 111	moon	Wood and metal
	When we did the	PE 11111 Home Eco 1 and	Experiments in	work
	newspaper in English	maths	Science 1	Science
	Drama 1 and music	Drama 1	The rope and peg	SOSE 1-history
	PE 1	The SOSE dig	thing in maths	Literacy
	Science	When activities don't	Survival day 11	PE
	English 1	involve writing	Wood and metal	Textiles
	Warrnambool Eisteddfod	Home Eco 1	work 111	
	debating	Maths	Sport 1	
	Port Fairy Camp		Indonesian	
	Metal and wood work		PE 1	
	Alternate Ed days		Home Eco	
	Camp		The first and last	
	Literacy		period	
	Home Economics or		Art	
	English or SOSE		Textiles	
	Journal writing		Watching Shrek in	
			RE	
20. Describe a	Info tech because we get	Survival Day 1111111	When I first got there	Alternative
	to go on the internet	Experiments in science 1	In drama 1 and music	education days 1
time since, you have been at	All the time	Drama	1	SOSE dig 1
	Most of the time	Almost all the time	Doing experiments	PE, Drama and
Garden College, when learning	Alternative education	Rope and peg	1/Science	most of the
has been fun.			Probably in every	
nas been fun.	day 1	Class newspapers Wood work11		subjects
	Oral speaking	Science	subject	Literacy
	English 1 and music When we do fun stuff in		PE theory when we learnt about our	Newspapers
		SOSE dig 1		Trip to Wannon
	class	PE 11	strengths and	falls
	History – web quest	Art	weaknesses	Textiles
	roles	PE and Drama	In	Archaeological
	Drama 1/ Science	Textiles and Home Eco	woodworkmade a	dig
	Warrnambool Eisteddfod	Time with Br Paul	Ned Kelly head set	
	debating	Car counting	and gave it to me	
	History –archaeological		PE/Survival day	
	dig 1		1/History	
	Wood work		SOSE/Art/Textiles	
	Camp/ Poems about		Metal/Wood1/Group	
	myself		work	
	On computers looking up		Maths, when we got	
	stuff		to choose our own	
			tables/ counting cars	
			Learning to use water	
			colour pencils	
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Appendix 14

HCEL Concept Map

HCEL Concept Map



Appendix 15

HCEL Unit Planner

UNIT TITLE

Unit Description

Across the Key Learning Areas (Outcomes)

SOSE ENGLISH MATHEMATICS SCIENCE

Curriculum Focus/Focus Questions

Learning Activities	Assessment tasks/criteria	Links to KLAs
Highlight Information technology Thinking skills Research skills Generic skills	Formative/criteria Summative/Assessment tasks	
English Highlight Information technology Thinking skills Research skills Generic skills	Formative/criteria Summative/Assessment tasks	
Mathematics Highlight • Information technology • Thinking skills • Research skills • Generic skills	Formative/criteria Summative/Assessment tasks	
Science Highlight • Information technology • Thinking skills • Research skills • Generic skills	Formative/criteria Summative/Assessment tasks	

Resources

Refer to CSF outcomes and performance indicators