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**THE IMPACT OF AN EXTENDED STAY OUTDOOR EDUCATION
SCHOOL PROGRAM UPON ADOLESCENT PARTICIPANTS**

A thesis submitted in fulfilment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

from

THE UNIVERSITY OF WOLLONGONG

by

TONIA L. GRAY

B Ed (Wollongong)

MA (Northern Colorado)

Faculty of Education

1997

DECLARATION

I certify that the substance of this thesis has not already been submitted for any degree and is not being submitted for any degree.

I certify that any help received in preparing this thesis, and all the sources used, have been acknowledged.

Signed

Date 24 . 12 . 97.

TONIA L. GRAY

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Behind every PhD candidate, there are many unsung heroes. I am referring to my parents, Jeanette and Brian Gray, and my family and friends whose unflagging efforts have helped keep the thesis 'afloat' in tumultuous times. The many times when you begin to question the value of a higher degree as opposed to sanity!. Quite honestly, these people are in a round about way, part-owners of this thesis. Their abilities to inadvertently regain equilibrium and balance back into your life whether it be with childcare assistance, a sounding-board for your frustrations or just simply being a calming influence as you go through the higher degree roller coaster ride - to you all, I am eternally grateful and forever indebted.

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Lastly, and most importantly - my daughter, Mikhaela. At times I have been racked by guilt especially when I have had to say "mum is busy working on the computer...I'll play or draw or colour or read with you later". Well now my PhD journey is over, let's play and enjoy some quality time together!

PREFACE

This study is an outgrowth of my strong belief in outdoor education as an adjunct to contemporary educational methods. I became aware of the inherent power of this pedagogical medium over ten years ago whilst teaching in a secondary school. Quite clearly from this point forward, I was enamoured by this teaching paradigm.

The personal and social development of students in my classes, whether they be in the secondary or tertiary setting, have all provided ongoing testimony as to the pedagogical value of this field. For this reason, I have set about the rather arduous task of attempting to prove the educational efficacy of outdoor education.

At this juncture, one of my fondest wishes would be that this thesis becomes tattered and torn in the field. I am cognizant of the fact that there is a large pool of research which is commonly referred to as too "esoteric and academic". Such pieces of work remain on bookshelves collecting dust and can only be labelled ephemeral and obsolete.

My undying wish is for theory and practice to work synergistically in the outdoor education paradigm. As both a theorist and practitioner in this field, I have endeavoured to steer away from contributing to an ever-increasing pool of research which is viewed as irrelevant or too academic. For this reason, I sincerely hope that this piece of research enriches the field of outdoor education.

ABSTRACT

Although recently outdoor education has become an important component of the school curricula in Australia, extended programs in residential settings are still comparatively rare. Where such programs have been in existence, their *raison d'être* is underpinned by anecdotal evidence rather than systematic evaluation or empirically established statements of effectiveness (Gray, Patterson and Linke, 1993a).

This research is a longitudinal study examining the impact of an Extended Stay Outdoor Education School Program (ESOESP) upon adolescent participants. Primarily the study analyses program impact, both immediate and residual, upon the perceived changes in identified variables of participants. Data was gathered and analysed using both quantitative and qualitative methodologies. Many researchers are of the belief that the two methodologies compliment one another and thereby strengthen the total evaluation model (for example Hanna, 1992a; Henderson, 1993; Klint and Priest, 1988).

A unique Australian school (Timbertop) was used as the basis of a case study in the research. Timbertop is Geelong Grammar School's outdoor education campus where an ESOESP lasting for a full academic year is conducted. This residential program is co-educational catering for both females and males in Year 9. The subjects (n=409) came from two consecutive school populations, viz the 1993 cohort (n=201) and the 1994 cohort (n=208).

Three quantitative instruments, the Real Me Questionnaire (RMQ), the School Life Questionnaire (SLQ) and the Parent Questionnaire (PQ) were designed specifically for this study to assess program effectiveness. Moreover, the instrumentation evaluated perceived changes in participants' attitudes, values and behaviours during and after exposure to an ESOESP along with differential gender outcomes. Using a quasi-experimental design, students were administered pre-tests and tracked at regular intervals for up to two academic

years using the RMQ and SLQ in order to ascertain self-perceived changes in selected variables.

The instruments contained subscales (also referred to as dependent variables) related to selected variables which were identified on the basis of the literature review, as being relevant outcomes associated with ESOESP's. The RMQ contained six subscales: 1) social responsibility, 2) personal relations, 3) health and physical aptitude, 4) environmental sensitivity, 5) autonomy and 6) academic and cultural achievement. The SLQ contained four subscales: 1) school spirit, 2) quality of teaching, 3) interpersonal relationships and 4) appropriateness of curriculum.

In qualitative terms, a randomly selected cohort from each consecutive school year (1993 and 1994) were tracked using techniques such as personal interview, personal observation, time line charts and log book analysis. Input from teachers and parents was also sought in an attempt to consolidate the self-report data. The teacher interviews provided anecdotal evidence towards program impact for the cohort of students tracked through personal interview.

The research design was further strengthened both quantitatively and qualitatively, using a Parent Questionnaire (PQ). This was mailed to all parents/guardians of the 1993 cohort roughly nine to ten months following their child's completion of the ESOESP. Inarguably, triangulation of data from a variety of sources provided a more comprehensive overview of the impact of ESOESP's upon adolescent participants.

In order to ascertain the impact of the ESOESP over an academic year, an A X B X (C X S) two-way repeated measures mixed model analysis of variance (MANOVA) was carried out on the self-report data contained in the RMQ and SLQ, where A represented time, B represented gender and C represented the subjects with time. An extra data point (referred to as follow-up) was included for the 1993 cohort 12-months after their ESOESP departure.

When assessing the residual impact of the ESOESP, four subscales viz: Social Responsibility, Appropriateness of Curriculum, Quality of Teaching and School Spirit, all experienced a significant decline in the mean scores over the follow-up period. The most marked and statistically significant reversion was in the subscales Quality of Teaching and School Spirit. The other six subscales remained relatively constant over the follow-up period.

The qualitative data was collected by a number of methodologies viz: 1) personal interviews; 2) log book analysis and time line charts; 3) personal observations; 4) teachers' perceptions; and 5) parents' perceptions. In the main, all sources of qualitative data strongly endorsed the intrinsic and extrinsic benefits of the ESOESP.

It can therefore be seen, that a pluralistic evaluation model was involved in the assessment of process and impact variables. Similarly, the study utilised a prospective methodology for data collection. The case study approach attempted to assess the immediate and long term impact of an ESOESP and discuss the differences between perceived and real outcomes of the experience. A secondary purpose of the study was to establish rigorous and acceptable methodologies and instrumentation which will enable ongoing and systematic research into this field. Clearly there was a paucity of formal evaluation which attempted to clarify the ongoing aims and objectives and program efficacy within this arena.

Assessing the residual and long-term effects of ESOESP's was no easy task. In many respects the longitudinal nature of the research is representative of a landmark study within the outdoor education paradigm. Invariably, outdoor education is perceived as a fringe or peripheral subject within the school curriculum. Increasingly, these so called "esoteric" subjects are coming under scrutiny by policy and curriculum planners as we head towards the 21st century. Attempts have been made during this study, to devise a workable model which assists in the identification of the educational efficacy and viability of ESOESP's.

Physical fitness of students was assessed by measuring their completion time over a set cross country course designated at the ESOESP. The fitness testing data was analysed descriptively and inferentially using a t-test for paired samples. The PQ data was treated descriptively for every item with means and standard deviations being reported.

As far as the quantitative data is concerned, the results were unequivocal and somewhat ambiguous. The fitness data revealed a significant improvement in aerobic capacity ($p < .001$) for both cohorts. The PQ consistently made reference to similar attributes attained as a result of the intervention. For the most part, these included 1) autonomy and self-reliance; 2) environmental sensitivity; 3) health and physical aptitude; 4) interpersonal relationships; and 5) social responsibility. The PQ also conveyed that the parents were strong advocates of the program. Collectively, the large majority of parents (89.4%) were either satisfied (25.2%) or very satisfied (64.2%) with the experiences provided by Timbertop. A minority of parents (10.6%) were slightly dissatisfied with the ESOESP whilst no parent (0%) indicated a total dissatisfaction with the school.

In most instances there was minimal change within the subscales of the RMQ and SLQ over the ESOESP duration. There were only five subscales that revealed a significant main effect viz: Social Responsibility; Personal Relations; Environmental Sensitivity; Quality of Teaching; and School Spirit. Moreover, all five subscales that were statistically significant experienced a decline in scores.

Only one subscale viz; Academic and Cultural Achievement produced a significant gender difference. Mean scores for males and females became more similar (or androgynous) as a result of the intervention. All other subscales retained their parallelism during the period of intervention. The combined mean scores for the 1993 and 1994 females remained consistently higher than their male counterparts in all subscales except Autonomy throughout the duration of the ESOESP.

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Chapter 1

AN INTRODUCTION TO THE STUDY

1.1 BACKGROUND AND RATIONALE

Throughout history humans have pitted themselves against nature. As a result, challenge, risk taking, adventure and survival have been catalysts for personal growth and behaviour change. Contemporary society however, has produced an ever increasing protectionism which isolates humans from nature's direct exposure (Cooper, 1994). Feelings of alienation, separateness and unimportance are consequences of humans living detached from nature (Cohen, 1997; Conrad and Hedin, 1986; Henley, 1989; Jones, 1989; Kiewa, 1991 and Suzuki, 1993). It is theorized, that the psycho-social problems afflicting adolescents today are for the most part, manifestations of these modern maladies (Mackay, 1993). In many respects, the outdoor education movement has arisen in an attempt to address these pedagogical anomalies (Davis-Berman and Berman, 1994a, Gray, 1995 and Potter, 1992).

Proponents articulate that the outdoor education experience leads somehow to a personal and social transformation which lasts far beyond the conclusion of the adventure (Conrad and Hedin, 1986; Ewert, 1983 & 1989; Gass and Gillis, 1994; Klint, 1990; Stremba, 1989; Potter, 1992 and Yaffey, 1992 & 1993). Abbott (1987:41) concurs with this statement when he summarizes that "many of us run outdoor education because we have a gut feeling that what we do is valuable". For the most part however, anecdotal evidence and "warm fuzzies" have not

been grounded in rigorous systematic research (Davis-Berman & Berman, 1994b; Ewert, 1987; Gass, 1992; Gillis, 1994; Gray and Patterson, 1994; McRae, 1989a and Warner, 1986).

As a natural corollary, there appears to be a lack of empirical data to support the rhetoric surrounding these, and other similar claims. In essence, outdoor education is presently suffering from a credibility crisis. Neill (1997b:198) exemplifies this point when he argues:

To date, the vast majority of outdoor education programs have been sustained by an act of faith. We can choose to continue walking along the path of faith, however, this will require praying harder than ever that schools, teachers, parents, and funding bodies don't dare question the evidence for that faith.

This is particularly true of outdoor education programs which take place in extended stay school settings (Gray, Patterson and Linke, 1993b). Practitioners in outdoor education have long argued that research is needed to inform practice and enhance the credibility of the profession (for example Gass, 1992; Hanna, 1992a; Hedin, 1980; Kelk, 1990; Richards, 1994; Sakofs, 1991). A review of the literature reflects a shared awareness of the need for quality research to deepen our understanding of the educational processes and subsequent impact of such programs (Ewert, 1987; Gass, 1992; Gray and Patterson, 1994; Klint, 1990 and Warner, 1986).

The related literature also reveals an apparent increased focus on qualitative as opposed to quantitative methodologies. To this end, professionals (for instance Henderson, 1993 and Klint and Priest, 1988) would argue that a synergy should exist between both qualitative and quantitative evaluation models. In particular, a recurring theme relates to the dearth of quantitative research to support the development and continuation of outdoor education. The formulation of methodologies and the subsequent creation of quantitative and qualitative data sets which can be used in the debates concerning outdoor education are in their own right, critical resources for the professional paradigm (Ewert, 1989 and Gray and Patterson, 1994).

Although outdoor education can take place within a myriad of contexts, this study deals specifically with extended stay outdoor education school programs (ESOESP's) for adolescents. For the purpose of this study, ESOESP's are defined as residential school programs lasting for a minimum of roughly forty weeks.

1.2 BRIEF HISTORY OF OUTDOOR EDUCATION

Outdoor experiential education has been evident for centuries. Aristotle, incorporated and promoted the use of outdoor experiential methodologies when he hypothesized that it was crucial to: a) educate the whole child; b) accept that learning is enriched by experience; and c) possess self-discipline and interest as a pre-requisite for learning (Hanna, 1992a) .

At the outset, it is imperative to address two major issues inherent within the outdoor education paradigm. Firstly, the evolutionary and historical context of outdoor education and secondly, the provision of a workable definition of this field highlighting its multi-dimensional nature. In an attempt to minimise potential confusion, four entwined terms (outdoor education, experiential education, adventure education and the wilderness experience) may at times be considered synonymous. For this reason, the terms may also be used interchangeably throughout the fabric of the thesis. All four terms have shared commonalities, and as such are considered to be inextricably linked. Quite clearly, they contain a common theme: viz "learning in the outdoors by doing or experiencing". These terms will be elaborated upon later in this chapter.

1.2.1 HISTORICAL CONTEXT

Arguably, outdoor education is one of the most successful of the post-World War II 'progressive' education movements. Although based on earlier precedents, its continuing development over the past 50 years was derived from the pioneering work of Kurt Hahn (Rohrs and Tunstall-Behrens, 1970). Influenced strongly by his experience as a teacher and subsequently principal at Salem School in Germany (a small residential school established in 1920 with a curriculum centred around outdoor activities and a philosophy of personal development through integration of physical and intellectual challenge), Hahn later moved to Britain where in 1934 he founded a new school at Gordonstoun to develop further the 'Salem system' of outdoor education (Brereton, 1970 and Ewald, 1970).

During the War years the school was moved to Aberdovey in Wales, and at the instigation of Hahn its activities were expanded to provide short term adventure training programs for sailors to develop their teamwork and survival skills. This was the beginning of the Outward Bound movement, and Aberdovey subsequently became the first of many Outward Bound schools as the movement quickly spread throughout the world, (Linke, Patterson and Gray, 1992 and Rohrs and Tunstall-Behrens, 1970).

After the War the Gordonstoun model - and to an extent Hahn himself - was influential in the development of similar schools in a number of other places. Some of these were established as long term residential schools following strictly in the Gordonstoun tradition (for example Anavryta in Greece, founded in 1949), while others adopted a broadly similar philosophy and curriculum program but were confined to shorter periods of schooling. Examples of the latter kind include Atlantic College, a British senior secondary college established in 1962, and Timbertop, a twelve-month residential school for students at mid-secondary level established in 1952 by Geelong Grammar School in Australia. There are now several of these medium-term

residential outdoor schools in Australia, with one of the most recent being Glengarry, established in 1988 by The Scots College (Sydney), near Kangaroo Valley on the South Coast of New South Wales. The historical context of ESOESP's will be discussed in further detail in Chapters 2, 3 and 4.

1.2.2 DEFINING OUTDOOR EDUCATION

As implied earlier, outdoor education is a broad umbrella term. Consequently, arriving at a suitable definition of outdoor education is a difficult task in and of itself. Gilbert and Chase (1988:28) reinforce this notion when they state that "and therein lies the problem.....outdoor educators let alone the general public have problems agreeing on a definition". For this reason, there are numerous definitions and varying terminologies encompassing this broad paradigm. As a natural corollary, there is much debate and controversy about the nature and objectives of outdoor education (Brown, 1989). Generally speaking however, four terms tend to be used interchangeably within the literature. These include:

- a. Outdoor Adventure;
- b. Wilderness Experience;
- c. Experiential Education; and
- d. Outdoor Education.

For the purpose of this thesis, each term will be dealt with in isolation so that similarities can be heightened.

1.2.2.1 OUTDOOR ADVENTURE

In general terms, Ewert (1989) describes outdoor adventure as any form of adventure which occurs in an outdoor setting and implies an educational or recreational activity that is physically demanding, challenging and exciting. Furthermore, Ewert (1989:2) articulates that:

....it was the Chinese who first successfully encapsulated the true essence of adventuring by their term "**wei-jan**". Translated as opportunity through danger, wei-jan incorporates many reasons for participating in the outdoor adventure. Outdoor adventure affords the participant the opportunity to experience the excitement and personal involvement in an outdoor setting which is often lacking in our traditional recreational or educational systems.

This quote is an example of a broad range of readings throughout the literature where it becomes increasingly apparent that there are crucial ingredients necessary for an outdoor adventure experience. These ingredients include: 1) a natural environment; and 2) a degree of risk - whether it be emotional, psychological, physical or social. This element of "high perceived risk" differentiates outdoor adventure from outdoor recreation. The latter could be outdoor photography, a walk in the botanical gardens or even a leisurely bicycle ride. Each of these activities are generally "low-risk" and "low adrenalin", thereby generating minimum "adventure or challenge".

Similarly, a definition of adventure education is also provided by Priest (Miles and Priest, 1990:114) when he ascribes to the theory that adventure education is fundamentally concerned with two relationships: interpersonal and intrapersonal.

Interpersonal relationships refer to how people get along in a group (two or more people). These include communication, cooperation, trust, conflict resolution, problem solving, leadership influence etc. Intra personal relationships refer to how individuals get along with self. These include self-concept, spirituality, confidence, self-efficacy etc.

There are numerous definitions for adventure activities which take place in an outdoor setting. Ewert (1989) summarises these in Figure 1.1. In succinct terms, Ewert (1986:56) defines outdoor adventure as "an adventure, usually performed in a natural setting, which contains elements of real or apparent danger, in which the outcome, while often uncertain, can be influenced by the actions of the individual and circumstance".

FIGURE 1.1: DEFINITIONS FOR ADVENTURE ACTIVITIES

- "Any number of leisure pursuits which provide exposure to physical danger (Meier, 1978:33)".
- "All pursuits that provide an inherently meaningful human experience that relates directly to a particular outdoor environment - air, water, hills, mountains,..... (Darst and Armstrong, 1980:3)".
- "Activities which involve human participation as a response to the challenge offered primarily by the physical, natural world such as hills, air currents and waves (Progen, 1979:237)".
- "Outdoor activities involving the natural environment where the outcome perceived by the participants is unknown (Yerkes, 1985)".

Adapted from Ewert (1989:2)

1.2.2.2 THE WILDERNESS EXPERIENCE

Within an outdoor education context, the wilderness experience, at its very simplest involves stripping people of all surrogates, conveniences and artificiality of life and placing them in the bush where they may appreciate nature, both its beauty and wildness. In the process, participants learn self-reliance by discovering or rediscovering literally, how they and the world work (Davis-Berman, Berman and Capone, 1994 and Hedin and Conrad, 1986. This point is reiterated by Miles (1987:36-37) when he states that:

Wilderness places also challenge the whole person and thereby contribute to growth. Conventional schooling emphasises intellectual growth, half-heartedly addressing physical growth and paying little or no heed to the emotional or spiritual sides of the being.....modern life plagues us with doubt, alienation, and nihilism and separates us from the natural community and even from ourselves. In wilderness we have a chance to overcome these problems and get in touch with the self and nature.

Interactions between the wilderness environment and the participant activate internal processes (Potter, 1995 and Young and Crandall, 1984). These processes in turn, are catalysts for personal and social growth. Handley (1993:3) corroborates with this notion when he eloquently states that:

...the wilderness experience is a journey into the unknown where people meet nature as a stranger in kind but a friend in spirit: an experience of risk, of self reliance, of freedom to both fail and succeed, and an opportunity to see ourselves as ourselves, stripped of 'other world' facades and facing the wilderness within.

The wilderness experience is a potentially powerful tool and Potter (1992:92) believes that "the most significant and worthwhile purpose of a wilderness experience (is) - the empowerment of self and the magnification of personal awareness and interpersonal skill development". Along this same train of thought, Bacon (1983) espouses that when individuals and wilderness are united, there is an inherent potential for personal transformation. He argues that wilderness provides the challenges which are for the most part, instrumental in urging humans towards their highest potential. When viewed in this light, the wilderness experience has the potential to enhance personal, social and spiritual growth. These thoughts are elaborated upon by Sinclair (1994: pg i) when he claims that:

But wilderness is more than just an aesthetic experience, it is spiritual and physical. It inspires us, it motivates us even when we are remote from it. While the artifacts of modern civilisation enable us to live most our lives inside the insulated cocoons of comfort and a controlled environment, the yearning for wilderness will always persist.

It must be stipulated that the inherent power of the wilderness experience is contingent upon "the successful transition of the students from their known, accepted and comfortable everyday life reality to the foreign reality of wilderness living" (Potter, 1992:93). When devoid of the trappings associated with our modern buffered society, participants become responsible for their very survival. Consequently, for their potential to be fully realized, participants must possess the ability to step out of their perceived comfort zone and face the unknown discomforts of the wilderness episode in a productive manner. Potter (1992:93) reiterates this aspect when he states that "it is this unpredictability and loss of convenience and control that form new physical and subsequently emotional and social realities for the students".

1.2.2.3 EXPERIENTIAL EDUCATION

In simple terms, experiential education involves 'learning by doing'. Chapman, McPhee and Proudman (1992:17) elaborate on this definition when they expound that:

....students are actively engaged - exploring things for themselves - rather than being told answers to questions.....the teacher's role is to give just enough assistance for students to be successful, but no more. If the teacher carries out the role properly, students will accomplish more than they ever could on their own.

Invariably, experiential education is based on the premise that learning or behaviour change is contingent upon direct experience. To this end, Gass (1993:4) summarizes that:

All change has some form of experience as a base for its origin, but experiential learning asks that the learner be placed as close as possible to that base of origin because this process is often more valuable for the transmission of knowledge than other forms of learning.

Within a pedagogical context, experiential education as defined by Conrad and Hedin (1986:230) primarily encapsulates:

....educational programs offered as an integral part of the general school curriculum, but taking place outside of the conventional classroom, where students are in new roles featuring significant tasks with real consequences, and where the emphasis is on learning by doing with associated reflection.

It is interesting to note that experiential education is not a new phenomena. Aristotle cited by Kraft (Kraft and Sakofs, 1985:2) claimed "men of experience succeed even better than those who have theory without experience". Furthermore, Coleman cited by Kraft (Kraft and Sakofs, 1985:7) provides a succinct definition of this paradigm when he contends that experiential education concerns itself with:

...educating through assimilating information, education through being taught via a symbolic medium, learning by being given the distilled experience of others, direct memory-to-memory transfer of information.

Experiential education can occur *inside* or *outside* the classroom environment. Fundamentally however, it is concerned with learning through the assimilation of an experience. This idea is elaborated upon by Chickering cited by Kraft (Kraft and Sakofs, 1985:30) when he identifies experiential education as:

...learning which occurs when changes in judgements, feelings, knowledge or skills result for a particular person from living through an event or events...Experiential learning may also result from an encounter, group or exam, discussion or demonstration, work or play, travel or sitting on a stump.

This begs the question "why is experiential education so effective?" The underlying pedagogical mechanisms require that the learner is placed in a state of dissonance or "dis-ease" once they have been forced to embark from their "comfort zone". In order for their equilibrium to be restored, the learner must harness their innate resources and adopt the appropriate strategies to facilitate change and learning (Gass, 1993). This feature will be revisited in greater depth in the related literature contained within Chapter 2.

Summarizing, Kraft & Sakofs cited by Gass (1993:4) maintain that the important ingredients associated with experiential education include:

1. The learner is a participant rather than a spectator .
2. Personal motivation is an integral component of learning activities.
3. The learning activity is real and meaningful in terms of "consequences of actions".
4. The learning process is enhanced by reflection.
5. Learning must have present as well as future relevance for the learner and the society in which he/she is a member.

1.2.2.4 OUTDOOR EDUCATION

As stated earlier, defining outdoor education is problematic. Similarly, arriving at a coherent and succinct definition of outdoor education within the school setting has similar complexities. A suitable starting point however, is provided by Abbott (1993:1) when he states that "outdoor education has become a very acceptable term embodying as it does the key elements that draw us together - *the use of the outdoors for educational ends*". Further to this, the Victorian Ministry of Education (1989:131) purport that:

Outdoor education focuses on personal development through the interaction of others and responsible use of the natural environment. It involves the acquisition of knowledge, values and skills that enhance safe access, understanding and aesthetic appreciation of the outdoors, often through adventure activities.

Knapp (1992:1) defines outdoor education as "the instructional use of natural and constructed settings beyond the school to expand and enrich learning". In simple terms, outdoor education is education which mainly occurs out-of-doors, and can incorporate many disciplines such as environmental studies, geography, history, biology, art, and physical education depending on the context (Humberstone, 1990).

Given this stance, outdoor education embodies the experiential education philosophy. The main distinction is that outdoor education primarily incorporates the use of the natural environment as a synergistic agent for learning and behaviour change. Experiential education on the other hand, can occur in any setting whether it be artificial or natural. Priest (Miles and Priest 1990:113) carries this idea to further intensity when he reveals that:

...outdoor education is an experiential method of learning with the use of all the senses. It takes place primarily, but not exclusively, through exposure to the natural environment. In outdoor education, the emphasis for the subject of learning is placed on relationships - relationships concerning people and natural resources.

As a natural progression, participants in outdoor education programs can be impelled towards growth as a direct consequence of their experiences (Davies, 1993, Humberstone and Lynch, 1991 and Loynes, 1991). When marrying experiential education and outdoor education Kraft (citing MacArthur in Kraft and Sakofs, 1985:30) is of the opinion that:

The learner is placed into a demanding situation which necessitates mastery of new skills, which are followed immediately by responsible, challenging action, demanding application of new skills coupled with an opportunity for critical analysis and reflection, which ultimately reorganises the meaning and direction of the learner's life experiences.

Practitioners in the field maintain that outdoor education is an educational medium which enables them to effectively attain their educational goals (Gray and Perusco, 1993). According to Knapp (1992:2) outdoor education is placed in a unique position because students' use "more of their senses and their whole bodies as they explored meaningful problems.....to understand better the relationships between the school curriculum and community life".

There have been several conceptual models devised to explain the outdoor education paradigm. From an evolutionary perspective, Priest cited by Miles and Priest (1990:113) contend that "historically, two branches of outdoor education have been identified: environmental education

and adventure education. Truly functional outdoor education incorporates aspects of both approaches". This phenomenon is illustrated by Priest (1986) in Figure 1.2 as a tree metaphor. In this illustration, Priest states that environmental education has two strands: viz an ecosystemic and an ekistic strand. The former is concerned with "the interdependence of living organisms in an ecological microclimate", (Miles and Priest 1990:113) whilst the latter refers to "key interactions between human society and the natural resources of an environment" (Miles and Priest 1990:113).

Priest (1986) also envisages that adventure education is concerned with interpersonal and intrapersonal relationships. The interpersonal refers to relationships which are evident *between* two or more people, such as co-operation, conflict resolution, trust, interdependence, communication and reciprocity. Whereas intrapersonal refers to how the individual relates to themselves; viz autonomy, self-efficacy, self-concept, self-esteem and confidence.

As can be seen in the model shown in Figure 1.2, the main trunk (outdoor education) diverges into two major branches (adventure education and environmental education). Both branches disappear into a mass of leaves representative of the experiential learning process which is the resultant product of interpersonal, intrapersonal, ekistic and ecosystemic relationships. Priest (1986) argues that quality learning in outdoor education is contingent upon the four categories inter-relating.

Traditionally, environmental education emerged in response to a growing social concern for the future of our planet. This is reiterated by Brown (1989:3) when he postulates that:

The 1960s witnessed a growing social awareness of the finite nature of the world's natural resources and led to the emergence of the environmental education movement in the 1970s. The activities of environmental groups are slowly changing social attitudes in the 1980s and is leading to increasing concern about meta environmental issues. This shift of attitude has also led to some encouraging curriculum development work in this area.

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FIGURE 1.2: THE OUTDOOR EDUCATION TREE (Priest, 1986:15)

The main aim of environmental education is to educate students so that they can be aware of the impact of their actions on the environment and take positive action to preserve and manage their environment for the future. Ultimately, human survival will depend upon improved understanding and appropriate action. Although a number of definitions exist the New South Wales (NSW) Department of School Education (1989:4) provides the following succinct definition of environmental education:

..(it is) a process which develops awareness, knowledge and understanding of the environment, positive and balanced attitudes towards it and skills which will enable students to participate in determining the quality of the environment.

According to Ewert (1996) environmental awareness and environmental sensitivity are closely linked to socio-economic status and an innate desire to enhance one's quality of life. Within the Australian context, Keys Young (1994) performed a study on the behaviours, attitudes, skills and knowledge level of a wide cross section of society and concluded that people from non-english speaking backgrounds were less likely to exhibit "environmentally friendly" habits. This sub-group also possessed inferior knowledge levels on environmental issues. Keys Young (1994) also identified that males attained higher environmental knowledge scores, while their female counterparts exhibited more appropriate attitudes and behaviours. Within the Canadian context, Ewert (1996:31) proffers that:

....age, urban residence, and political ideology, as well as education, are now considered the best variables from which to predict environmental concern. Thus, education still seems to be the most salient predictor of environmental concern.

Outdoor education has a cross-curricula element in that it can incorporate many issues under the broad umbrella heading. To this end, Brown (1989:2) conceptualizes that outdoor education can be divided into four main components: leisure education; environmental education; personal/social development; and cross-curricula education. These are illustrated in Figure 1.3.

FIGURE 1.3: OUTDOOR EDUCATION: A CONCEPTUAL FRAMEWORK (Brown, 1989).

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1.2.2.5 UNITING THE FOUR TERMS

In an attempt to elucidate the commonalities associated with all four terms; outdoor adventure, the wilderness experience, experiential education and outdoor education, the following definition by Kraft (cited by Kraft and Sakofs, 1985:30) is provided:

The learner is placed into a unique physical environment and into a unique social environment, then is given a characteristic set of problem-solving tasks, which lead to a state of adaption dissonance, to which he (or she) adapts by mastery, which recognises the meaning and direction of the learner's experiences.

Within these parameters Luckner (1987) has outlined the key elements of adventure/outdoor education which are conveyed in Figure 1.4.

FIGURE 1.4: THE KEY ELEMENTS OF ADVENTURE/OUTDOOR EDUCATION

*** A Sense of Disequilibrium**

- To challenge how they think/know
- Reorganise their attitudes and
- Make adjustment to demanding situations
- Motivated to seek new information

*** Considerable Length of Time**

- Minimum 10-15 days

*** High Perceived Risk**

- Challenge in a novel setting
- Maintain a constructive level of stress/sense of the unknown

*** Unique Problem Solving Situations**

- Consequences of your actions/inactions
- Develop responsible solutions
- Empowerment and confidence

*** A Co-operative Environment**

- Participants share common goals and responsibilities
- Leader as participant

*** Processing the Experience**

- Using the experience as a metaphor for future personal growth
- Generalisation & Transfer

*** Some Measure of Success**

- Rewards for effort, achievement and perseverance.

Adapted from Luckner (1987).

Along the same train of thought, Bertolami (1981:5) cogently defines this field as:

.....a series of characteristic problem-solving tasks set in a unique physical and social environment, which creates a state of adaptive dissonance in the learner. The learner adapts to the dissonance by mastery of him/herself and his/her

environment which reorganizes the meaning and direction of the learner's experience.

Several characteristics have emerged as being central and pertinent to this field of pedagogy.

Kraft and Sakofs (1985:31) identifies these crucial ingredients as:

- an emphasis on process rather than program;
- how to learn rather than content acquisition;
- internal learner motivation as opposed to imposed learning;
- value forming experience - not sterile learning;
- intergroup and cooperative learning.

Summarising, the learning, self-discovery and personal fulfillment inherent in outdoor education, experiential education, the wilderness experience and outdoor adventure, becomes truly "educational" - and herein lies the nexus of all four terminologies. For the sake of simplicity, this study will consider the terms synonymous.

1.3 BACKGROUND TO ESOESP's

The work of Dr. Kurt Hahn in the post-WWII years was instrumental in shaping outdoor education as we know it today. In essence, he maintained that the traditional school curriculum was inadequate for the total development of the child (Ewald, 1970 and Ryan and Gray, 1993). Hahn repeatedly emphasised the need for education to reach beyond the classroom and for students to find expression in the world at large. His educational thought advocated that one meaningful way to develop and enhance the adolescents' self concept, was to test and prove themselves in the outdoor setting (Rohrs, 1970).

The emergence of the outdoor education movement in the western world began as early as the 1940's and 1950's in an attempt to counterbalance traditional methodologies employed in classroom teachings. The "four-walled" delivery of educational messages is considered by many to be archaic and meaningless (Conrad and Hedin, 1986; Gray and Perusco, 1993;

Horwood, 1987; Knapp, 1994 and Mortlock, 1987). Many educators maintain that the utilization of natural environments as an adjunct to the pedagogical process produced learning that is enriching and indelible (Davies, 1993; Hunt [Miles and Priest], 1990; Jones, 1989 and Knapp, 1992). These pedagogical issues will be explored further in Chapter 2.

The passive and submissive nature of student learning exacerbated by standardized testing and rote memorization, led many progressive educators to question the value of such an approach. Through the inevitable discontent, the outdoor education movement was borne. These ideas are echoed by Knapp (1992:1) when he states that "they (educators) wanted to revitalize education by moving some of it into the 'real world'. Outdoor education developed as a response to these circumstances".

The underlying aim of outdoor education was originally (and continues to be), the personal and social development of the whole person in a balanced and integrated fashion. Hahn wanted to instill in his students a sense of community, responsibility, purpose and thirst for adventure. Hahn (cited by Schoel, Prouty and Radcliffe, 1988:189) stated that "I regard it as the foremost task of education to ensure the survival of these qualities: an enterprising curiosity; an undefeatable spirit; tenacity in pursuit; readiness for sensible self-denial; and above all, compassion".

Schools following Hahn's philosophies were set up world-wide over the succeeding decades as an increasing number of his contemporaries realised the inherent value of his pioneering work (Rohrs, 1970). This, when coupled with the fact that post-war educators were questioning the efficacy and futility of their current educational system has led to the burgeoning interest in this field (Hunt [in Miles and Priest], 1990; Richards, 1994 and Mortlock, 1987). This aspect is clearly conveyed by Horwood (1987:vii) when he articulates that "schooling was inordinately absorbed with information; information which was often dated, usually irrelevant to students,

and unavoidably ephemeral". Given this stance, contemporary education can be viewed as misguided and for the most part, ineffective.

Furthermore, the irrelevant and disintegrated nature of our educational system is depicted by Ryan and Gray (1993:7) when they argue that:

In our modern buffered society young people are kept in a dependent, passive and sheltered role as learners. This protected, ordered and programmed existence is maintained until adulthood by an educational system which is often incomplete, abstract and impersonal. This remains the shortcoming of contemporary education.

There is nothing in the adolescent's education that marks a "right of passage" into adulthood (Gibbons, 1974). Some educators would suggest that what is needed in secondary education is a challenging demonstration of the individual's competence through stress experiences which can involve decision making, risk taking, acceptance of responsibility, group problem solving and personal introspection (Schulze, 1971 and Stapleton, 1988 & 1990). Such maturing experiences become profound metaphors for life (Bacon, 1983 and Gass, 1993). In this context, a metaphor is a comparison in the mind of the person experiencing the wilderness episode. The stress, challenge and adventure encountered in the wilderness provides the catalyst for certain feelings and responses to come to the fore. Later, in the "real world" these newly acquired qualities will be drawn upon when similar stressful experiences emerge.

The misguided nature of contemporary education is also articulated by Mortlock (1987:55) when he maintained that:

Education today is unbalanced in terms of growth of young people. The physical and emotional needs and the abilities of youth tend to be regarded as peripheral, rather than of central importance, subjugated to a great extent by the need for success in examinations.

To address the educational inadequacies, Hahn established the Gordonstoun school in Scotland where he implemented his pedagogical philosophy (Schoel et al. 1988). One of the main features of the school was the Moray Badge which involved four steps: 1) reaching standards in athletics; 2) undertaking expeditions on land or sea; 3) completing a meaningful and personalised achievement in an area of skill or craftsmanship and 4) providing community service. The Moray Badge award was later developed to become the Duke of Edinburgh's Award scheme. Hahn's underlying "Outward Bound" philosophy has grown and spread throughout the world. According to Ryan and Gray (1993:7):

What has been preserved as a common theme is that education should impel people through experiences which enhance:

- self awareness and responsibility;
- an ability to value and work with others;
- an environmental appreciation;
- a capacity to embrace challenge, and
- a tenacious spirit.

As implied earlier in this paper, outdoor education as interpreted in this thesis, cannot exist without students experiencing the controlled challenge inherent in the Outward Bound process. This challenge provides the vehicle for a right of passage into adulthood (Gibbons, 1974). Schoel et al, (1988:iv) corroborate with these ideas when they advocate that "challenge and risk in a supportive environment which values effort, create an opportunity for humans to discover and develop their potentialities". It is within this context, that the emergence of outdoor education within the school curriculum has taken place. These issues will be expanded upon in Chapter 2.

1.3.1 THE EMERGENCE OF ESOESP's IN SCHOOLS

As elaborated upon earlier, ESOESP's have emerged from an Outward Bound philosophy. Furthermore, Doherty (1995:12) states that "after the inception of Outward Bound in the USA

in the 1960's, adventure learning gained popularity and soon assumed an important place in North American education". As such ESOESP's are imbued within Hahn's educational ideology and many current outdoor education curriculum activities can be traced back to these origins. Hahn (cited by Rohrs, 1970:124) advocated that the school curriculum was both sterile and irrelevant and these thoughts are echoed in:

In spite of innumerable attempts to make the curriculum attractive and more commensurate with the sensibility and experience of children, the reforms themselves have retained an air of artificiality, of being imposed from outside. They are not spontaneous Hahn repeatedly emphasised the fact that young people will take pleasure in learning if the environment is attractive and the lessons both interesting and worthwhile.

These issues are also reiterated by Gray and Perusco, (1993:18) when they advocate that:

Traditional schooling remains entrenched in a system which foolishly prepares its graduates for a final exam rather than a total life experience. Surely, if education continues along this same pathway it will contribute to the demise of society rather than towards its enrichment.

In the same vein, ESOESP's are an outgrowth of dissatisfaction and disenchantment with the contemporary educational system. Disintegration, compartmentalization and fragmentation are common themes plaguing contemporary educational curriculum (Hunt, 1990; Miles, 1987; Mortlock, 1987; Richards, 1990 and Westheimer, Kahne and Gerstein, 1992). Some further educational inadequacies are postulated by Gray and Perusco, (1993:17) when they maintain that:

1. The educational process in its current form, possesses many shortcomings, not the least of which can be attributed to our irrelevant curriculum.
2. Living in our technological age fosters an artificial existence totally divorced from nature. This has far reaching repercussions on the students in our charge.
3. A growing trend toward anonymity between the teacher and student which poses as a barrier for effective learning.

Outdoor education is a powerful educational tool which has the potential to reach many students in meaningful ways (Cooper, 1994; Gray and Perusco, 1993; Keighley, 1993 and Knapp, 1992). It must also be noted that in isolation, outdoor education is not a panacea for our educational pitfalls, but when interwoven into the school curriculum, it offers sound alternatives (Davis-Berman and Berman, 1994a; Horwood, 1987 and Kiewa, 1991). Despite economic rationalism and calls for back-to-basics such as formal classroom teaching incorporating the three R's, outdoor education is gaining momentum as it heads towards the 21st century, (Kraft, in Miles and Priest, 1990).

1.3.2 AIMS OF ESOESP's

Given the educational shortcomings addressed in the previous section, the fundamental aim of outdoor education, and indeed any ESOESP, is to promote the development of the whole person as a social as well as an individual being in a balanced and integrated way (Ewert, 1992; Horwood, 1993; Jones, 1989; Miles, 1990 and Ryan and Gray, 1993). In particular ESOESP's aim to strengthen the values of social responsibility which is often considered to be neglected within conventional schooling. This is achieved through team activities and involvement in community welfare and development projects.

At the same time ESOESP's aim to promote a sense of self esteem and personal capability by providing opportunities to explore individual interests and develop a range of practical skills beyond those of the normal academic curriculum, and by establishing a climate of cooperative enterprise, of collective challenge against natural forces rather than individual competition, (Gray, Patterson and Linke, 1993a). None of this is to deny the importance of academic, sporting and cultural interests associated with conventional schooling, but rather to balance

them with the development of other personal and social values, generally regarded as outside the formal curriculum, in a more explicit and deliberate way.

The main aims of ESOESP's were gleaned from discussions with the teaching staff in two Australian schools (Timbertop and Glengarry). An analysis of written materials provided by the campuses pertaining to the major objectives (each relating to different aspects of personal and social development) were identified as the primary expectations of the programs. These aims and objectives are conveyed in Figure 1.5.

For the most part, ESOESP's are embedded within a cross-curricula and interdisciplinary delivery of the school curriculum. It is therefore developed around themes and common units, for example in history, students are acquainted with the local farming ancestry and bushrangers. Geography lessons are conducted through field studies within close proximity to the ESOESP's campus. These provide first hand experience in topics such as ecosystems, erosion and human's impact on the environment. Art, science, mathematics and music all adopt similar approaches to teaching and learning.

Transcending the total ESOESP experience is the Hahnian educative philosophy. Timbertop was the first Australian expression of this teaching paradigm. Interestingly, one of the main aims of an ESOESP's is a spartan and archaic existence as this is considered to be instrumental in the pedagogical process. Students are stripped of all conveniences and artificiality associated with modern life and placed in a bush setting where they appreciate nature, both its beauty and wildness. In the process, they learn self-reliance by discovering or rediscovering literally, how

FIGURE 1.5: THE AIMS AND OBJECTIVES OF ESOESP's

1. *Affective Objectives*

(a) **Self Concept**

- to develop self confidence in students by providing them with opportunities to recognise and build on their personal strengths, to minimise their weaknesses, to engage in positive interaction with others, and through these experiences to become more independent and self reliant;
- to provide students with a range of both academic and non-academic activities designed to enhance their sense of personal accomplishment;
- to assist students gain acceptance from their peers and teachers as worthwhile and significant individuals.

(b) **Social Responsibility**

- to help students develop socially responsible attitudes and behaviour both in their relationships with other people and in their activities associated with the non-human environment;
- to improve self awareness and understanding of others by exploring personal capabilities and interrelationships in diverse and challenging situations.

2. *Objectives Relating to Intellectual Development*

- to encourage a general interest in learning based essentially on intrinsic or intellectual motivation (ie. curiosity driven) rather than on external persuasion or pragmatic vocational factors;
- to develop a reflective approach to learning through analysis and correlation of ideas and experiences rather than relying simply on rote recall;
- to improve self reliance in learning through efficient organisation of study time and selection of appropriate learning strategies;
- to improve knowledge and understanding in both core and elective subject areas of the school curriculum.

3. *Objectives Relating to Health and Physical Development*

- to enhance and appreciate physical health and fitness through encouragement of regular exercise and appropriate dietary habits;
- to promote a sense of enjoyment and satisfaction in outdoor activities through participation in games, adventures and sporting events which emphasise individual accomplishment rather than focusing on open competition;
- to develop coordination and teamwork skills through participation in both individual and group activities designed to encourage positive involvement, perseverance and cooperation within a relaxed and supportive environment.

Gray, et al (1993a:7)

the world works (Potter, 1992 and Ricketson, 1993). Similarly, the New York's Herald Tribune noted upon Prince Charles' arrival that "Timbertop is one of those curious schools where the bleakness of life is in direct ratio to the cost of tuition" (Ricketson, 1993:26).

Clearly, ESOESP's have a profound and lasting impact upon their participants and most graduates of an ESOESP are strong advocates for their program. For instance, Stapleton (1988:30) describes the impact of Timbertop's curriculum upon its students when he states "ex-students vowed and declared that they learnt more in their one year at Timbertop than they did in all their school years put together". But just what did they learn? Attempting to tease out the processes involved in the attitudinal and behavioural change is an extremely complex and time consuming task. These issues will be elaborated upon in Chapter 3.

1.4 NEED FOR THE STUDY

Outdoor education in its various forms has been subject to the researchers' microscope for several decades (Klint, 1990). Historically speaking, research into the outdoor education arena began in earnest in the 1950's with a numerical tally of schools incorporating survival training in their curriculum. During the 1960's, the evolving research centred around assessing the inherent personal and social benefits of participation such as: enhanced self-concept; lowered recidivism rates for youth at risk; and improved academic achievement (Hanna, 1992a).

Within this context, the need for the study emanates from the apparent dearth of rigorous longitudinal and systematic evaluation, whether it be within the broad umbrella of outdoor education, or in the narrow context of school based outdoor education programs. Hanna (1992a:233) reinforces this aspect when she argues that outdoor experiential education programs:

....work and elicit a wide variety of positive personal, social and therapeutic benefits, declining resources and increasing demands on accountability suggest

we need to be able to demonstrate these benefits unequivocally to those in the decision making positions. As researchers, we can only benefit by looking into our reflective pool and considering where we've been, and what we've done and how well we have reached our objectives. Our body of research can only benefit from critical inquiry into the designs and methods that have been used to provide us with an answer to the questions. After all, learning from our experience is what we are all about.

Clearly there is insufficient quantitative research to support the development and continuation of outdoor experiential education. The formulation of methodologies and the subsequent creation of quantitative data sets which can be used in the debates concerning experiential education are themselves critical resources for the profession (Gray and Patterson, 1994 and Neill, 1997b).

As implied earlier in this chapter, outdoor educators have repeatedly argued that research is needed to inform practice and enhance the credibility of the profession (Gass, 1992; Gray and Patterson, 1994; Hanna, 1992a; Klint and Priest, 1988; Richards, 1987). This is supported by Conrad and Hedin (1986:230) who suggest that "while strong endorsements of experience-based education abound, there is relatively little "hard" evidence to demonstrate or document the impact of such programs on student participants".

Although recently outdoor education has become an important component of the school curricula in Australia, extended programs in residential settings are still comparatively rare. Where such programs have been in existence, their *raison d'être* is underpinned by anecdotal evidence rather than systematic evaluation or empirically established statements of effectiveness (Gray et al, 1993a; McRae, 1989a and Neill, 1997b). Anecdotal and descriptive evidence clearly supports the inclusion of ESOESP's into the school curriculum. To date however, the majority of these claims have been on an intuitive level and not embedded in sound research methodologies (Conrad and Hedin, 1986; Gass, 1992; Gray, 1995; Hanna, 1992a; McRae, 1989b; Patterson, 1991).

In an age of educational accountability, with incessant calls for a back to basics movement, outdoor educators need a more credible bases to justify the incorporation of the peripheral or fringe subjects into the conventional educational mainstream (Patterson, 1991). Within the North American context, Hanna (1992b:77) eloquently argues that "educators are confronting a "back to basics" wave designed to focus them and their students on identified L.O.'s (learning outcomes) and reduce time devoted to perceived extraneous and frivolous experiential components and processes". Undeniably, the reality facing contemporary education is that it is:

....in the grip of conservative educational reformers.....increased emphasis on student passivity, rote memorization, standardized testing and other reforms that seek to eliminate adventure from education", (Miles and Priest, 1990:127).

Furthermore, it is naive and short-sighted to be married to a belief that outdoor education is "vast and elusive, it resists our attempts to create models of it and extract generalities, while continuing to inspire and provide motivation for those involved in facilitating its effects" (Yaffey, 1992:34). Hence, the accountability of ESOESP's in the current education climate is questionable and has primarily fueled the need for the study. The field needs to deepen its understanding of the educational processes and subsequent impact of ESOESP's (Gray and Patterson, 1994). These shortcomings curtail the development and continuation of outdoor education.

Therefore, the importance of this study lies in the fact that the findings should provide outdoor educators with tangible and concrete evidence of program impact, and thereby, enable them to be proactive in educational change and innovation. This study also attempts to devise a workable model which assists in the identification of the educational efficacy and viability of ESOESP's. Gass (1992:6) also echoes these sentiments when he states that "experiential learning must integrate theory and practice together in a synergistic manner to be a powerful and effective process in today's world".

Esoteric and ephemeral statements of the supposed benefits have been articulated earlier in this chapter. In short, they range from claims of improved social competence, enhanced self-concept, better communication skills and environmental appreciation to name a few. However, educators must be cognizant of the ethical and moral implications of such activity. Clearly, outdoor education has a professional responsibility and duty to explore and enunciate the rhetoric which surrounds this field. Richards (1987:126) further magnifies this argument when he maintains

These (self-concept and self-esteem) are not peripheral issues. They are at the core of a person's identity, of who he or she is, as a functioning and developing human being. If we only teach skills, then such issues may not concern us, but once we claim to be educating in these expanded areas we have an absolute obligation to know what we are doing.

Another intriguing aspect of the study pertains to the differential gender outcomes of ESOESP's. Whatever pedagogical factors impinge on females and males can be applied to the ESOESP experience. This study provides the unique opportunity to view the impact of a physically, emotionally and psychologically demanding program upon participants in which no concessions exist for gender. The literature suggests that females do not partake in activities that are perceived to be high risk or physically taxing - and indeed, prefer the softer options (for instance Fullager and Hailstone, 1996; Humberstone, 1989; Levi, 1995; Lirgg and Feltz, 1989 and Maccoby and Jacklin, 1974). The research findings will be informative in this regard.

Finally, the uniqueness of this study cannot be underestimated. It will provide a landmark longitudinal study within the school-based context. It is representative of a study within an area which is considered outside the conventional educational mainstream. As such, the research should enable a critical analysis of: (1) program efficacy; (2) the immediate and residual effects of program impact; and (3) the differential gender outcomes derived from ESOESP's.

In summary, outdoor education as it currently exists in the Australian school education system suffers from a credibility crisis (McRae, 1989b and Patterson, 1991). Unquestionably, as outdoor educators head towards the next millennium they will need to have a sound theoretical base to be used in debates concerning the future of their field. Without such ammunition, the area may become an "endangered species". It is crucial for theory and practice to work synergistically and enhance the credibility of the field. When this inadequacy is addressed the field can become proactive rather than reactive in the race for outdoor education's survival as it heads towards the 21st Century.

Chapter 2

LITERATURE REVIEW

Chapter 1 provided a justification of the study through a brief overview of the key issues and a summary of the related literature in this field. This chapter explores in greater depth, the related literature pertaining to the study and three broad themes will be addressed within the fabric of the chapter, viz:

1. Education in the 1990's: The current state of play.
2. Adolescence:
 - i. General characteristics; and
 - ii. Gender issues.
 - iii. Gender issues in outdoor education.
3. Outdoor and experiential education:
 - i. The benefits of outdoor experiential education;
 - ii. Research and evaluation in outdoor and experiential education;
 - iii. Outdoor education programs pertaining to the school setting;

An examination and understanding of these three themes provides the framework upon which the proceeding chapters will be built .

2.1 EDUCATION IN THE 1990'S: THE CURRENT STATE OF PLAY

As implied previously, lack of relevance and fragmentation are common themes in educational debate (Heaven, 1994; Hunt, 1990; Miles, 1987; Raffan, 1990; Rice, 1996 and Westheimer et al, 1992). Consequently, the inherent value of our current education system and its subsequent role in alleviating the level of social disintegration and environmental degradation in the world, is open to conjecture. The basic tenet upon which education is built is that it should enrich the lives of contemporary youth by maximizing their inherent potentials (Clinchy, 1995). Primarily, education should assist the betterment of society by producing well rounded, fully functioning individuals. Paradoxically however, there is overwhelming evidence to suggest the contrary (Horwood, 1993; Kiewa, 1991; Nettleton, 1994 and Poole and Goodnow, 1990).

It should be stipulated that both education and society have a major role to play in instilling a sense of worth and self-pride in individuals, especially adolescents. Ironically however, the following examples highlight the misguided nature of education and society:

Suicide is the second leading cause of death of Australia's youth.

NSW Health Department Public Health Bulletin (June 1993:8)

There are now more deaths in Australia from suicide than from motor vehicle traffic accidents.

Commonwealth of Australia "Australia's Health" (1994:107)

As health professionals would attest, the etiological factors associated with suicide include feelings of futility, unimportance, alienation and lack of purpose in life (Donatelle and Davis, 1996). Moreover, this begs the question 'how enriching and effective has the educative process been?' This less than desirable situation has also been exacerbated by the vast array of social and emotional upheavals confronting children of contemporary society. To this end, Legge (1993:17-18) posits that:

Children today are having to cope with an unprecedented level of pressure. Teachers confirm the talk of paradise lost.Mod cons do not compensate for the loss of innocence. It is a trade-off between higher standard of living and a lower quality of life.....Doctors specializing in adolescent medical problems report an increasing number of young girls with eating disorders.....Compared with 30 years ago, children today face a staggering turnover in "household personnel" either as a result of family breakdown or because of patchwork childcare arrangements. No one knows for sure what the fallout will be.

The rationales as to why contemporary society is fraught with social upheaval and alienating lifestyles are many and varied. Rice (1996:15) argues that we live "in a world of pluralistic standards, changing customs and uncertain values, it becomes difficult for adolescents to know how to live and what to believe". Some interesting issues are raised by Cooper (1994:9) when he maintains that:

There is a lack of purpose in many people's lives. We have become removed from the rhythms of nature, from the seasons, from the day and night, and from the land and sea, from other life. We surround ourselves with surrogates, second-hand experiences vicarious pleasures. These are poor compensations for feeling part of the planet, for having a spiritual belonging, a kinship with the earth.

Arguably, education in its current state, is sterile, irrelevant, ineffective and unproductive (Horwood, 1993; Mortlock, 1987 and Nettleton, 1994). These aspects are echoed by Richards (1994:6) when he espouses that "public education in the western world is in a shambles". However, it must be stipulated that education is not solely responsible for the myriad of problems facing contemporary youth. However, the evidence suggests that education, in its current state is failing abysmally to meet the needs of many students.

Historically there have been three modes of learning and information dissemination that have shaped and fashioned the face of contemporary education (Lepani, 1994). These include:

1. **Oral mode** - in the first instance, people communicated and acquired information through the use of language.

2. **Literate mode** - in the second instance, once we had established and mastered our language, we entered into the phase characterized by writing or drawing as a form of communication and learning.
3. **Technological/Electronic mode** - is our third wave. Here information is received and disseminated through computers, CD-ROMS, internets, e-mail, faxes, mobile telephones and so on.

Adapted from Lepani, 1994.

This third wave has revolutionized human evolution. Society as a result, has undergone intensive and rapid technological change (Rice, 1996). However, these advancements can be both advantageous and deleterious. The adverse or negative consequences are for the most part, manifested in human costs (Caldicott, 1996 and Suzuki, 1993). For instance, increased alienation and job redundancy due to industrialization and automation. Inarguably, "social transformations have occurred as a haphazard result of technological progress" (Rice, 1996:14) and herein lies one of the major challenges confronting both education and society in general as we head into the next millennium.

The advantages of technology as an adjunct to the educative process has been well documented (Reilly, 1992 and Sandholtz, Ringstaff and Dwyer, 1995). Technology has been shown to enhance knowledge-building tools and thereby validate the constructivist approach to learning (Reilly, 1992). According to Sandholtz, et al (1995:15) students that are exposed to technology within the classroom exhibited "increased initiative by going beyond the requirements of the assignments, and by independently exploring new applications".

Without question, technology has gained momentum in the school curriculum at an unprecedented rate. As we head towards the 21st century, school education is gearing up for a technological explosion and Lowe (1995:35) succinctly explains the impact of the internet on pedagogy when she says:

School life in 2000: playgrounds lie silent and unused as students spend their breaks and lunchtimes in cyberspace. Kids rush home just to log back onto their

computers and continue their keyboard conversations with friends around the world. In two Australian schools this vision of school life is well on the way to becoming a reality.

How can we allow our young to lose sight of the value of play and outdoor activity? The ramifications are incalculable. Health professionals have long recognised the fundamental importance of vigorous physical activity on motor development and well-being (Donatelle and Davis, 1996). This is further argued by Gallahue (1993:5) when he posits:

Movement should be at the very centre of children's lives, permeating all facets of their development, whether in the motor, cognitive or affective domains of their behaviour. To deny children the opportunity to reap the many benefits of regular vigorous physical activity is to deny them the opportunity to experience the joy of efficient movement, the health benefits of physical activity, and a lifetime as competent and efficient movers.

Computer usage is essentially a sedentary activity which does very little to tax the cardio-vascular system or enhance gross motor skills. The ramifications of prolonged computer usage are yet to be quantified however, one could speculate that it would have an adverse affect on the issues raised above by Gallahue. Quite clearly, when technology is incorporated into the school curriculum, it needs to be done in a "balanced" and "holistic" fashion. In other words, technology in the school curriculum needs to be presented in an integrated fashion within the instructional process.

In many respects, technology allows individuals to function in an existential vacuum. Computers and e-mail for instance, allow people to operate as an "island" - devoid of direct interpersonal contact. To this end, Cadzow (1996) poignantly states that technological change is both alienating and dehumanising. Overdoses of technology have the potential to undermine the health and well-being of not only our youth, but society in general. This notion is echoed by MacKay (1993:80) when he hypothesizes that:

As usual, technology has played its part in facilitating and even accelerating the process of social change: the three most popular new domestic appliances of the Eighties (the VCR, the microwave oven, the dishwasher) have all facilitated the

breaking down of family activities; they have all made it easier for individuals to act individually. The VCR reduces the need for the household to co-ordinate its viewing of particular TV programs; the microwave oven accelerates the erosion of the formal family mealtime by encouraging 'relays' of diners to use the freezer/microwave combination to prepare meals when they want them, rather than when meals are ready. The dishwasher removes one potentially valuable episode of family communication - the sharing of washing up.

Technology allows people to become "cocooned" from first-hand interpersonal contact and removed from our natural rhythms and cycles. Moreover, Stapleton (1990:20) is of the opinion that:

With all this has come a generation of young people who seem to have lost touch with the systems of nature. Nature is almost old fashioned to them. Technology is the go now, and they are convinced that it will be able to solve all problems. They can tell you every known fact about the space program or digital technology, but ask them how to make jam, or how long it takes to boil an egg, or what is the season for apples?

Being devoid of human interaction and plagued by vicarious reinforcement and second-hand surrogates are spin-offs associated with technology. The holistic nature of education is questionable under a regime such as this. Denying students multi-sensory and indelible learning experiences sounds a death knell as far as outdoor experiential educators are concerned. More importantly, the fundamental social and interpersonal skills needed for effective living in the 21st century are not being addressed. In a nutshell, our schools of the future will be producing partially handicapped graduates unless the value of outdoor education is recognised and incorporated into the curriculum. These issues will be revisited later in this Chapter in Section 2.3.1 the "Benefits of Outdoor Experiential Education".

2.2 ADOLESCENCE

As this study deals in the main, with adolescents, a thorough analysis of this age group is essential. Once the theoretical underpinnings have been addressed, it will establish a workable basis from which further discussion can revolve.

2.2.1 CHARACTERISTICS OF ADOLESCENCE

When investigating adolescence, the researcher must be mindful that "this is a study of contrasts, change, experimentation and growth" (Rice, 1996:8). For whatever inexplicable reason, western society tends to hold a negative perception of adolescence (Coleman, 1993). This point is poignantly conveyed by Rice (1996:6) when he argues that:

research indicates that adults have negative feelings towards adolescents and mistrust them more than any other age group loud, vulgar, ill-mannered, immoral, ungrateful, irresponsible, sexually promiscuous, untidy, rebellious or lazy - such adjectives are commonly considered to be accurate descriptions of adolescents.

There are two schools of thought regarding the emergence of adolescence as a phenomenon. The first school advocates that the negative images of adolescence have been evident for centuries - in fact, as far back as eighth century B.C. when Hesiod (cited by Manning, 1983:824) suggested:

I see no hope for the future of your people if they are dependent on the frivolous youth of today, for certainly all youth are reckless beyond words When I was a boy, we were taught to be discreet and respectful of elders, but the present youth are exceedingly wise and impatient of restraint.

Oddly enough, these descriptions are evident in our daily conversations about contemporary youth of the 1990's. Notably, it becomes blatantly apparent that very little has changed over the centuries.

The second school of thought upholds the belief that adolescence, as a developmental phenomenon, is a relatively new concept. They suggest that it evolved since the turn of the century and Davis-Berman and Berman (1994a:3) state:

the notion of adolescence as a stage different from childhood or adulthood was popularized largely as the result of writings of psychologist G. Stanley Hall, whose book, *Adolescence*, was originally published in 1904.

In the early 1900's society underwent significant sociological transformation and changed from being an agricultural and rural to an industrialized and urban society. With this metamorphosis, new roles and responsibilities arose within the family context. This ultimately led to redefining the role of the adolescent within the family structure. Furthermore, urbanization accordingly to Rice (1996:15) "creates impersonalization in the family (and) a host of social problems: overcrowding, poverty, slums, gangs, delinquency and other problems that go with city life".

Chronologically, adolescence is defined as the period between 10 to 19 years of age (Kenny and Job, 1995). During this developmental period, individuals are subjected to enormous social pressure to abandon their families, to be accepted by peer culture and to be independent individuals. Adolescence therefore, is a period of social, psychological and physiological change and Pipher (1995:23) postulates that "self-absorption, preoccupation with peer approval and identity formation" are the hallmarks of this period. Hall cited by Davis-Berman and Berman (1994a:4) suggests that:

.....the major physical changes that occurred during this time caused psychological changes. The adjustment to one's body during this time caused *sturm and drang* (storm and stress).....one could emerge from this developmental phase emotionally stronger.

Coleman (1993:251) among others, makes reference to the notion that adolescence is "as much a puzzle today as it was 20, 40 or 60 years ago". This echoes issues raised earlier which suggests that adolescence is a vexing phenomenon confronting the researcher. When viewed contextually social, economic, cultural, political, biological and physiological factors impinge upon this period (Coleman, 1993 and Rice, 1996) and thereby confound the researchers' investigative process.

Adolescents are confronted with many adverse situations during the transition between childhood and adulthood. In contemporary society these aspects include: dysfunctional family structure and

composition; sexual harassment; HIV/AIDS; violence and crime; drugs; and the possibility of living in a nuclear age (Caldicott, 1996 and MacKay, 1993). Further to this, Coleman (1993:268) suggests:

(Y)oung people are growing up in a world of uncertainty, where values are unclear, where cultures are on the move, where the nature of the family is altering. Such circumstances inevitably affect adolescent transition to adulthood.

The popular conception of adolescence is that it can be tumultuous, excessive, frivolous, passionate and turbulent (Heaven, 1994 and Rice, 1996). The hurdles encountered during this period have the potential to thwart adolescent development and truncate their potential and as Pipher (1995:26) explains it is "an extraordinary time when individual, developmental and cultural factors combine in a way to shape adulthood. It is a time of marked internal development and massive cultural indoctrination".

During this period the individual "must develop a sense of identity and discover just *who* he or she is" (Heaven, 1994:27). This is exacerbated by the fact that physiologically their bodies are undergoing immense change and psychologically, they are confronted with the responsibilities of adult life. Furthermore, Heaven (1994:29) postulates that:

It is not surprising, suggests Erikson, that teenagers, living in 'no-man's-land' become preoccupied with their own subculture and initial identity formation. In this regard, the influence of the peer group assumes a growing importance.

To this end, some of the adolescent community is an electronic sub-group who worship television, rock music, videos, movies and computers (Pipher, 1994 and Rice, 1996). They can be self-absorbed and hedonistic. For the most part, adolescents yearn for instant gratification at the expense of delayed gratification. Notably, they have trouble comprehending and accepting the notion that what may be painful in the short term, can ultimately be rewarding in the long term (Pipher, 1995). In short, adolescents have difficulties denying themselves the many instantaneous

pleasures which bombard their lifestyle. The old chestnut "that which does not kill us makes us stronger" is a concept that adolescents find perplexing to comprehend.

Ironically, several researchers (for instance, Coleman, 1993 and Heaven, 1994) maintain that the 'storm and stress' associated with adolescence may be somewhat of a misnomer. Heaven (1994:3) contends that "there is little support for the idea that parents and adolescents suffer from the much heralded 'generation gap' or that adolescent development is 'stormy'". Notwithstanding this, Davis-Berman and Berman (1994a) imply that adolescents must disengage from their parents and family in order to prepare for adult relationships. Inner conflict during this phase is inevitable, and as Blos cited by Davis-Berman and Berman (1994a:4) advocates:

....the resolution of underlying conflicts.... (it) comes through the taming and redirection of unacceptable primitive urges by identifying the role models of the same gender, and an emulation of their behaviour.....Adolescent turbulence can therefore be either a sign of normal or abnormal development.

2.2.1.1 THE STABILITY OF ADOLESCENT SELF-CONCEPT

Much research has been conducted on self-concept during childhood and adolescence (for instance, Harter, 1990; Marsh, 1990; Piers, 1984 and Piers and Harris, 1969). The stability of adolescent self-concept through the teenage years has been supported by several empirical studies (Heaven, 1994). For example, a study in the United States (Savin-Williams and Demo, 1984) reported that self-concept remained relatively stable throughout the testing period.

Others (for instance O'Malley and Bachman, 1983) have identified that self-concept between the ages of 13-23 years gradually rises. Harter (1990) concurs with these findings and argues that with increasing age, autonomy concurrently rises. She also suggests that personal happiness and life satisfaction are closely aligned with an adolescents' self-concept.

In general, the results are far from definitive or conclusive. As noted thus far, a stable, or slightly positive trend has been shown in adolescent self-concept scores. But what about sex differences? The related literature in this area is even more perplexing. In one study Maccoby and Jacklin (1974) found that females underestimated their chance of success at a task more so than their male counterparts, whereas according to Heaven (1994:43) research on adolescent populations exhibit that "only a small number of studies showed that males have higher general self-concept than females. In fact, many of the studies reviewed found no significant sex differences at all".

However, one must be mindful of the fact that general self-concept is a multi-dimensional phenomenon and contains constructs associated with 1) academic, 2) social, 3) emotional and 4) physical assessment (Shavelson, Hubner and Stanton, 1976). These can be further broken down into sub-components which are shown in Figure 2.1. When viewed as a multi-dimensional phenomenon, males have significantly higher self-concepts in physical ability and mathematics, while females have higher self-concepts in reading (Marsh, Relich and Smith, 1983 cited by Heaven, 1994).

FIGURE 2.1: THE MULTI-DIMENSIONAL NATURE OF SELF-CONCEPT

Academic self-concept:	English, Mathematics, History and Science	Adapted from Heaven (1994)
Social self-concept:	Peers and significant others	
Emotional self-concept:	Particular emotional states	
Physical self-concept:	Physical ability and physical appearance	

2.2.1.2 ADOLESCENT IDENTITY FORMATION

This section will firstly examine the general issues associated with adolescent identity formation. Secondly, it will then proceed to look at the specific factors which impinge on this period: 1) the

role of peer groups and friendships; 2) the influence of parents and family; and 3) the impact of schools and teachers.

General issues associated adolescent identity formation

Whilst progressing from childhood into adolescence, it is imperative that the individual develops an awareness and acceptance of self. In short, the adolescent must discover who s/he is and develop an identity. Identity is multi-faceted and as Rice (1996:36) advocates "physical, sexual, social, vocational, moral, ideological and psychological characteristics make up the total self".

To this end, Heaven (1994:27) argues that "fundamental to identity formation is the merging of one's past with future aspirations, while at the same time recognising one's present talents, limitations and characteristics". Erickson (1968) is also a strong advocate of identity formation and development. His theories take into consideration social drives and the affect of social experiences upon adolescent identity formation. These ideas are corroborated upon by Heaven (1994:28) when he states "Erickson's proposals emphasise the importance of the social context and social forces in the life of an individual". His theory is based on the premise that there are eight stages throughout the lifespan (Heaven, 1994). Each stage is classified by polarized items which are referred to as a "social crisis" and are depicted in Figure 2.2.

FIGURE 2.2: ERICKSON'S EIGHT STAGES ACROSS THE LIFESPAN

1	• Trust vs mistrust	Birth to 1 year
2	• Autonomy vs shame and doubt	1 to 3 years
3	• Initiative vs guilt	3 to 5 years
4	• Industry vs inferiority	5 to 12 years
5	• Identity vs identity confusion	adolescence
6	• Intimacy vs isolation	young adulthood
7	• Generativity vs stagnation	middle adulthood
8	• Integrity vs despair	late adulthood to death

Adapted from Heaven (1994:28)

In simple terms, Erickson cited by Heaven (1994) is of the opinion that many crises confront the individual throughout life. At each crisis, he/she is faced with many options and choices, the outcome of which has consequences for future behaviours. In other words, healthy adult functioning is dependent upon how well earlier developmental periods have been resolved. In essence, Erickson contends that successful conflict resolution in each stage allows the person to move harmoniously into the next developmental stage. It is significant to note, that not all adolescents will accomplish complete identity achievement. Furthermore, progressive identity formation becomes apparent as the adolescent moves through their teenage years (Heaven, 1994).

The adolescent is faced with the dilemma of how to integrate "biological and cognitive change, own free choice, and the pressures of parents and peers" (Heaven, 1994:29). Partaking in new, and sometimes risky behaviour is a constant lure for adolescents. Testing boundaries regarding what is acceptable and unacceptable is also commonplace. In their quest for meaning, "it is important that adolescents avoid *identity confusion*. Unless they successfully resolve their identity and move beyond their childhood identifications, then the adolescent process will remain incomplete" (Heaven, 1994:30).

The next section will explore in detail three aspects which have a profound impact upon adolescence viz: a) peer groups and friendship; b) parents and family; and c) the role of the school and teachers in adolescent development.

a. Peer Groups and Friendships

The fact that individuals are influenced by peer groups and friendships during adolescence is unequivocal (Hayes, 1985; Heaven, 1994; Parker and Asher, 1983 and Rice, 1996). During this period, an adolescent seeks emotional support from those outside the family, particularly his or her

peer group (Coleman, 1993). The peer group is an important developmental component of adolescence and the successful completion of this stage will have far reaching implications for tasks relating to friends and the broader community (Heaven, 1994).

Peers are an "important source of emotional support and affiliation, and are therefore crucial to the adolescent striving for identity achievement" (Heaven, 1994: pg x). Peer interaction fosters social competence (Parker and Asher, 1983) and assists the adolescent in making the transition to the wider world (Dunphy, 1963). This issue is reinforced by Heaven (1994:95) when he suggests that the "peer group becomes increasingly important as a vehicle of social comparison.....assisting the teenager to become emotionally autonomous of the family and thus gradually asserting his or her own independence".

Friendships during adolescence are formed on the basis of interpersonal relations, physical attributes and achievement (Heaven, 1994:75). Hartup (1989) suggests that close friendships exhibit qualities such as reciprocity, commitment and involvement. As friendships provide stimulation, companionship and a sense of belonging, they are innately satisfying (Hayes, 1985). Moreover, Richey and Richey (1980) contend that close friends during adolescence are confidants and allies. Adolescent attitudes, values and behaviours are closely connected to those held by the peer group in which the individual belongs (Kandel cited by Heaven, 1994). Quite clearly, adolescent friendships play a vital role in shaping and modifying each other's behaviour.

There are notable sex differences in friendships. Boys friendships are based on the sharing of common activities, for instance, football, camping or skateboarding. Richey and Richey (1980) indicate that boys simply enjoy having fun together and tend to be less intimate and more guarded than their female counterparts. Males tend to be poor communicators and lack conflict resolution skills (Bowen, 1996). Furthermore, they usually de-emphasise affection and have difficulty expressing emotions (Heaven, 1994). Conversely, girls form friendships on the basis of verbal

communication about themselves and are more likely to self-disclose in a mutually intimate and understanding friendship (Heaven, 1994). It is significant to note that both males and females have different ways of expressing their friendship, although friendship bonds are perceived to be equally as strong for both sexes (Hayes, 1985).

b. Parents and Family

The family's influence on the adolescent is well documented (for example Coleman, 1993; Heaven, 1994; MacKay, 1993; Poole and Goodnow, 1990 and Rice, 1996). Several factors have been identified as significant factors in adolescent development. These include: family conflict; separation or divorce; family pathology; communication and relationships; and parenting styles (Heaven, 1994).

Coleman (1993:264) states that "individuals and their families reciprocally influence each other". As such, the child and family must be viewed as a "system" which inevitably impacts on each other. This system is not static but rather, dynamic. Changes in an adolescent's maturation has a bearing on the family. At the same time, changes in the structure and function of the family effects the adolescents' development (Coleman, 1993; Heaven, 1994 and Rice, 1996).

Within the Australian context, there have been marked variations in the family setting over the last 20 years (MacKay, 1993). According to Poole and Goodnow (1990:13) research suggests a decline "in the number of nuclear families characterised by one breadwinner, and a rise in the number of divorced and single parent families and of mothers in full- or part-time paid work".

Several studies have explored the impact of family dynamics and functioning upon adolescent identity status (for instance Campbell, Adams and Dobson 1984; Papini, Sebby and Clark, 1989 and Waterman, 1982). For the most part, the impact of family factors on adolescent development

is inconclusive. There is general agreement however, that the quality of relationships among family members, rather than the characteristics of the family (divorced, intact, blended and so on) remains the most critical feature to affect adolescent development and identity (Heaven, 1994; Poole and Goodnow, 1990 and Rice, 1996).

The impact of divorce or separation upon adolescents is equivocal. While some studies show it has an adverse effect (for instance, Fine, Moreland and Schwebel, 1983 and Westman, 1983) it is significant to note that a meta-analysis of the related literature suggested otherwise (Amato and Keith, 1991). Moreover, an adolescent according to Heaven (1994:71) prefers "a happy new family to an unhappy intact one". Demo (1992) also reiterates on the quality of family life as the single and most critical ingredient in adolescent development. Notwithstanding this, divorce and separation is a complex and convoluted event and it is difficult to disentangle all of the possible causes from the many effects (Heaven, 1994).

During adolescence, a greater distance between parent and teenager is in most instances, inevitable. Another recognisable feature is "at an overt level, much of what the parent stands for may be challenged, even at times rejected" (Coleman, 1993:255). Quite clearly, a review of the literature indicates that "parents of adolescents report this stage to be the most problematic and anxiety-provoking of all the stages of parent-hood" (Coleman, 1993:256).

Parents are often replaced by a "significant other" and as Coleman (1993:255) attests "relationships are formed with girlfriend or boyfriend, inevitably altering the parents' role and diminishing the centrality of the mother and father in the relationship network".

c. The Role of the School and Teachers in Adolescent Development

Evidence indicates that schools play a significant role in adolescent development (for instance Batten and Girling-Butcher, 1981; Bernard, 1991 and Carpenter and Western, 1986). According to Poole and Goodnow (1990:14) "school is a context common to all Australian children. It is however, a context that varies widely, both in the length of time spent within it and its type". Whether the school be: 1) co-educational or single sex; 2) large or small; or 3) same ethnic background or a melting pot of nationalities, its fundamental role in developing and nurturing functional characteristics in an adolescent cannot be underestimated.

Trends suggest that increasing numbers of adolescents are staying on at school as western society demands a well-educated workforce (Heaven, 1994). High retention rates in schools are also a by-product of limited job opportunities and increasing technological sophistication (Rice, 1996). Poole and Goodnow (1990) indicate that non-government, non-Catholic schools have the highest retention rates in Australia. Similarly, "the same schools are likely to display higher levels of academic achievement. The question at issue is how these effects come about" (Poole and Goodnow, 1990:14).

The majority of Australians view education as a "vocational ticket" which allows an individual to obtain better jobs and socio-economic standing (Heaven, 1994). This issue is supported by Poole and Goodnow (1990:14) when they state that "school was seen as an investment rather than an intrinsically worthwhile experience".

The following section investigates eight sub-components of schooling which have direct implications for this study, namely: i) students' attitudes and achievements in school, ii) appropriateness of curriculum, iii) quality of teaching, iv) characteristics of a good teacher, v)

student responsibility vi) gender and schooling, vii) boarding school, and viii) private school versus public school.

i. Students' attitudes and achievements in school

Indeed, it would appear that many students have a positive view about school - but this attitude is seldom related to academic achievement. Rice (1996:379) indicates that studies show "students like school because it is a place to meet friends, to participate in activities, and to enjoy the companionship of others their own age".

However, some of the harshest critics of the school system are students (Rice, 1996). Many students hold negative attitudes towards school and the curriculum although they recognise that completing high school will suitably enhance their career aspirations (Heaven, 1994).

ii. Appropriateness of curriculum

Some adolescents are critical of their schools' curriculum and label it as inappropriate and irrelevant (Gray and Perusco, 1993; Horwood, 1987 and Mortlock, 1987). Furthermore, Heaven (1994:99) reports that:

Australian schools are not viewed as particularly inviting or supportive, and are seen to be organised along authoritarian lines, with an emphasis on discipline. Many adolescents find schools alienating and impersonal.

Education need not be preoccupied with overwhelming students with a vast accumulation of knowledge, but as Rice (1996:159) posits "it needs to ensure that it does not dull their eagerness by overly rigid curricula that disrupt the child's own rhythm and pace of learning". The challenges confronting contemporary education are many and varied, however Heaven (1994:100) articulates that:

As we approach the next century, schools face the challenge of producing well-educated individuals who will be able to meet the social, intellectual, and technological challenges of our times. Schools need to adapt their ethos, subject choice and organisational structure accordingly.

Quite clearly, the ability of our educational system to equip and assist adolescents in making these functional adjustments, is highly questionable (Davis-Berman and Berman, 1994a). The school can and should act as a protective shield to enable students to withstand "the multiple vicissitudes that they can expect of a stressful world" (Bernard, 1991:9). In addition, Bernard (1991:13) postulates that:

In schools with low levels of problems like delinquency, students were given a lot of responsibility..... the operating dynamic reflects the fundamental need to bond - to participate, to belong, to have some control over one's life.

Many educators, for example Moore (1992), Peck (1987) and Seligman, (1975) echo these sentiments. Bernard (1991) suggests that lower rates of problems were evident in schools which were rich in social networks (both peer groups and intergenerational relationships).

iii. Quality of Teaching

The importance of teachers in the lives of adolescents cannot be underestimated (Rice, 1996). Australian research has indicated that students' perceptions of their teacher plays an integral role in their development (Heaven, 1991). Furthermore, Batten and Girling-Butcher (1981:55) argue that "the influence of teachers on student attitudes to school was powerful and pervasive, not only in the area of learning acquisition but also in the area of social development". These findings are in accord with the strong evidence found by Galbo (1989) in the related literature. In essence, he found that teachers are important role models who can significantly impact upon the adolescents' identity, aspirations and self-concept.

Pupils are particularly concerned with teacher-student relationships. To this end, Poole and Goodnow (1990:14) are of the opinion that teacher-student relationships "played an important role in equipping youth with a sense of personal efficacy, and a self-concept vital for the smooth transition to adulthood".

The relationship between teacher expectations and student performance has brought to the surface some interesting results. Rice (1996:378) cogently argues that "consistent with the self-fulfilling prophecy hypothesis, teachers' expectations predicted changes in student achievement". These results were also mirrored by Jussin and Eccles (1992) who found a strong correlation between teacher expectations and achievement results.

There are marked differences in the way male and female students perceive their teacher and school. This is conveyed by Heaven (1994:99) when he claims:

boys were found to be less optimistic and to have slightly higher negative expectations about school than girls. Boys, for instance, were more likely than girls to lower their expectations about school in order to avoid disappointment. Boys were also more likely to expect teachers to dislike them.

A study by Carpenter and Western (1986) revealed that student's perceptions of teachers' effectiveness, teachers' fairness and interest in students, along with school climate influenced the achievement levels of students. Another study recently conducted in the United States by Bear and Stewart (cited by Rice, 1996:377) on quality of teaching found that:

over one-half of the students said that the teachers failed to make the subject matter interesting, 22 percent of students said teachers did not challenge students with work hard enough, and 11 percent complained of lack of classroom discipline. Many students felt that teachers' salaries were too low to attract the best teachers.

iv. Characteristics of a good teacher

According to Rice (1996) there is sufficient evidence to suggest that three qualities are vitally needed to be an effective secondary teacher. These include: a) personality traits and character; b) teachers' relationship with others; and c) professionalism.

a) Personality traits and character

Teaching is an exhausting and stressful profession which often demands unlimited reservoirs of physical, emotional and mental energy. Further to this, Rice (1996:380) maintains that "lethargic, apathetic, bored people in poor health can neither inspire students nor meet the vigorous demands of the profession". This is especially true in an ESOESP. These schools, by their very nature are extremely demanding of teachers. For instance, being on call 24 hours a day, assuming the role of *in locus parentis* and running or hiking with students all compound the taxing nature of the profession.

Emotional maturity and open mindedness allows the teacher to accept various points of view. Furthermore, Rice (1996) posits that teachers with a genuine concern for their students welfare are able to nurture a close rapport with students.

b) Teachers' relationship with others

Teachers need to like adolescents and treat them with the admiration and respect they deserve (Rice, 1996). The characteristics include concern, tolerance, friendliness and respect evident in their relationships. The most effective teachers exhibited "real understanding of youths, the developmental tasks of adolescence, and the particular problems, adjustments and interests of young people" (Rice, 1996:380).

Teachers who are too authoritarian or dictatorial, stifle social interchange and hence, impede the problem-solving abilities of their students (Rice, 1996). Group discussion and interpersonal relationships need to be fostered within the classroom setting to enhance the formal thinking and reasoning of students.

c) Professionalism

Keeping current in their ideas and attitudes along with remaining abreast of instructional knowledge and skills are important qualities of good teachers. Being well prepared and using a variety of teaching techniques are also mentioned as admirable qualities. This is reinforced by Rice (1996:381) when he posits that "students are highly critical of teachers who are 'never prepared', are 'lazy', 'aren't interested in teaching', who 'don't care if we learn', or who 'use films as substitutes for a good lesson'".

v. Student responsibility

Teachers often complain about the problem and difficulty of getting students to be responsible for their learning and behaviours (Rice, 1996). But as Rice astutely comments, there is a big difference between being responsible and being held responsible.

Research on adolescents indicates that "their feelings of satisfaction depend partly on having some control over their lives, being able to have choices and taking responsibility for their own behaviour" (Rice, 1996:50).

vi. Gender and schooling

The gender composition of schools has been exposed to the researchers' microscope for decades. For the most part, Australian schools have produced differential gender outcomes (Poole and Goodnow, 1990). These range from lower levels of achievement by girls (Blackburn, 1984) to sex-stereotyped elective subject choice within schools (Australian Schools Commission, 1975). Furthermore, Eckersley cited by Cadzow (1996:32) is of the view that "girls are succeeding and boys are failing, and the girls are academically out-performing the boys and have become more self assured and assertive, while boys are confused and apathetic".

The question whether single-sex or co-educational schools optimize the students' potential has also been subject to educational debate, however, Poole and Goodnow (1990:15) conclude "the results are far from unequivocal". For example, a study by Carpenter (cited by Poole and Goodnow, 1990) indicated that single-sex or co-educational schools were not related to girls' performance. Interestingly, performance was shown to be correlated to interpersonal and organisational aspects of the school. Alternatively, Jones (1990) and Marsh (1989) are strong advocates for single-sex schools and argue that girls' performance is enhanced in such a setting.

Poole and Goodnow (1990) reported on a five-year longitudinal study undertaken on two Sydney schools. The results indicated that self-concept for both males and females was favourably enhanced within the co-educational setting. Furthermore, the study revealed that "girls performed better than boys in English and marginally poorer in mathematics. The conclusion was that the social benefits of co-education were not at the expense of academic progress" (Poole and Goodnow, 1990:15).

Marsh (1989) has suggested that stereotypes can be influenced by the type of school an adolescent attends. The maintenance of traditional stereotypes and accentuated sex differences

were more apparent in co-educational schools (Heaven, 1994). Furthermore, the sex differences in private schools were less prevalent.

vii. Boarding school

Adolescents who attend boarding schools and are exposed to dormitory living, "are much more likely to progress through the stages of friendships at a quicker pace" (Heaven, 1994:75). As friendships become more meaningful individuals are more likely to disclose personal problems and bond on an emotional and empathetic level.

viii. Private School versus Public School

Recent research in Australia by Jones (1990) indicates that academic performance of private school students is superior to that of their public counterpart. In the same vein, Rice (1996:385) indicates that in the United States "it is obvious for those families that can afford private education that they are more likely to get superior education for their adolescents than if they sent them to the average public school". This view is challenged by Graetz (1990) who argues that within the Australian context, the long-term benefits of private schooling diminish after the final year of secondary school. Academic performance at the tertiary level is not related to attendance at private or public school.

2.2.1.3 RESILIENCY IN ADOLESCENTS

From a developmental perspective, adolescents will face aspects of change in all facets of their lives. Feldman and Elliot cited by Coleman (1993:266) argue that an adolescent's "ability to cope with those changes depends not only on intrinsic strength and external support but also on the timing on the stresses". Moreover, Erickson (1968) speculates that the stress, turmoil and chaos

found in adolescence is a universal phenomenon. The literature suggests that individuals who find the transition from childhood to adulthood relatively easy, tend to exhibit the profile of a resilient child. The resilient child is defined as "one who works well, plays well, loves well and expects well" (Bernard, 1991:3). The consistent attributes of a resilient child are summarised in Figure 2.3. Interestingly, the personality of a resilient child exhibits many close similarities to those characteristics articulated in the outdoor education literature (outlined in Figure 1.5).

FIGURE 2.3: THE PERSONALITY OF A RESILIENT CHILD

- Social Competence:** The ability to be responsive, flexible, empathic, caring, communicative, in concert with a sense of humour and other prosocial behaviours.
- Problem-Solving Skills:** The capacity to think abstractly, reflectively and flexibly and to be able to attempt alternative solutions for both cognitive and social problems.
- Autonomy:** A sense of one's own identity and an ability to act independently and exert some control over one's environment.
- Sense of Purpose and Future:** This includes healthy expectancies, success orientation, a sense of coherence, hopefulness, hardiness and educational aspirations.

Adapted from Bernard, 1991 pp 3-6.

2.2.1.4 RISK TAKING PROPENSITY IN ADOLESCENCE

Adolescents are by nature risk takers (Kenny and Job, 1995). This in part, can be attributed to their own sense of impunity and immortality and as Lipsett and Mitnick (1991) cited by (Pearson, 1993) contend, adolescents purposely and intentionally seek out risks in an effort to:

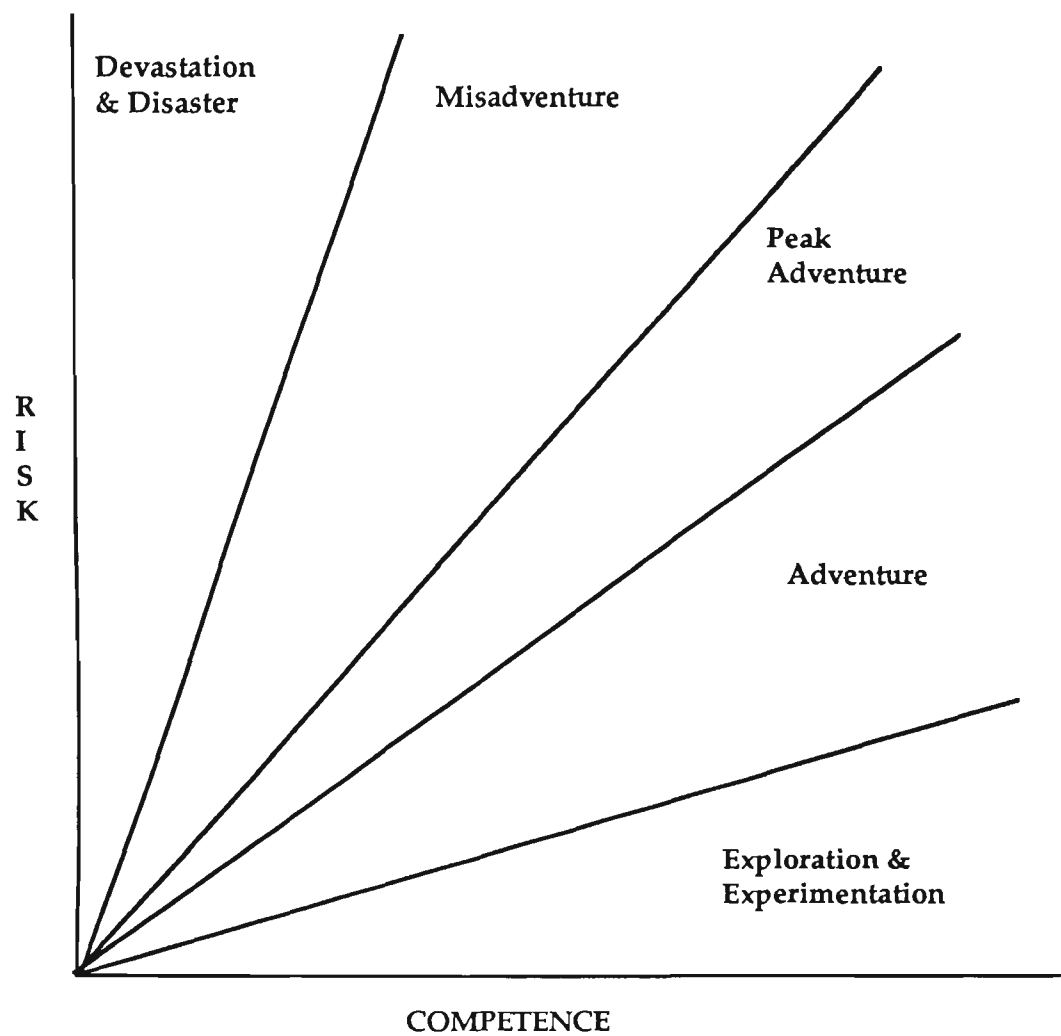
- take control of their lives;
- express rebellion and opposition to adult authority and conventional society;
- deal with their inadequacies, failures, frustrations and anxieties;
- gain membership to peer groups and identification with sub-cultures;
- re-affirm their personal identity; and
- attest to their new found maturity and mark their developmental transition into adulthood.

Risk taking is commonplace within an outdoor education setting (Ewert, 1989). Risk can be real or perceived based on the participants' personal interpretation. Ewert also argues that risk could be physical or social. The former is attributed to physical hardship such as cold temperatures, falling from a rock face, kayaking in white water or hiking in steep terrain. Whereas the latter may include "conflict within the group, appearing inept, or being perceived as a burden to the group" (Ewert, 1989:61).

According to Atkinson (cited by Priest, 1995) people take risks primarily for two reasons: 1) to achieve success; or 2) to avoid failure. Furthermore, these two behaviours are mutually exclusive. Priest (1995) suggests that the people in the first category select risks which are concomitant to their competence and skill level in an attempt to create the optimum challenge and yet still succeed. The second group have two options at their disposal. Firstly, they may choose risks which are very low and thereby reduce the likelihood of failure. Or secondly, they may choose risks which are extremely high and when failure transpires, they have plenty of excuses for the impending outcome.

Martin and Priest (1986) examined the interplay of risk and competence and developed the Adventure Experience Paradigm as a result. This is depicted in Figure 2.4. They propose that risk can be physical, social, emotional, psychological, intellectual or financial, whereas competence takes into consideration knowledge, attitude, behaviour, confidence, experience and skill. The reciprocity and interaction of risk and competence creates challenge.

FIGURE 2.4: THE ADVENTURE EXPERIENCE PARADIGM

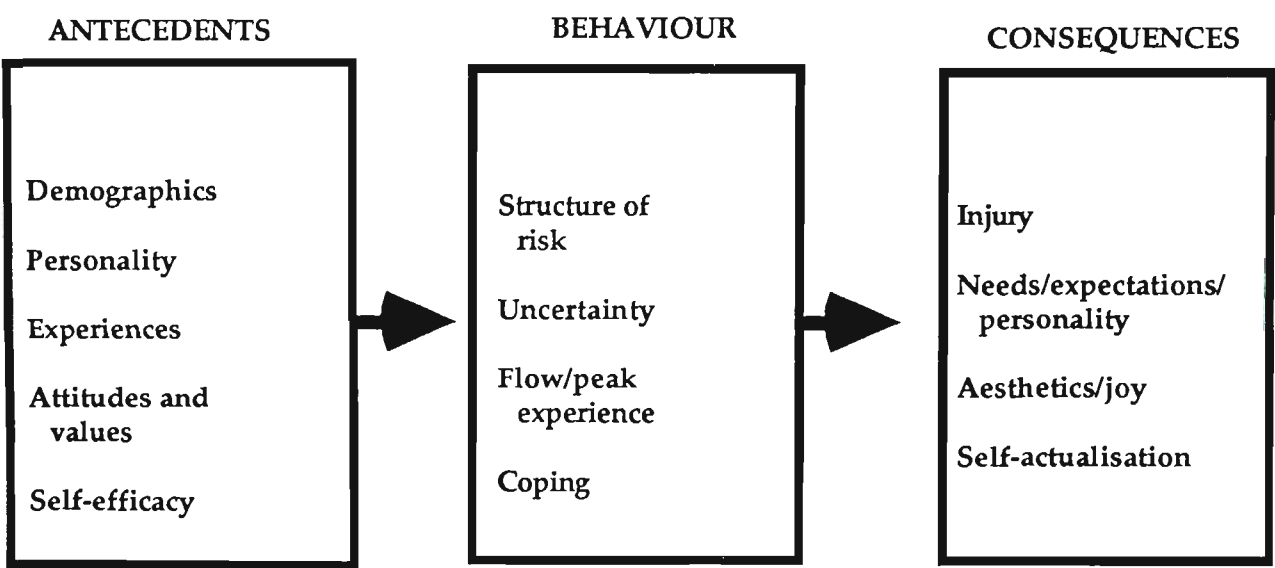


Adapted from Priest (1995)

Allen (cited by Ewert, 1989) provides a conceptual framework for risk taking in the outdoors. This is displayed in Figure 2.5. The antecedents (predispositions), behaviour and consequences are closely aligned. As far as the related literature is concerned, Ewert (1989:62) indicated that:

the outdoor risk taker is usually relatively young, middle class, and male (Klauser, 1968). With respect to personality, Allen (1980a) reports that the research findings are relatively consistent with risk seekers scoring consistently higher than non-risk seekers in the areas of confidence (Cober, 1972), need for achievement (Huberman, 1968; O'Connor, 1971), sensation seeking (Zuckerman, 1979) and risk-taking propensity (Allen, 1980b).

FIGURE 2.5: ALLEN’S MODEL FOR RISK-TAKING IN OUTDOOR ADVENTURE



Adapted from Ewert (1989:62)

Fear is the human response to risk (Priest, 1995). Golins (cited by Ewert, 1989:70) articulates that "using fear and stress in an outdoor program will enhance decision making, discipline and personal awareness". Underlying this assumption is the fact that coping with fear in the outdoors promotes qualities and strengths that can be transferred back into real life. As such, the individual should be better equipped to handle future fearful experiences (Ewert, 1989). In short, the outdoor experience has become a metaphor for life (Bacon, 1983).

2.2.2 GENDER ISSUES

As gender is an independent variable in this study, it is imperative to understand the complex nature of gender identity. Once this has been established, an exploration of the impact of outdoor education upon gender roles will be explored.

2.2.2.1 THE DEVELOPMENT OF GENDER IDENTITY

For the most part, we live in a patriarchal culture where the political and economic power is held by males (Pipher, 1995). For this reason, issues associated with gender relations begin at birth and pervade the lifespan from that point forward. Jordan (1992:62) concurs with this notion when she articulates that:

People develop a gender identity and understanding of gender roles (knowing that they are female or male, and the associated gender-appropriate behaviours) as early as five or six years of age.....female children tend to be socialized to be dependent upon others and emotionally expressive, thus beginning the development of competence in the area of human relations. On the other hand, males tend to be socialized for independence and an orientation towards task, thus encouraging skill development of task and conceptual functions.

In the gender schema, boys learn that active behaviours are the ones that will lead to success. They are given more attention for their actions in school and are encouraged to a greater extent than their female counterparts (Pipher, 1995). The messages delivered through these type of actions clearly suggest that boys are more important and capable than girls, (Basow cited by Jordan, 1992). Similarly, in academic settings, Pipher (1995:62) maintains that:

.....boys tend to be portrayed as clever, brave, creative and resourceful, while girls are depicted as kind, dependent and docile.....(boys) are called on more often than girls and are asked more abstract, open-ended and complex questions. Boys are more likely to be praised for academic and intellectual work, while girls are more likely to be praised for their clothing, behaving properly and obeying rules. Boys are likely to be criticised for their behavior, while girls are criticised for their intellectual inadequacy.

These and similar messages have far reaching repercussions on self-concept and locus of control and as Gilligan (1993) espouses girls begin to believe that they are not capable of thinking analytically, being physically skilled or making decisions. They also learn to focus on people, to become skilled in interpersonal abilities and to care and nurture others. In addition, Jordan (1992:63) suggests that "females have been socialized to play quiet, supportive roles where they help others to achieve their task goals. They have been socialized to be expressive emotionally and to care for others". Within the same train of thought, Pipher (1995:63) espouses that as children progress through school:

...boys do better and feel better about themselves and girls' self-esteem, opinions of their sex and scores on standardized achievement tests all decline. Girls are more likely than boys to say they are not smart enough for their dream careers. They emerge from adolescence with a diminished sense of their worth as individuals.

Mention should be made at this juncture however, that Australian trends are currently undergoing a change. There is a noticeable shift in academic performance and career aspirations for females. Girls are consistently out-performing boys in academic attainment scores which in part has been attributed to the successful gender equity campaign in the early 1990's (Cadzow, 1996). Likewise, girls are beginning to pursue their "dream careers".

Notwithstanding this, Pipher is of the opinion that the message is clear, girls' forte lie in relationship-based cooperative learning environments and they begin to fade academically when the structure of schools are impersonal and physically large. According to Pipher, (1995:64) females are better suited to "relationship-based cooperative learning situations" and have culturally prescribed roles and responsibilities. Lerner (1989:2) states that women are "the nurturers, the soothers, the peacemakers and the steadiers of the rocked boats". Preserving the status quo is of utmost importance in a relationship. For the most part, they appease and placate the world and thus, can be viewed as 'emotional service stations' to others. Avoiding overt conflict is an

overriding concern for females. Smooth interpersonal relationships are held sacred and in many respects, form part of their life-line. According to Lerner (1989:6) females behave in such a way that their:

....primary energy is directed towards protecting another person and preserving the harmony of our relationships at the expense of defining a clear self. Over time we may lose our clarity of self, because we are putting so much effort into 'reading' other people's reactions and ensuring that we don't rock the boat, we may become less of an expert about our thoughts, feelings and wants.

Mitten, Henderson, Warren, Bialeschki, Yerkes and Hampton (1997) also reaffirm this view when they state that females are primarily preoccupied with "relationships" whilst males seem to be engrossed in issues such as career, sport and sex. This notion is illustrated in Figure 2.6 below.

Please see print copy for image



FIGURE 2.6: THOUGHT FREQUENCY AS PIE CHARTS

Handout from Mitten, Henderson, Warren, Bialeschki, Yerkes and Hampton (1997)

Further to this, Lerner (1989) also believes that in order for females to foster a harmonious relationship with others, they may betray or sacrifice the self. This is a phenomenon which she labels as "de-selfing". First and foremost, females will strive to maintain peace and ensure that things remain on an even keel. Lerner (1989:197) elaborates upon this issue when she states that "women have a long legacy for assuming responsibility for other people's feelings and for caring for others at the expense of the self".

2.2.2.2 GENDER AND ADOLESCENCE

Generally, adolescence is analogous to a rollercoaster ride (Rice, 1996). Some researchers would suggest that girls in particular, appear to find the transition more tumultuous than boys. Pipher (1995:11) defines the female adolescent as:

... sometimes they were happy and interested in their world; other times they just seemed wrecked. They were hard on their families and on each other.....many confident well-adjusted girls were transformed into sad and angry failures.

The culture into which adolescents are imbued also has a profound impact on them (Heaven, 1994). Magnifying this problem is the fact that some aspects of Australian society are dysfunctional (Legge, 1993 and MacKay, 1993). Contemporary western society can have a deleterious and negative affect upon adolescents. This is poignantly displayed by Pipher (1995:12) when she writes about the American context:

As I looked at the culture that girls enter I was struck by what a girl-poisoning culture it was. The more I looked around, the more I listened to today's music, watched television and movies and looked at sexist advertising, the more convinced I became(culture) today limits girls' development, truncates their wholeness and leaves many of them traumatized.

Adolescence appears to have the most profound impact upon females. According to Pipher (1995:18) some girls:

.....crash and burn in a social and developmental Bermuda Triangle. In early adolescence, studies show that girls' IQ scores drop and their math and science scores plummet. They lose their resiliency and optimism and become less curious and inclined to take risks. They lose their assertive, energetic and "tomboyish" personalities and become more deferential, self-critical and depressed. They report great unhappiness with their own bodies.

Clearly, this is not the case for all girls. However, this begs the question why do some individuals breeze through adolescence, whilst others experience scarifying effects? This perplexing question is also voiced by Coleman (1993:254) when he states:

What is it that differentiates those young people who adjust to adolescent transition from those who do not?What are the skills and capabilities necessary for young people to assist them in the adolescent adjustment process?

Some studies indicate that androgynous individuals seem to handle adversity more appropriately. According to Pipher (1995:18) "research has shown, that since they are free to act without worrying if their behavior is masculine or feminine, androgynous adults are the most well adjusted". Perhaps an educational goal should be the production of androgynous individuals? This has ramifications for outdoor education programs and a more detailed account of gender issues follows in the next section.

Recent research published in the United Kingdom has produced some interesting findings. A year-long study reported by Cadzow (1996:35) suggests that boys in the United Kingdom are becoming more like the girls, and vice versa. This is elaborated in:

....younger men are becoming much more attached to what might be seen as soft and caring, feminine values.....this includes changed attitudes to parenting, where the younger men want more involvement, to more interest in caring-type jobs, intimacy, emotional honesty and so on. On the other hand we are seeing a masculinisation of young women, where they're becoming more attached to the sort of values that have traditionally been seen as masculine values. Things like risk-taking, success and hedonism.

The findings of this British study clearly indicate that young adults in the United Kingdom are becoming more androgynous. If this is the case, it could be that there is a general move in modern culture. This convergence of masculine and feminine values is unique and has not surfaced in the related literature to date.

2.2.2.3 OUTDOOR EDUCATION AND GENDER ISSUES

As the related literature in the outdoor education arena gains momentum, differential gender outcomes are arguably the most ubiquitous individual difference being subjected to the researchers' microscope. Moreover, Neill (1997a) posits that in spite of this positive trend, critical reviews of the anecdotal and empirical literature are lacking. In the outdoor education and gender debate, two types of literature predominate viz: "warm fuzzies" and empirical data.

The first consists of intuitive statements and anecdotal evidence proffered by practitioners in the field. Historically, during the 1960's and 1970's the emerging literature tended to be dominated by male writers reporting findings based on program impact upon delinquent boys. The anecdotal literature emanating from the 1980's and 1990's has taken a different tangent. This point is echoed by Neill (1997a:183) when he advocates that "typically these works are authored by women and tend to focus on expressing and explaining females' experiences of the outdoors in mixed-sex and single-sex settings".

The second area of research literature in differential gender outcomes in outdoor education is based upon studies which incorporate qualitative and quantitative methodologies in their research design. In the main, these studies do not specifically examine the impact of gender in outdoor education. However, they include gender as an independent or dependent variable whilst examining the outcomes of outdoor education.

In the gender debate, it is significant to note that self-concepts and self-images of both boys and girls can be favourably enhanced through participation in outdoor education programs (Henderson, 1992; Humberstone and Lynch, 1991; Marsh and Richards, 1987 and Mitten, 1992). Longitudinal studies assessing the impact of outdoor education upon masculinity and femininity are rare however, Marsh and Richards (1987) examined the impact of participation in a 26-day Outward Bound program upon both males and females (n=264) on measures on masculinity and femininity. Marsh and Richards (1987:15) concluded that the intervention enhanced:

Self-perceptions of masculinity in young men and women (it) also seems to enhance femininity, though the size of this change is smaller and support for this contention is weaker. However, the results clearly indicate that participation in Outward Bound did not produce a decline in femininity.

Accordingly to other researchers, outdoor education unfortunately, has been traditionally stereotyped as a masculine playing field (Humberstone, 1986 & 1990). This aspect is illuminated by Bialeschki (1992:52) when she suggests that "historically, the wilderness has been portrayed as male domain with exploring and discovery seen as highly masculine adventure". In an ideal setting, outdoor education should be presented as a gender neutral phenomenon on a level playing field. Furthermore, Lirgg and Feltz (1989) posit that when females perceive that a task is gender neutral, they have the same expectations and self-confidence as their male counterparts.

Miranda and Yerkes, cited in Henderson (1992:50) theorize that "women are an emerging outdoor audience interested in freedom from gender-imposed roles". It is clearly evident that the vicissitudes of the outdoor education experience open up opportunities for women who struggle for male-female equality. Humberstone and Lynch (1991:28) purport that:

....observations of girls during Outdoor Education classes both in New Zealand and England, strongly indicate that some girls are immediately reluctant to participate in adventure activities, despite the apparent non-threatening nature of the activity....girls tend to perceive themselves as being unable to cope physically and emotionally with risky and/or arduous practical tasks. Girls' perceptions of

their inabilities may well be rooted in their own particular preconceived and media-influenced images of outdoor pursuits, but also their lack of experience and perhaps their uncertainty about new activities.

However, Neill, (1997a:185) advocates that there is "a noticeable gender bias in the volume of material available.....there is a strong and increasing trend for females to be featured in educational and research/evaluation literature more than males". Interestingly, there is a expanding body of research which supports the notion that females achieve greater gain scores (that is a change in pre and post-test scores due to intervention) on a wide range of measures than their male counterparts (for instance, McIntyre, 1987; Neill, 1997a; Nussbaumer, 1988 and Sveen, 1995). Neill (1997a:188-189) suggests that "this may surprise some people and appears to challenge the popular myth that outdoor education is largely conducted to suit males and does not address the needs of females". This begs the question 'why do females achieve better results?' Is it because they had lower initial scores? Is it due to the self-select bias? The explanations are extremely vexed indeed. In Figure 2.7 Neill attempts to summarise the research reporting outcomes for males and females.

Koepke (1973) cited by Neill (1997a:189) found that females participating in an Outward Bound course had:

.....higher ideal self-concepts than males, even though females' actual self-concepts were similar to males'. This may, in part, be due to a self-selection bias. In other words, it may be that only females with particularly high ideal self-concepts are motivated to participate in outdoor education programs.

Undoubtedly, females have decidedly different educational experiences than their male counterparts (Gilligan, 1993). Given this stance it can be seen that outdoor education programs offer one way to counter inequality. In many respects, outdoor education and feminist theory dovetail. This position is also assumed by Warren and Rheingold, (1993:30) when they reveal that "feminist education practice infused into experiential education has the potential to create a just society".

FIGURE 2.7. OUTDOOR EDUCATION RESEARCH REPORTING OUTCOMES FOR MALES AND FEMALES

(Adapted from Neill 1997a:188)

Studies reporting either no differences in change scores or an overall mixture of differences in change scores for males and females	Year	Outcome Measure
Bertolami (cited in Hattie, Marsh, Neill, & Richards, 1996)	1981	Self-Esteem
		Locus of Control
Ewert & Heywood	1991	Group Development
Hendy	1975	Personality
Koepke	1973	Self-Concept
		Anxiety
Marsh & Richards	1989	Sex-role attributes
Marsh, Richards, & Barnes	1987	Multidimensional Self-Concept
		Locus of Control
McDonald	1996	Self-Esteem
Mitchell & Mitchell	1989	Multidimensional Self-Concept
Morrison	1996	Social Co-operation
Owen	1990	Ropes Course Impact
Owens	1984	Personality
Raze	1990	Outdoor Attitude
Young & Ewert	1992	Fears
Studies reporting predominantly greater change scores for males		
McDonald	1996	Self-role attributes
Richards	1987	Physical Self-Concept
Van Gelder, Richards, & Neill	1993	Trait Anxiety
Studies reporting predominantly greater change scores for females		
Burrus-Bammel, & Bammel	1986	Environmental Knowledge
Fersch (cited in Richards, 1977)	1972	Multi-dimensional Self-Concept
Finkenberg, Shows, & DiNucci	1994	Multidimensional Self-Concept
Fraser, et al (cited in Hattie, Marsh, Neill, & Richards, 1996)	1991	Vigour
		Personal Relations
Galpin	1989	Self-Concept
		Hardiness
Henderson, & Bialeschki	1982	Self-Concept of Staff
McIntyre	1987	Multidimensional Self-Concept
Mitchell & Mitchell	1989	Locus of Control
Neill & Heubeck	1995	Mental Health
Neill & Richards	1996	Course Evaluation
Nussbaumer	1988	Physical Self-Concept
Richards	1996	Group Process Observation Scale
Simson (cited in Abbott, 1987 and McIntyre, 1990)	1981	Wilderness Attitudes
Sveen	1995	Self-Esteem

A study undertaken by Simpson (1991) explored the group dynamics in outdoor adventure. The findings suggest that there is a tendency for women to view their outdoor experiences as a "journey" rather than a "quest". Within this context, a woman's journey tends to be a process of inner experience that may focus on self-realization and aesthetics as opposed to the more product-oriented quest traditionally associated with men (Beale, 1988). Simpson also implies that women involved in outdoor activities described their connection with the wilderness for its beauty, the freedom it offered, the peacefulness and the solitude, and the feeling of the wilderness as a spiritual home.

Further, a study conducted by Lichtenstein (1985) showed that women who assume difficult, even impossible challenges in the outdoors, develop a spirit that is characterized by intense bonding, cooperation and support. Similarly, outdoor education is considered a catalyst for behaviour change. For instance, Mitten (1992:56-60) states that:

.....over the past 15 years I have heard directly from women and girls about life changes and positive experiences they have attributed to their participation in outdoor trips, particularly all-female trips. They have expressed personal benefits regarding empowerment and self esteem.....Interestingly, while sometimes women and girls articulate immediately that they enjoyed and benefit from these trips, it is in retrospect that they recognize and acknowledge the strengths and skills they gained.....In general women come on outdoor trips with strong expectations and leave with an increased passion for themselves, their families and their lives, particularly when they are attended to in a safe supportive environment.

Maintaining peace and harmony tends to be of paramount importance for females and as Lerner (1989) speculates, many women 'de-self' and assume responsibility for other people's feelings and happiness at the expense of the self. However, this can be counter-productive as it can engender or escalate feelings of hopelessness and powerlessness (Seligman, 1975).

Ultimately, females are sometimes viewed as vulnerable, weak and subservient (Lerner, 1989). Striking a balance between independence and interdependence (viz: in the terms of this study - the

subscales autonomy and social responsibility) is an interesting paradox. Ironically, these two qualities seem polarized at either end of a continuum, and yet, ESOESP's aspire towards nurturing these mutually exclusive traits.

To illustrate this point, ESOESP's on one hand aim to produce autonomous, self-contained and independent individuals; on the other, they seek a sense of intimacy, connectedness, belonging and interdependence. There does not appear to be a "right" formula for the amount of autonomy and social responsibility. However, Lerner (1989:16) astutely conveys that "many of our problems with anger occur when we choose between having a relationship and between having a self".

Participating in a co-educational outdoor education program for adolescents (such as in the Timbertop scenario) is an intriguing concept. A past master of Timbertop, Simon Leslie cited by Ricketson (1993:26) purports that:

The girls have had a humanising influence on the school. They are not interested in all the macho stuff, and most of them are more mature emotionally than the boys. They tend to pick up on the philosophy of Timbertop more readily and sometimes help the boys early on when they are struggling to adjust.

Furthermore, McKay, cited by McArthur and Priest (1993:21) hypothesised that in the case of Timbertop, "girls were more positive than boys toward social and personal dimensions of the experience, while boys were more positive than girls about the organisational, physical and environmental dimensions." From this perspective, it can be seen that the ESOESP can elicit positive outcomes for both sexes.

Friedrich and Priest (1992:11) are of the view that "an environment which allows children to portray behaviours ranging from independence and tenderness, assertiveness and passiveness, and masculine and feminine can help destroy the sex stereotype myths". Hence, the outdoor

education setting can be seen as a catalyst for the development of an androgynous personality.

This position is supported by Neill (1997a:190) when he explains that:

If the view that participation in outdoor education involves development of more masculine characteristics than feminine characteristics is combined with the evidence that outdoor education tends to achieve larger change scores for females, then an intriguing hypothesis can be offered.

Could it be that females stand to learn a lot through the challenge of a masculine type outdoor education experience? On the other hand, could it be that exposing males to masculine-style outdoor education may not challenge their ideas, behaviours, feelings to the same extent, and hence result in males reporting less growth?

If the hypothesis put forward here has some truth to it, then males may benefit from outdoor education experiences which challenge their sex-role orientations and facilitate the development of positive feminine characteristics. Achieving growth for males in their positive feminine characteristics through outdoor education is quite feasible.

2.3 OUTDOOR AND EXPERIENTIAL EDUCATION

Since the early 1970's the field of outdoor experiential education has gained momentum and now encapsulates a wide range of applications which are challenging, both mentally and physically (Cason and Gillis, 1994). Claims surrounding the salient characteristics resulting from involvement in outdoor and experiential education abound. For instance, Breitenstein and Ewert (1990) argue that it actively promotes and enhances skill development for life-long recreational activities. Others make claims for improvement in physical, social, emotional, and spiritual well-being (Abbott, 1989; Bunting, 1989; Davis-Berman and Berman, 1994a; Ewert, 1986 & 1989; Gray, 1995; Henderson, 1990 and McIntyre, 1987). While many researchers have attempted to enunciate the crucial components of effective outdoor and experiential education programming, in the majority of cases these attempts have lacked the necessary academic rigour or have been flawed. These issues are addressed in the final section of this chapter.

2.3.1 BENEFITS OF OUTDOOR AND EXPERIENTIAL EDUCATION

It was evident in the brief overview of the related literature in Chapter 1, that there were strong arguments for outdoor education as a valuable learning experience (for instance Bertolami, 1981; Davies, 1993; Ewert, 1983 and Handley, 1993). Rhetorical and anecdotal claims of the benefits for participants abound, for example, the Colorado Outward Bound Pamphlet (undated) *"Challenging the Course of Cancer"* alludes to the potential benefits of the outdoor education experience:

Adventure and challenge, solitude and reflection, the self-confidence that comes with knowing one can do more than was ever imagined, risk taking and triumph over fear, skills mastered, joy, exhaustion, compassion, concern, a sense of community - all these are part of the experience.

Elsewhere in the *"Challenging the Course of Cancer"* pamphlet the inherent value of outdoor education is articulated by Dr Paul Hamilton:

The Outward Bound experience was transformational for me. It has the potential of teaching one more about oneself, strengths and weaknesses, than four years of higher education could ever provide.

But these "warm fuzzies" do very little to validate program impact or effectiveness. Within the last decade the field has begun to produce several significant studies to address these shortcomings. These studies will be addressed in the next section (Section 2.3.2: Research and Evaluation in Outdoor and Experiential Education). Generally however, there is a lot of theorizing about outdoor education which provides useful categories to examine the related literature.

Ewert (1989) states that the benefits can be divided into the categories of psychological, sociological, educational and physical. These four categories are expanded upon in Figure 2.8. Interestingly, Ewert (1989:49) maintains that "to date, most of the research has typically centered

on such constructs as self-esteem and self-concept. This may be due to the fact that much of the research is affiliated with psychology".

FIGURE 2.8: POTENTIAL BENEFITS OF OUTDOOR ADVENTURE PURSUITS

Psychological	Sociological	Educational	Physical
Self-concept	Compassion	Outdoor education	Fitness
Confidence	Group cooperation	Nature awareness	Skills
Self-efficacy	Respect for others	Problem Solving	Strength
Sensation seeking	Communication	Conservation education	Coordination
Actualization	Behavior feedback	Value Clarification	Catharsis
Well-being	Friendship	Outdoor techniques	Exercise
Personal testing	Belonging	Improved academics	Balance

Adapted from Ewert (1989: 49)

Alternatively, Driver and Brown cited by Breitenstein and Ewert (1990:16) classified the benefits into "personal development, social bonding, therapeutic/healing and improved physical fitness". At this juncture, a brief discussion of the benefits is warranted. Yet again, it should be noted that an in depth analysis of the related literature follows in Section 2.3.2.

a. Emotional and Psychological benefits

Repeatedly it has been suggested that outdoor education is a powerful catalyst for enhanced self-concept (Ewert, 1983; Marsh, Richards and Barnes, 1986; McIntyre, 1987 and Potter, 1993), and self-actualization (Stremba, 1989; Yaffey, 1992 and Young and Crandall, 1984). It is claimed that the outdoor environment works as a prophylaxis for the stress encountered during daily routines and emotional well-being is enhanced by recreation in the outdoors. Breitenstein and Ewert (1990:16) suggest that "outdoor recreation can facilitate an individual's ability to develop feelings of self-empowerment by providing opportunities for a person to engage successfully in a positive and cathartic experience".

Many researchers have investigated the effects of outdoor adventure pursuits on variables such as personality traits, locus of control and self-efficacy. Self-esteem appears to have been the main focus for the majority of studies, however, the findings are far from unequivocal. For example, Cason and Gillis (1994:41) maintain that "some studies revealed no significant difference in pre- and post- measures of self-esteem while others reported significant improvements".

b. Sociological benefits

Social benefits are defined as an increased sense of belonging, group harmony, compassion for others, co-operation and respect. Outdoor education requires group members to work cohesively towards a common goal (Bunting, 1989). To this end, Wilson (cited by Jones, 1989) reveals that greater social acceptance within a group can be enhanced through an outdoor environment. Similarly, he maintains that communication skills, both verbal and non-verbal are positively influenced as a result of a well planned outdoor education experience. Berman (1995:61) reaffirms this aspect when he states that social "growth occurs within the context of a supportive, affirming group atmosphere".

Interestingly, adversity and hardships can also cause individuals to affiliate (Gray and Perusco, 1993). Mitten (1995:83) is of the opinion that "groups tend to become more cohesive when facing a threatening, rather than nonthreatening situation". This "shared experience" she suggests is beneficial for group bonding. Furthermore, Davies (1993:27) is of the opinion that the highs and lows are shared experiences which "force people to relate to each other and interact in a dynamic manner. They create situations requiring trust, sharing and communication. They involve closeness and touch. They need active involvement, participation and cooperation".

In an outdoor education setting "the element of competition is downplayed and the importance of working effectively towards a common goal is stressed (Bunting, 1989:38). Harmon cited by Breitenstein and Ewert (1990:17) contends that outdoor education activities "are effective in sociological change because there are opportunities for listening to other ideas, offering and accepting leadership responsibilities, becoming a member of a team and working to a common goal".

Social responsibility is also a claimed benefit of involvement in outdoor education. To this end, Bacon (1983:16) advocates that "if the group itself is healthy - if it possesses adequate amounts of nurturance, common sense, risk-taking ability, and insight - then the individual members of the group will also be healthy" .

c. Educational benefits

According to Breitenstein and Ewert (1990:17) "intellectual or cognitive benefits are perhaps the least obvious of the values of outdoor recreation". Yet, whether covert or overt, many practitioners would claim that there are many educational benefits derived from participation in outdoor education programs (Bunting, 1989; Gilbert and Chase, 1988 and Wurdinger, 1994). Ewert (1989:52) elaborates on the benefits to be accrued from program participation when he states that "positive consequences include improved academic abilities, education about the environment, nature awareness, problem solving, outdoor skills and value clarification".

Time management skills, intellectual application and academic grades have been shown to be favourably enhanced as a consequence of involvement in adventure programming (Gass, 1987 and Hammerman, 1978). Further to this, McNamara cited by Ewert (1989:53) hypothesized that "the outdoors may be particularly effective in helping a student learn to develop concepts rather than rote memory".

d. Physical benefits

It is claimed that engaging in outdoor education programs can also be physically and emotionally cathartic (Ewert, 1989). The catharsis is a result of the energy expended during physically taxing activity. It follows, that physical fitness is a byproduct of adventure activities (Bunting, 1989). In general terms, physical fitness refers to cardiovascular fitness, strength, flexibility, endurance, coordination and power (Donatelle and Davis, 1996). Breitenstein and Ewert, (1990) theorize that outdoor education programs significantly enhance one, or more of these areas. It is commonplace for outdoor adventure activities to demand a high degree of physical exertion whether it be hiking large mountains, riding white water rapids or rockclimbing difficult ascents. Ewert, (1989:54) articulates that:

....the popularity of outdoor adventure programs is that they allow a student to participate, regardless of skill level and in a non-competitive atmosphere. This active participation can often lead to improvements in a variety of fitness-related benefits.

A recent Australian study by Gray et al, (1993b) revealed that an outdoor education program significantly increased cardio-vascular fitness ($p < .001$) of adolescent boys ($n=75$). It is significant to note however, that the outdoor education program under investigation had a strong emphasis on physical fitness throughout its duration. An American study conducted by Wright (1983) also reported positive fitness benefits for juvenile delinquents following participation in an Outward Bound program.

e. Spiritual benefits

The underlying value of the outdoor education experience is attributed in part, to the fact that it provides an opportunity for participants' to become reconnected with their "soul". This "soulful" benefit is synonymous with tapping into their spiritual core which enables participants to evoke a sense of fulfillment, purpose and direction in their lives (Gibbens, 1991 and Warren, Sakofs and Hunt, 1995). Many practitioners refer to this as a "spiritual" component of outdoor education (for instance, Davies, 1993; Gray, 1995; Henderson, 1996 and Potter, 1993). There appears to be no unequivocal definition of spirituality. However, the term is an integral component of health and well-being (Donatelle and Davis, 1996). Breitenstein and Ewert (1990:18) reiterate on this problematic aspect when they suggest that "while spiritual health is not as easy to define or observe as other dimensions of health, it is accepted generally as a vital dimension of well-being".

On one hand, spirituality may have religious connotations where participants acknowledge a union or affinity with God whilst in the wilderness. On the other hand, some perceive that spirituality may imply a sense of connectedness and unity with nature. Proponents suggests that people are seeking a spiritual inclusion and self-actualisation which is inspired by the pristine and majestic qualities of nature (for instance Cohen, 1997 and Henderson, 1996). In many respects, the spiritual empowerment derived from the wilderness experience is instrumental in the self-actualisation process. Whatever the interpretation, Breitenstein and Ewert (1990:18) conclude that the "wilderness is a sacred space.... (which) helps young people increase congruence between their beliefs and their behavior".

Clearly, a wilderness episode can be innately satisfying. Frazier cited by Nettleton (1994:15) corroborates this aspect when he posits that:

People say that what we are seeking is a meaning for life. I think that what we're seeking is an experience of being alive, so that our life experience on the purely

physical plane will have resonances within our inner most being and reality, so that we actually feel the rapture of being alive.

Moreover, Davies (1993:27) posits that humans are propelled to a higher consciousness as a direct consequence of their involvement in the outdoors when he articulates that:

As we develop a sense of awe and wonder, as we identify that which is marvellous in the world, as we fall in love with our planet, and as we develop a sense of concern for humanity, through the warmth of the relationships that we experience, so we begin to find a sense of meaning for ourselves in the midst of all this.

Outdoor education is often claimed to be a remedy or panacea for some of the ills which transcend society (Jones, 1989 and Kiewa, 1991). In concert with these ideas, Hunt cited by Miles and Priest (1990), maintains that the erosion of civilization could be arrested if an adventure philosophy was adopted by society.

2.3.2 RESEARCH AND EVALUATION IN OUTDOOR AND EXPERIENTIAL EDUCATION

Research in this field has primarily been confined to the United States where a plethora of doctoral and research studies have been generated (McRae, 1989b). There is a substantive amount of descriptive and anecdotal evidence which claim that outdoor education programs may have an immediate and pronounced emotional impact on participants, but in the past 40 years of their development there have been very few attempts at systematic evaluation (Hedin, 1980; Ewert, 1983 and 1992; Kelk, 1990; Hanna, 1992a and Davis-Berman and Berman, 1994a & 1994b) and none at all to determine their long term impact, either real or self perceived (Gillis and Gass, 1993 and Gray and Patterson, 1994).

McRae (1989a and 1989b) and more recently Patterson (1991) indicated that systematic searches failed to unearth studies of this nature in any context, let alone with particular reference to Australia. For example, McRae (1989b:110) writes that "no comprehensive or rigorous study exists of the historical or philosophical foundations of outdoor education in Australia, of current practices or the effectiveness of programs implemented in schools or in resident centres". Similarly, Conrad and Hedin (1986:230) contend that:

....little effort has been made to systematically test the assumptions underlying the endorsements or to investigate empirically which specific forms of experiential programs may be the most effective in realizing the hypothesized benefits.

There are of course, many reasons for the dearth of formal evaluative evidence in outdoor education programs. These include: 1) an apparent lack of concern for critical analysis (or at least its subjugation by many proponents to their sense of commitment and belief in the inherent value of outdoor education), 2) the primitive state of instrumentation for measuring attitude and value change in relation to self concept and social concern (Kazdin, 1991 and Linke, Patterson and Gray, 1992), and 3) the unsophisticated statistical analysis of data. This aspect is heightened by Hanna (1992a:232) when she articulates that "a number of chronic design and methodology ripples (problems) have plagued the body of research in experiential education and hence the generalizability of study results".

In general terms, research attempts have been thwarted and impoverished due to their lack of academic rigour. In the main, this can be attributed to poor research designs and unsuitable instrumentation. Similarly, Cason and Gillis (1994:41) suggest that:

Research problems confounding the measurement of effectiveness often included a lack of equivalent control groups, a lack of randomization used for participant assignment, a lack of adequate follow-ups on initial successes, and the lack of clearly defined methods for conducting an adventure program".

Quite clearly, this poses as a threat to both internal and external validity and will be addressed in further detailed in Chapter 3.

A review of the literature suggests that a wide variety of research designs have been adopted in an attempt to analyse the multi-faceted nature of this paradigm. These approaches have been summarised by Hanna (1992a:232) and conveyed in Figure 2.9.

FIGURE 2.9: RESEARCH METHODS EMPLOYED IN EXPERIENTIAL EDUCATION RESEARCH

Quantitative Methods	Qualitative Methods
<ul style="list-style-type: none">• Observational• Behavioural Analysis• Correlational• Quasi-experimental• Experimental• Causal• Critical-incident• Single-subject• Time Sampling• Mechanized Collection• Evaluation	<ul style="list-style-type: none">• Historical• Descriptive• Case Study• Ethnographic• Phenomenological• Hermeneutic• Action Research• Evaluation

Adapted from Hanna (1992a:232)

Within the last decade or so, there has been an increased amount of activity emanating from the research arena. This in turn, has positively influenced the quality and quantity of evaluation designs. Hanna (1992a:232) supports this idea when she argues that:

....experiential education is not a specific academic discipline, but an interdisciplinary, applied field of study. Early studies tended to be descriptive, exploratory and disciplinary-based, while more recent studies have tended to be increasingly conceptually-based, exploratory and multi-disciplinary. These changes are collectively leading towards a stronger body of research.

In summation, although most of the existing research is for the most part positive in nature, there have been ambiguous and contradictory results. The problem of lack of clarity and congruency needs to be addressed in future research endeavours.

2.3.2.1 RESEARCH IN ADVENTURE THERAPY

Outdoor education which incorporates adventure therapy has a myriad of applications (Hastie, 1992). Although this study does not specifically look at adventure therapy, a brief synopsis of this field is warranted to illustrate its versatility. Programs utilizing adventure therapy have the potential to target participants from diverse populations, for example adjudicated youths, victims of rape and sexual assault, drug abusers, under-achievers, corporate clients and terminally ill just to name a few. It should be noted that adventure therapy and wilderness therapy are not synonymous. For instance, "adventure therapy" for a delinquent adolescent may be robbing a bank, whereas "wilderness therapy" is using nature (for instance, a remote and pristine setting) as an adjunct to the therapeutic process. Davis-Berman and Berman (1994a:10) speculate that wilderness therapy is effective because:

It separates participants from environments that foster and maintain dysfunctional behaviour. It is action oriented, provides immediacy of feedback, and enhances taking responsibility for oneself. At the same time it depends on interdependence among group members and staff, and the development of effective communication skills.

Many researchers have reviewed the outdoor education literature as it pertains to therapeutic populations, for instance Chase (1981), Davis-Berman and Berman (1994a), Ewert (1983, 1987, 1989), Gass (1993), Gillis (1992) and Gillis and Gass (1993). The generic findings indicate that outdoor adventure therapy enhances "self-concept, social attitudes, and behaviour along with reduced emotional problems" (Ewert cited by Gillis, 1992:42). Further to this end, Gillis and Gass (1993:276) posit that:

globally measured self-esteem has been found to increase following participation in adventure programming although the longevity of such change and its transfer to other settings have not been empirically validated.

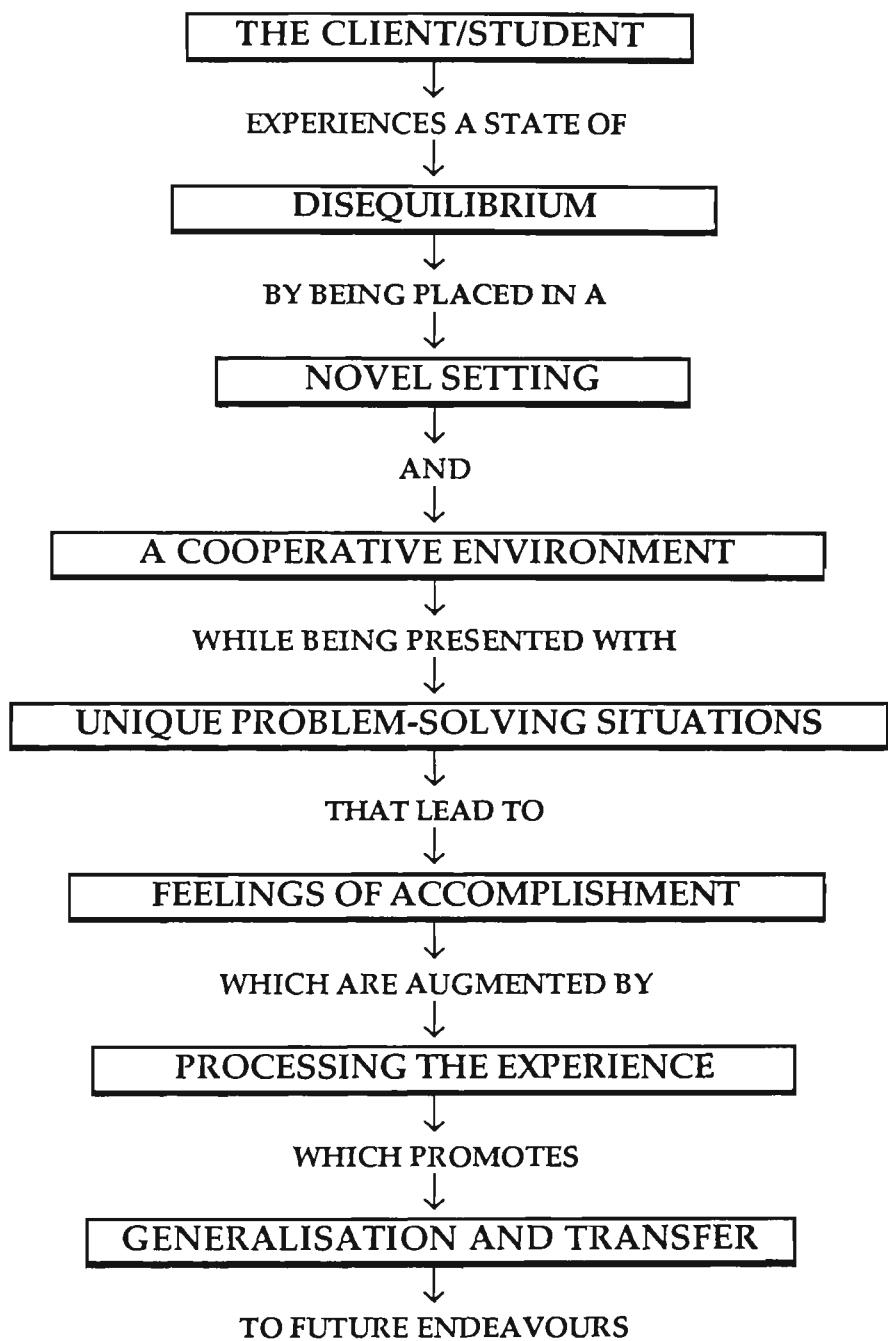
One must be cognizant of the fact that the therapeutic outcomes may be somewhat controversial due to the "no-difference" findings. However, Gillis (1992:43) is of the opinion that:

...this lack of difference may be related to poor statistical power due to small sample sizes and "weak" assessment instruments....Due to cost, time consumption, comparable outcomes of various treatments, and internal and external validity issues, such outcome research is slowly giving way to the study of process as it relates to outcome.

Whatever the limitations inherent in research conducted to date, there is however, strong consensus supporting the processes involved in effective adventure therapy. Gass (1993:59-61) provides a theoretical framework to clarify these processes which is shown in Figure 2.10. In essence, Gass (1993:59-61) identifies these terms as:

1. **The Client/Student:** Enters the experience with a preconception of what the activities may involve. This generally causes a sense of internal stimulation. The internal state that allows change to occur is called disequilibrium.
2. **Disequilibrium:** This is a state of internal conflict because the individual is aware of the fact that previous ways of processing the information no longer applies to this new experience. This state provides the catalyst for personal change. Clients/students experience the state of disequilibrium by being placed in a novel setting.
3. **Novel Setting:** Being placed in an environment that is unfamiliar is instrumental in this process. When an unfamiliar physical activity is coupled with immersion in a group of virtual strangers, a heightened sense of arousal tends to occur. Trust, hope, anxiety, a sense of the unknown and a perception of risk are integrated within a cooperative environment.
4. **Cooperative Environment:** An atmosphere which engenders cooperation rather than competition fosters opportunities for clients/students to develop group cohesiveness. A shared goal also facilitates the bonding process. This foundation exists while they are continually presented with unique problem solving situations.
5. **Unique Problem-solving Situations:** New problem-solving situations are introduced to clients/students in a sequence of increasing difficulty which draws on their mental, physical and emotional resources. Successful completion of such tasks leads to feelings of accomplishment.
6. **Feelings of Accomplishment:** Success can lead to increased self-esteem and belief in self, improved communication skills and more effective problem-solving skills. The interpretation of these experiences is strengthened by processing the experience.

FIGURE 2.10: THE ADVENTURE THERAPY PROCESS



Adapted from Gass (1993:60)

7. **Processing the Experience:** Reflection assists clients/students in this process and is essential if there is going to be generalization and transfer.
8. **Generalization and Transfer:** The fundamental goal of outdoor adventure is to assist clients/students in forming their own linkages to what they are learning. This allows them to integrate their new knowledge and desired behaviour with their lifestyle during the remainder of the course and continue these changes when they return home.

As indicated earlier, experiential education has at times been referred to as "learning by doing combined with reflection" (Gass, 1993:4). Several practitioners in the field (for instance Hayllar, 1991 and Knapp, 1992) would argue that an individual's ability to reflect upon the experience is perhaps the most critical element contained in the schema outlined in Figure 2.10.

To this end, Knapp (1992:2-3) poignantly explains that:

Outdoor education is one way to improve teaching and learning through direct experience. But direct experience is not enough. If such experiences are to be meaningful and applied to life situations, teachers must help students learn from carefully planned and guided reflection sessions.

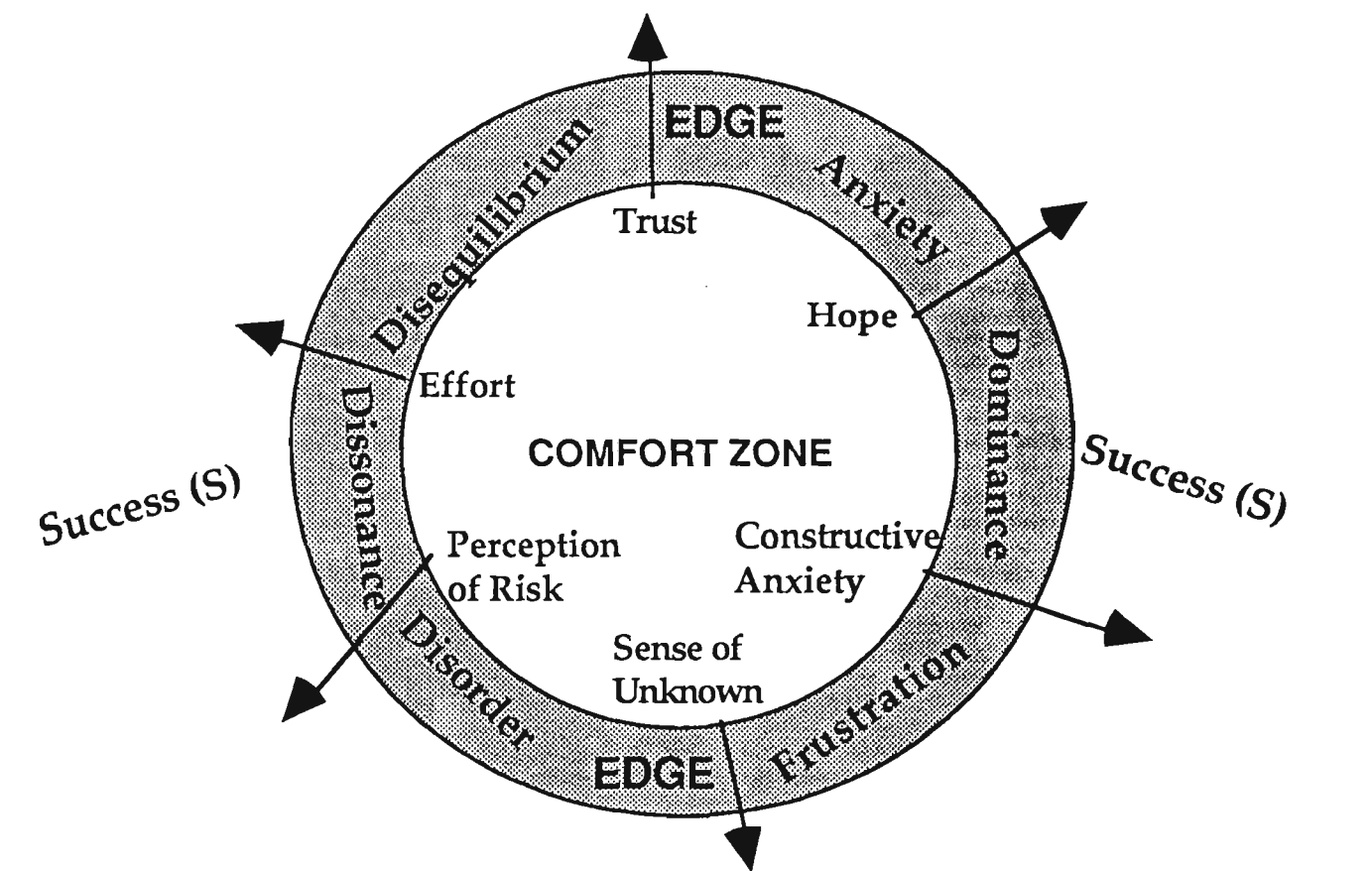
In essence, "an instructional activity - in fact, any activity - is potentially educational, but only when we can (a) understand its meaning and (b) apply our learning to future problems or situations" (Knapp, 1992:ix). In the same vein, Aldous Huxley cited by Hayllar (1991:49) maintained that "experience is not what happens to you, but what you make of what happens to you". Clearly, this statement illustrates the value of reflection within the outdoor education experience.

During reflection, the learner is either becoming aware, transforming, analyzing, recapturing, reliving, exploring, or linking the parts of an experience (Knapp, 1992). The resultant product of experience and reflection is ultimately learning. Learning is contingent upon our innate ability to assimilate the experience. This gives rise to the notion that "you do not learn by doing....you learn

by thinking-acting-thinking-acting....In and of itself, doing, like experiencing, can be a mindless affair" (Sarason, 1984:224-225).

Lastly, in the adventure therapy process, there are a myriad of factors that underpin successful therapy. Gass (1993:61) isolates two components that separate adventure therapy from other traditional therapeutic approaches and these are "the manner in which disequilibrium is achieved and novel settings". This breakthrough to appropriate therapeutic change is illustrated in Figure 2.11.

FIGURE 2.11: APPROPRIATE THERAPEUTIC CHANGE



Adapted from Gass citing Nadler and Luckner (1993: 64)

2.3.2.2 IMMEDIATE AND RESIDUAL EFFECTS

As far as residual and longitudinal aspects of outdoor education programs are concerned, Davis-Berman and Berman (1994b:48) cogently explain that "very few studies have collected follow-up data on the participants to determine the stability over time. Consequently, there is a great deal of confusion regarding the effectiveness of wilderness programs". This void in and of itself, is a critical issue confronting contemporary researchers in the field.

Marsh, et al (1986) systematically examined the effect of an Outward Bound program upon participants (n=229). They found that 18 months after completion of the intervention there was very little change in the multidimensional self-concepts of participants. Moreover, this led them to conclude that the positive changes in self-concept acquired during exposure to an Outward Bound program were retained up until a period of 18 months after departure.

The majority of longitudinal studies undertaken thus far, have assessed the impact of wilderness programs on therapeutic populations. One of the earliest studies was conducted by Adams cited by Davis-Berman and Berman (1994a). He tracked 19 adolescent psychiatric patients for 28 months following a 30-day wilderness program. This study neglected to reveal the instrumentation used in the process, however, the findings revealed that "self-esteem, self-reliance and feelings of physical adequacy" (Davis-Berman and Berman, 1994a:68) were retained for this period.

For the most part, early studies have been generally flawed by methodological or technical errors. For instance, Stich and Sussman cited by Davis-Berman and Berman (1994a) evaluated self-esteem and contentment four months following the completion of an Outward Bound program and concluded that "there were no significant differences between the treatment and a control group"

(Davis-Berman and Berman, 1994b:48). The validity of the results was adversely affected by the 45% response rate and thereby dilutes the significance of the study.

In general terms, Breitenstein and Ewert (1990:16) suggest that "outdoor recreation could be effective in reducing levels of trait anxiety and that this effect was still evident one year after the experience". Researchers have also attempted to assess whether the impact of outdoor education programs is "situation specific" or whether it is transferable to other situations in daily life. A longitudinal study by Sakofs and Schuurman (1991:16) assessed the impact of adventure programs upon delinquent youth and concluded that significant positive changes occurred in:

.... locus of control, asocial orientation, manifest aggression, values orientation, immaturity, withdrawal-depression, social anxiety, repression, parental assessment of their child's dependency and counselor assessment of their client's peer relations.

It becomes increasingly apparent after a review of the literature that most measures have been obtained from psychological testing. Given the fact that program outcomes appear to be intangible and esoteric in nature, program efficacy in outdoor education is difficult to measure in valid and reliable terms (Yaffey, 1992). However, as the dual purpose of evaluation is not only to prove but also to improve, it appears timely for rigorous evaluation in this domain.

2.3.2.3 RESEARCH ON ADOLESCENTS IN OUTDOOR EDUCATION

Adolescents are ideally suited to outdoor education because of their risk-taking propensity and their exuberant, energetic approach to physically taxing activities. Cason and Gillis (1994:40) conducted a meta-analysis of the research findings for adolescents in outdoor adventure and demonstrated that "adolescents who attended adventure programming are 62% better off than those who did not". Statements such as this are somewhat ambiguous and misleading. This begs the question - better off at what?

Within the North American context, Conrad and Hedin (1982:57) summarized the results of a national study involving 27 programs and concluded that "experience-based educational programs can have a significant positive impact on the social, psychological and intellectual development of adolescents". Interestingly, the most powerful predictors of personal and social growth were contained within the characteristics of the experience. Further to this Conrad and Hedin (1982:74-75) argue that the personal development of subjects aged 12-19 years was contingent upon the degree of autonomy given to program participants, whereas social development was determined by the collegial relationship with adults and others.

Hastie (1992) examined the enjoyment ratings of 60 adolescent participants (14-15 years old) in various outdoor adventure activities. He concluded that "white water rafting and horse trekking were the two most enjoyable activities" (Hastie, 1992:46). However, this and similar research studies offer very little about the process variables associated within the outdoor experience. Further, there appears to be no substantial studies of a longitudinal nature upon mainstream adolescents in an outdoor education setting.

2.3.3 OUTDOOR EDUCATION PROGRAMS PERTAINING TO THE SCHOOL SETTING

The previous chapter briefly visited the historical context of ESOESP's and outlined how they embody the philosophies of Kurt Hahn. For the most part, Hahn perceived that contemporary youth were victims of declining fitness, self-discipline, craftsmanship and compassion (Horwood, 1987 and Schoel et al, 1988). The emergence of outdoor education in the school curriculum is in part, attributed to these problems exacerbated by a heightened social consciousness of issues evident in contemporary society.

Contemporary society places an enormous amount of stress on adolescents for instance the anxiety of attaining good marks at school, cut-throat competition amongst peers, or feelings of insignificance and unimportance in the total schema of life. These factors have been manifested in feelings of inadequacy, alienation and fragmentation in our youth. Subsequently, these ailments have been highlighted by many educators (for instance Jones, 1989; Potter, 1992; Gray and Perusco, 1993). To this end, McRae (cited by Jones, 1989:24) purports that "the increase of technology and urbanisation is alienating and depersonalising modern humans".

On a positive note, scientific and technological advancement have arrested many of the communicable and infectious diseases evident in society since the turn of the century such as chicken pox and diphtheria. Paradoxically however, civilization is responsible for many of the health maladies evident in contemporary society. The high rates of drug dependencies, mental illnesses, suicide and violent crimes, for example, can be attributed to the accompanying feelings of powerlessness, hopelessness and futility transcending human nature (Kiewa, 1991 and MacKay, 1993). Jones, (1989:24) reiterates this aspect when he hypothesises that "humans are free and happy in their natural, primitive state, however they lose their natural freedom and happiness when they take on the chains of civilisation".

Many practitioners in the outdoor education field advocate that a philosophy of adventure can be instrumental in preventing the decay of our civilisation (Miles and Priest, 1990). Schools who have incorporated aspects of Hahn's outdoor education into their curriculum believe that academic training needs to be concomitant with physical and social development. Renney and Currie (1993: 23) report that the main impetus for creating an ESOESP such as Glengarry is:

...a somewhat pessimistic and troubling view of the problems facing a large part of Australia's youth. The increases in family conflict and breakdown, increasing poverty, high youth unemployment, soaring youth homelessness and growing educational pressure cannot be ignored. Underlying these developments are social, economic and technical changes that are creating a growing stress among the young - a stress that finds an expression in the fear and pessimism which many of them face.

Similarly, Horwood (1987:87) contends that schools of this nature are built on the basic premise that they:

...are rooted in optimistic opinion about the capabilities of the young.....the conviction that the young have a desire to be helpful, to have work to do that is of value and that is worthy of their best efforts. Students are expected to learn to take charge of their own learning and become independent of instructors.

Anecdotal evidence suggests that the majority of students exit the ESOESP with an increased sense of identity, self-efficacy, purpose, self-direction and social consciousness (Madin, 1986). This point is illustrated by Renney and Currie (1993:23) when they advocate that:

The development of self-confidence, self-reliance and independence goes hand-in-hand with normal academic work and intellectual growth. The learning of competence in practical ways integrates the intellectually active mind with the body and spirit.

Outdoor education is a powerful pedagogical force because the experience goes beyond the abstract and into the realm of the real (Gray and Perusco, 1993 and Knapp, 1992). Furthermore, Smith (cited by Jones, 1989:23) claims that "the outdoors can help change abstractions into meaningful life experiences".

The dearth of empirical data causes concern for many involved in the field. This aspect is illuminated by McRae (1989b:111) when he states that "no research studies were found which evaluated programs which sought to help students achieve the broad intentions which characterize Australian secondary school outdoor education programs". Furthermore, Renney and Currie (1993:28) conclude that:

There is a significant lack of any real analysis in the world-wide literature of the effectiveness of Outdoor Education (short or long term). That Outdoor Education is 'good' is taken as an article of faith and has never been tested systematically or rigorously. This situation is becoming increasingly unacceptable as more and more schools are using Outdoor Education as a means of achieving their diverse

ends without having any real idea of what they can expect to achieve or how long the effect will last after the experience is over.

Outdoor education stands alone as an impactful educational adjunct. These thoughts are reiterated upon by Nold (1973:15) when he cites the following letter written to Outward Bound by a teacher.

....I wanted to tell you some of the things that really pleased me about your program. I know you've seen tons of people react and grow in Outward Bound programs, but to me it really seemed super exciting to watch kids that I've known for three years change in a seven day period. They were beautiful and I suppose I should have expected some of the reactions ... I will never feel the same about those 16 kids again - to me they are so different from the 150 who sit in my classes daily and yet they aren't really that different! If every teacher shared once in a year a similar experience with each of the 150 they face daily, how different our schools could be. At the end of our week I felt tuned in to those kids and their needs. If I continued with that group as a class, the sky would be the limit.

Gray and Perusco (1993) concur with these sentiments and maintain that outdoor education provides a vehicle for students to grow and develop in ways which are uncharacteristic of traditional schooling. They articulate that:

When we "look at our footprints in the sand" our involvement in this subject area was undoubtedly the highlight of our teaching careers. Health and Physical Education which is our area of expertise, sadly rates a poor second (pg 20).

ESOESP's have as one of their underlying aims and objectives, the enrichment of environmental knowledge, attitudes, skills and behaviours (Gray, et al 1993b). Quite clearly, these schools can play a fundamental role in enhancing the environmental awareness and sensitivity of their participants. Ewert (1996:31) corroborates with this stand when he advocates that "direct experiences in a natural environment will develop stronger empathies and levels of concern over natural resource issues than most traditional pedagogical efforts".

In conclusion, the related literature appears to be impoverished by a distinct lack of longitudinal studies upon adolescents whether it be within mainstream education or within the ESOESP context. To this end, Neill (1997b:194-195) succinctly argues that:

Despite the lack of systematic evaluation, the prevalence of outdoor education programs in our schools appears to be flourishing. This state of affairs is, however, far from ideal. In an industry experiencing rapid increases in competition, outdoor education providers would do well to take it upon themselves to invest in research and evaluation practices, if only for the bottom line sake of their own livelihood. If outdoor education providers do not take the onus upon themselves to evaluate their programs, the demand will soon come from their clients.....School authorities are perfectly justified in applying pressures for results to outdoor education providers. It is the client-driven and funding-driven demands of corporate outdoor programs and adventure therapy programs that have largely motivated much larger bodies of research in these fields. The problem for outdoor education providers is that unless they take the initiative to introduce and use appropriate performance indicators, school authorities will soon impose their own evaluation agendas.

For this reason, the study should significantly contribute to both the breadth and depth of understanding within the field.

Chapter 3

THE RESEARCH DESIGN

This first part of this chapter is devoted to a brief description of the ESOESP under investigation whilst Chapter 4 provides an expanded version of the case study. The latter section of this chapter explores: 1) the genesis of the instruments; 2) a summary of the research design; and 3) the circumstantial constraints associated with the study. In the concluding section of this chapter, an examination of the proposed methods of data analysis is discussed along with a definition of the subscales.

3.1. A BRIEF DESCRIPTION OF THE CASE STUDY AND ITS PROGRAM

For the purpose of this study, an ESOESP is defined as a school based residential outdoor education experience lasting for a minimum of four school terms. This is one academic year (four school terms of 10-weeks duration), broken in each instance by school vacations of two-weeks duration. First and foremost, the ESOESP under investigation (Timbertop) is primarily an academic school operating within the confines of the normal Year 9 curriculum within the Australian state of Victoria. Secondly, it is an outdoor education campus conducting an ESOESP as an adjunct to the total school experience.

Ideologically, ESOESP's embody the Kurt Hahn philosophy. As such, they are fundamentally imbued within the experiential education philosophy by the provision of "hands-on" and "experience-based" challenges for their students. Within this context, self-reliance, individual

decision making, group cohesiveness, self-directed learning and tenacity in pursuit are central to the philosophical underpinnings of these schools (Renney and Currie, 1993).

However, Timbertop is unique within the Australian context. Established in 1952, it remains the only ESOESP to integrate both males and females on one site for a full academic year. The reader will be familiarized with the innate characteristics and intricacies associated with the case study in Chapter 4.

3.2 AN OVERVIEW OF THE RESEARCH DESIGN

Ostensibly, Timbertop was chosen as a case study due to its close affiliation with the broad aims and objectives of ESOESP's. At the very outset, its suitability as a case study for scientific inquiry was (and still remains), undisputed. Timbertop is representative of a subgroup (or sample) within this field. The findings allow descriptions and inferences to be drawn from the population in general (Ferguson, 1981 and Winer, Brown and Michels, 1991). As is the case with any scientific inquiry, the design of the study was of critical importance. The author was mindful of the fact that if the design is flawed, no amount of statistical manipulation will allow valid inferences to be drawn (Ferguson, 1981). In the embryonic stages, several months were spent deliberating over the most effective way to evaluate the impact of ESOESP's on adolescent participants.

In the final analysis, a pluralistic (multi-mode approach) study was deemed to be the most suitable method for inquiry. It involved triangulation of a variety of qualitative and quantitative methods all geared towards assessing the outcomes of an ESOESP. It was assumed that both methodologies complement and counterbalance each other and enable a thorough analysis of the available data (Henderson, 1993).

In succinct terms, this is a single group study with a quasi-experimental design. Despite exhaustive attempts to locate a control group within the state of Victoria, no comparable cohort

was found to ideally match the Timbertop case study in terms of socio-economic status, gender ratios, private school system, age and so on. All private schools in Victoria with a similar socio-economic background to Timbertop, undertook some aspect of outdoor education during their academic year. For this reason, locating a control group was deemed impossible. At this juncture, the author acknowledges the limitations and weaknesses of a single group study, however, this was addressed in part, by replicating parts of the 1993 study on the 1994 cohort. Two consecutive year groups from Timbertop were used (that is 1993 and 1994) with the latter forming a subsample of the research design. Figure 3.1 provides a summary of the research design for both the 1993 and 1994 cohorts.

Qualitative data was gathered by selected cohort student interviews, personal observations and time line charts taken from the interview students' log books. The quantitative data was gathered from questionnaires which were designed specifically to test the hypotheses. Teacher input and parental perceptions obtained from a parent questionnaire (PQ) were also incorporated into the research design to provide triangulation of data. Clearly, a more accurate response to the research questions could be attained through this approach. This point is carried to further magnitude by Hanna (1992a:233) when she states that "quantitative and/or qualitative methods may provide us with designs where the strengths of one approach help calm the ripples of another".

The research design follows a conventional pre-test/treatment/post-test format. In addition, the 1993 cohort received a follow-up test 12-months after departure to assess the residual effects. Repeated visits to the case study site allowed the author to gather several sources of information which technically is referred to as triangulation. Horwood (1987:9) argues that triangulation:

....provides a degree of reliability in constructing a picture from the accounts of informants. Triangulation is especially valuable in revealing differences in the perspectives of different persons.

FIGURE 3.1 The Research Design

THE RESEARCH DESIGN

QUANTITATIVE DATA

Self-Perceived Change

- School Life Questionnaire
- Real Me Questionnaire

QUALITATIVE DATA

Selected Cohort

- Personal Interview
- Time line Charts
- Log Book Reflection

Health & Fitness Data

Run Times

CASE STUDY

Personal Observation

Parent Input*

Parent Input*

- Parent Questionnaire

Teacher Input*

- Perceived Changes
- Anecdotal Evidence

Based on this background, a multi-mode research design was adopted using both quantitative and quantitative methodologies for this study. This research design will be discussed in greater detail in Chapter 4.

3.3 THE GENESIS OF THE INSTRUMENTS

As implied in Chapter 1, if the outdoor education movement is to maintain its current momentum it needs to have a more substantial and reliable basis of evidence than that which presently exists (Gray, et al 1993b and McRae, 1989b). In turn, this will enable the establishment of more specific and realistic objectives, and to develop further the range of activities best suited to the needs of participants at different educational levels and in different locations and circumstances. It was to this end that the research efforts were primarily directed.

However, in 1991 and 1992 when the study was in its embryonic stages, there was a distinct lack of instrumentation available to research specifically in the field of school based outdoor education. What evidence existed was often ambiguous, and because it related to programs of widely different character and duration, could not readily be used as a basis for generalisation. There were some indications that adventure based programs of relatively short duration (for example around 1-2 weeks) could lead to positive and reliable changes in self concept as assessed by written attitude scales administered immediately before and after the exercise (Schoel, et al 1988:268-278). On the other hand impressions of the lasting impact of year long outdoor education programs seemed to suggest a disappointing reversion to former attitudes and behaviour among students returning to their regular school environment (Montgomery and Darling, 1967:140-141).

For this reason, all instrumentation used in the study was constructed, piloted and refined by the author. This in itself, was a time consuming and exhaustive task which took the majority of 1991 and 1992 to develop and refine the final instrumentation. The proceeding section (Section 3.3.1. Developing and trialling the quantitative instruments) outlines this process.

In an attempt to address the paucity of systematic evaluation in outdoor education, let alone in the specific field of ESOESP's, a full scale evaluation model was developed. One aspect of the model focused on program impact, both immediate and longitudinal, on the participants (see Figure 3.2). A preliminary review of the literature and extensive discussions with professionals working in the area, such as teachers and administrators associated with the programs, aided the initial phase of the study.

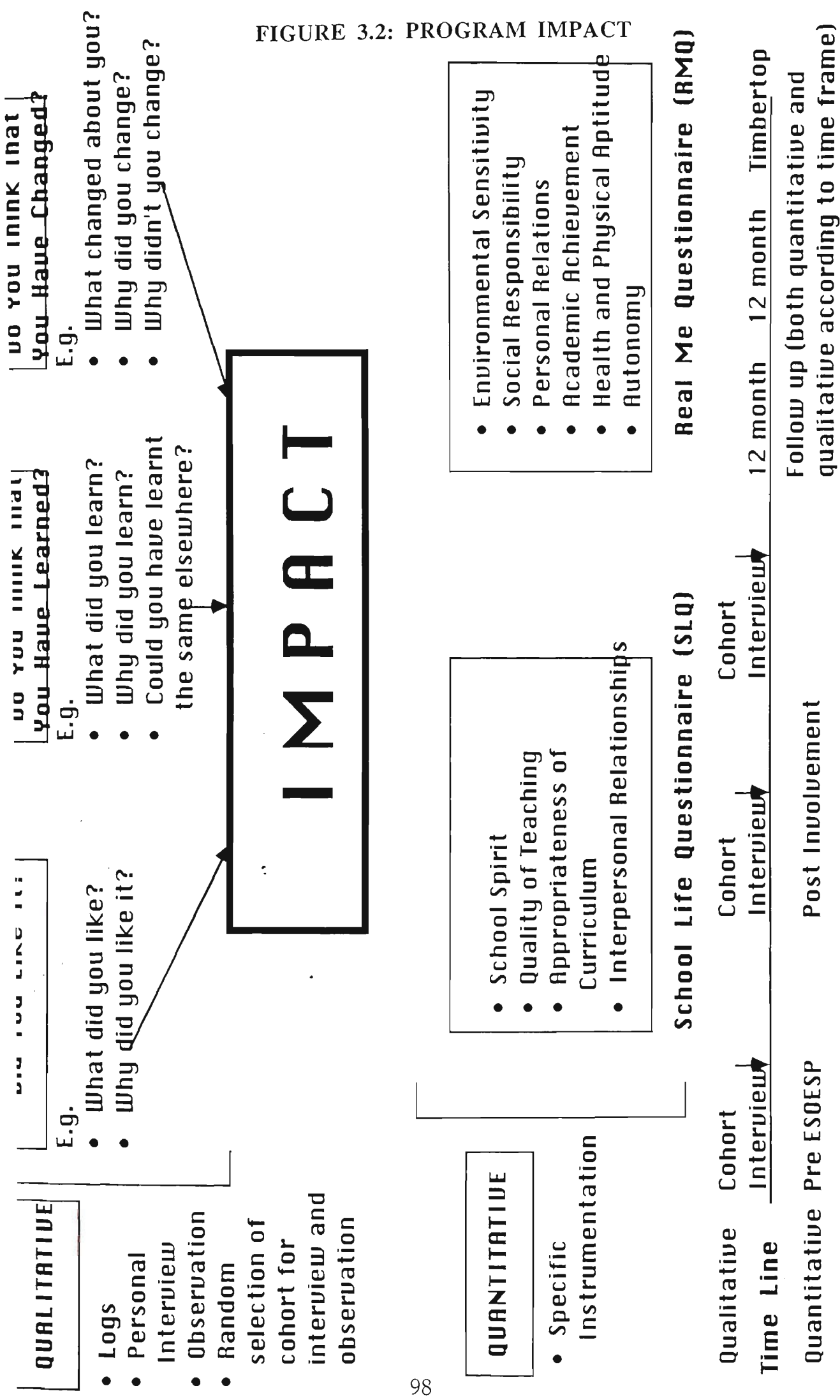
3.3.1 DEVELOPING & TRIALLING THE QUANTITATIVE INSTRUMENTS

The quantitative phase involved the development of three research instruments designed to evaluate the effects of an ESOESP. The genesis of the instruments, the Real Me Questionnaire (RMQ); the School Life Questionnaire (SLQ); and the Parent Questionnaire (PQ) was a two fold process. Firstly, the identification of the salient components of ESOESP's; and secondly, an examination of numerous instruments which had the potential to closely align to this study. To ensure that the final instrumentation was both valid and reliable, two pilot studies during 1991 and 1992 were conducted. The following is a brief description of the two pilot studies.

A. PILOT STUDY 1: THE GLENGARRY TRIAL - 1991

In an attempt to develop an effective evaluation model for an ESOESP, the first pilot study was commenced in 1991 with Glengarry, the outdoor education campus for The Scots College in Kangaroo Valley, New South Wales, Australia. Glengarry is a medium-term ESOESP and was established in 1988. It resides on 810 hectares of picturesque farm land and students spend two school terms at this campus broken in the middle by a three week school holiday. As such, Glengarry provides a 20-week seven day a week program for all Year 9 boys, each of whom

FIGURE 3.2: PROGRAM IMPACT



spends half their academic year in residence (one half of Year 9 stay from February to June, and the other half from July to December).

The key elements of the trial were to identify the major objectives of an ESOESP such as Timbertop or Glengarry. On this basis, it was feasible to develop a range of testing procedures and explore other possible information sources specifically designed to reflect the achievement of these objectives. To this end, a variety of sources including structured interviews, student and parent questionnaires and physical fitness data were explored in order to examine what changes in attitude and behaviour might have occurred during the Glengarry program.

1. STUDENT DATA FROM THE GLENGARRY TRIAL

Initially, the questionnaires devised by Ramsden, Martin and Bowden (1989) and Biggs (1987) were used as a framework for the instrumentation. The format of these two questionnaires was then interwoven into the educational objectives of an ESOESP (outlined in Figure 1.5) and translated into a series of more specific statements on personal attitudes and behavioural characteristics which formed the basis of two student questionnaires: 1) What I Really Want to Be; and 2) What I Really Am (see Appendix 1 and Appendix 2 respectively). Each questionnaire had a different graded response scale to measure the students' perceptions of how important they thought the characteristics were, and how well they thought they had achieved them. The questionnaires were defined as follows:

- 'What I Really Want to Be' - this asked students to reflect on the various characteristics and to indicate in each case how much they really wanted to achieve them as a personal goal in life;
- 'What I Really Am' - this asked students to indicate how well they thought they had succeeded in achieving the specified characteristics at a particular point in time;

The initial scales each consisted of 30-items and 36-items respectively, and were intended to cover all the educational objectives defined for the program. These were then subjected to factor analysis on the basis of the first application results (covering 149 students) and as a consequence of this were grouped into five distinct sub-scales defined with the following characteristics and constituent items:

- (1) *Social responsibility* (helping other people; understanding and tolerance of different views; cooperation and fairness in dealing with others; caring for the environment);
- (2) *Peer acceptance and self esteem* (friendship; popularity; ease at interacting with others; mutual respect, personal satisfaction and fulfillment);
- (3) *Academic and cultural achievement* (general knowledge; cultural interests; creativity; self learning interest and ability);
- (4) *Health and physical aptitude* (sporting ability; competitiveness; general health and fitness);
- (5) *Independence* (self confidence; self reliance; individual freedom; preparation for adult life).

These scales were subsequently modified and expanded to 36-items in order to improve the scope and sub-scale reliability of the measures without changing their basic structure and operational definition. Subsequent application data indicated sound empirical qualities of sub-scale discrimination (with substantial and consistent differences in mean sub-scale scores on importance, achievement and progress between the relevant defining characteristics) and internal consistency (Cronbach alpha ≥ 0.7 for each defined sub-scale).

2. PRE AND POST-TEST RUN TIMES FROM THE GLENGARRY TRIAL

Physical fitness of students was assessed by measuring their completion time over a set cross country course designated at the ESOESP. Measurements were taken at the beginning (pre-test

score) and end (post-test score) for each participant. Information gleaned from this test will be used as an assessment of improvement in aerobic physical fitness in the case study.

3. PARENT RESPONSES FROM THE GLENGARRY TRIAL

In order to provide an independent view of the personal development of students over the period of their stay at Glengarry, a Parent Questionnaire (PQ) was constructed and trialled on the Glengarry parents (n=38) during 1991. In essence, the PQ (see Appendix 5) is a modified version of 'What I Really Am'. It contains 30-items and examines parents' perceptions of their child's attitudinal and behavioural change as a result of the ESOESP experience. Using a four point scale (1=not at all/no noticeable change to 4=very much/a definite strong and consistent change) the PQ contains items which re-examine the subscales of the RMQ and SLQ. This triangulation will enable an acceptance(substantiate) or rejection(refute) of the findings found in the self-report data.

The closing section of the PQ is a two-part question which explores the level of overall satisfaction the parents obtained from their child's ESOESP experience. Parents responded by ticking the appropriate box, that is, either very satisfied, satisfied, slightly dissatisfied, not at all satisfied. An open-ended question concluded this section which allows parents to make any additional comments on the topic; viz "Are there any additional comments you would like to make?" This feedback from parents was invaluable in terms of qualitative data.

4. THE QUALITATIVE INSTRUMENTS USED IN THE GLENGARRY TRIAL

Other sources of information on student achievement, satisfaction with and response to the outdoor education program were also explored in the evaluation trial. Structured interviews were conducted with 25 randomly selected students at the end of each semester program seeking detailed comment on their overall reactions to the program and what specific effects it

had produced in them, what events or activities they considered to have been most influential, whether their views on outdoor education had changed during the program, and what impressions they had developed of the formal curriculum, the quality of teaching provided, and the nature of residential life at the school. As such, the interview questions not only attempted to focus on perceived development of the factors articulated in the survey instruments, but also attempted to elicit responses concerning the processes involved in the Glengarry experience.

5. DESIGN OF THE GLENGARRY TRIAL

In general terms the research trial followed a conventional pre-test/ treatment/post-test design. The testing program is outlined in Figure 3.3. The various measures of attitude change were administered at both the beginning and end of the outdoor education program, and for the first cohort only, one year after the program to determine the nature and extent of any perceived residual impact. Progress measures were also applied at two points during the program, for convenience near the beginning of terms 2 and 3 of the school year. The views of parents could only be obtained retrospectively and were therefore sought at the end of the program.

FIGURE 3.3: OUTLINE OF THE GLENGARRY TRIAL TESTING PROGRAM

Measure	First Cohort	Second Cohort
Importance Rating Scale	Mar 91; Jun 91	Mar 91; Jun 91; Nov 91
Achievement Rating Scale	Mar 91;Nov 91	Mar 91; Jun 91; Nov 91
Student Interviews	Jun 91	Nov 91
Parent Rating Scale	Nov 91	
Health & Fitness Data	Mar 91; Jun 91	Jun 91; Nov 91

It should be noted that the researcher felt that the Glengarry pilot was unsuitable for further study. Being a single sex school, it became apparent that Glengarry provided a limited data set. In particular, the researcher was interested in differential gender outcomes emanating from an ESOESP. For this reason alone, a co-educational was school was deemed the more suitable site for further study.

B. PILOT STUDY 2: THE TIMBERTOP TRIAL -1992

On the basis of the findings from the 1991 Glengarry trial, the first six-months of 1992 was spent further refining and modifying the instrumentation. Firstly, the 5-point response scale (5=of great importance to 1=of least importance) was changed to a 5-point behavioural intention scale (5=always to 1=never). Secondly, the items in the two questionnaires changed marginally due to the evolutionary process. In short, the instruments became eclectic in design and drew from a variety of sources such as:

- Conrad and Hedin's Learning in Experiential Education Scale (1982);
- Piers-Harris Childrens' Self-Concept Scale (1969);
- McRae's Environmental Concern Inventory (1989b);
- Ainley, Reed and Miller's Quality of School Teaching (1986);
- Rotter's Internal-External Locus of Control Scale (1966); and
- Marsh's Self Description Questionnaire II (1990).

Finally, the two instruments were re-named to the Real Me Questionnaire (RMQ) and School Life Questionnaire (SLQ). The first draft of the RMQ initially contained an 86-item self report questionnaire which was designed to measure adolescent attitudes, perceptions and behaviours. Similarly, the first draft of the SLQ contained 26-items. This revised format was first piloted at Timbertop (n= 203) in June 1992.

Using factor analysis, the final draft of the RMQ (administered at Timbertop in December 1992) was pruned to a 65-item self report questionnaire. Using a Likert five point behavioural intention scale (1=never to 5=always) the RMQ contains items which focus around aspects of independence, peer relations, health and physical fitness, academic achievement, environmental awareness and group dynamics. Items related to these areas were grouped to form six subscales. These include:

- Autonomy;
- Social Responsibility;
- Personal Relations;
- Health and Physical Aptitude;
- Academic and Cultural Achievement;
- Environmental Sensitivity.

A further pilot of the SLQ (administered at Timbertop in December 1992) indicated that a 31-item self report questionnaire was the most appropriate format to assess adolescents' perceptions and attitudes pertaining to areas such as student/teacher relationships, school ethos, level of satisfaction and academic rigour are addressed. The final draft of the SLQ is a five point likert scale examining pedagogical aspects that fall into four subscales. These include:

- Appropriateness of Curriculum;
- Quality of Teaching;
- School Spirit;
- Interpersonal Relationships.

Application and trialling provided data which indicated sound empirical qualities of sub-scale discrimination (with substantial and consistent differences in mean sub-scale scores between the relevant defining characteristics). There was one low Cronbach alpha (0.40) in the appropriateness of curriculum subscale, however, as items such as mathematics, science and outdoor education do not necessarily correlate, this was considered to be an acceptable figure. In both cases, the final RMQ and SLQ instruments (see Appendix 3 and Appendix 4 respectively) are the result of developing, restructuring and reshaping pilot attempts during 1991 and 1992.

At this juncture, the instruments have been shown to be statistically reliable, and in terms of the constructs investigated, valid. Used in conjunction with other qualitative methods such as log book analysis, personal interviews, parents' perceptions and personal observation, the quantitative instruments have the potential to improve both the depth and breadth of understanding in this field. Figure 3.4 outlines the three year evolution of the instruments. Furthermore, the RMQ and SLQ subscales with their corresponding Cronbach alphas are given in Figures 3.5 and 3.6.

Figure 3.4: Flow Chart of the Evolution of the Instruments

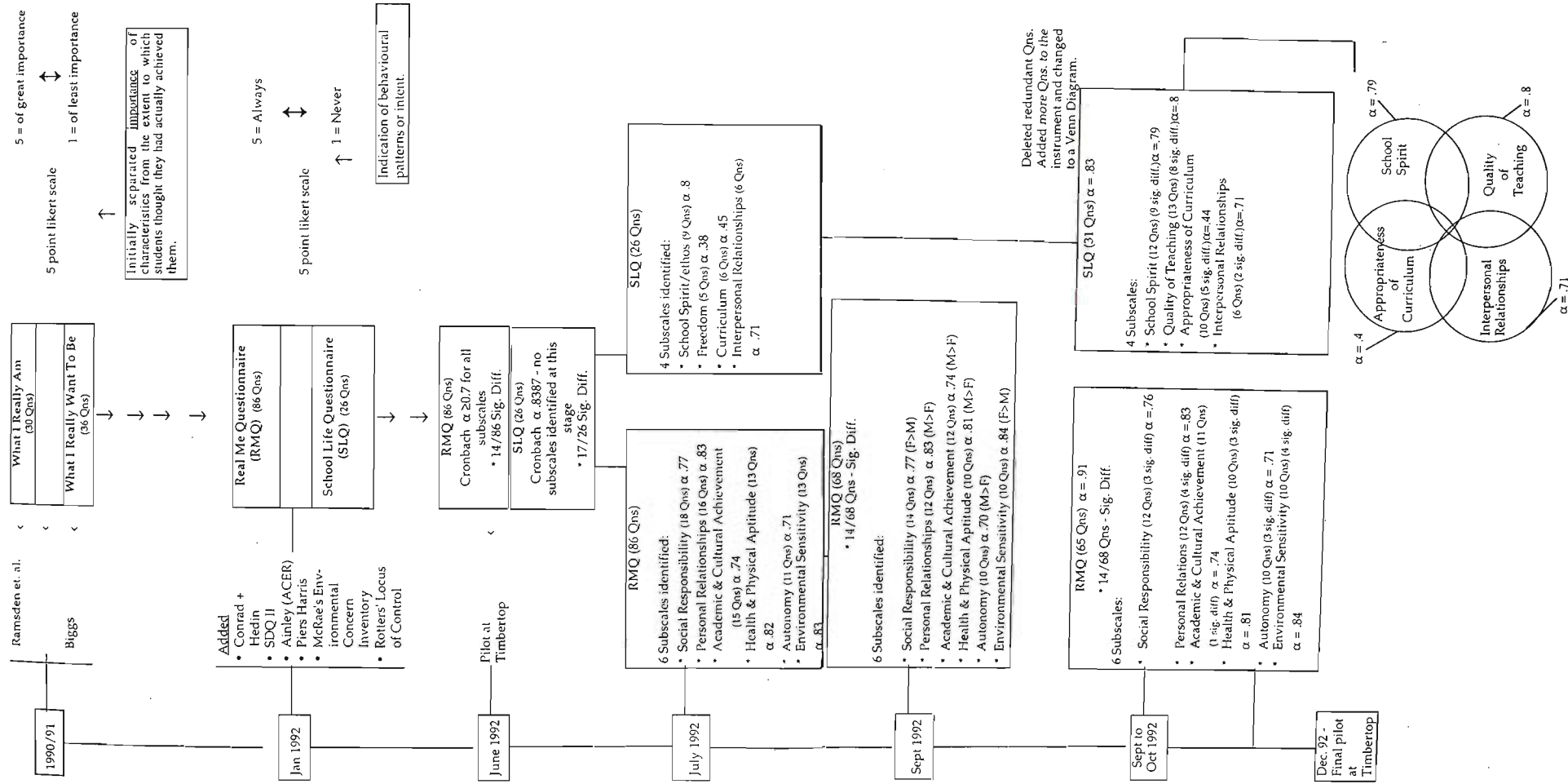


FIGURE 3.5 SUBSCALES CONTAINED IN THE REAL ME QUESTIONNAIRE (RMQ)

Alpha = .91

Subscale	Constructs	Items
Social Responsibility 12 items (Alpha= .76)	<ul style="list-style-type: none"> Helping other people Understanding and tolerance of different views Co-operation and fairness 	<ul style="list-style-type: none"> I try to make other peoples' lives happier I am tolerant of other people and their opinions I try to set a good example in my behaviour for others I enjoy being involved in community activities When people have problems I try to help them I think about how the things I do are likely to affect other people I am fair in my dealings with others People can count on me to do the right thing I tend to act first and think of the consequences later I like to live for the present and let future generations look after themselves When I make a promise, I keep it I tend to put my own needs before those of other people
Personal Relations 12 items (Alpha= .83)	<ul style="list-style-type: none"> Friendship, peer acceptance Interactions with others Mutual respect 	<ul style="list-style-type: none"> I tend to be left out of things I find it easy to make friends I am one of the last to be chosen for group activities My work is recognised in the school community Other people seem to think highly of me Other people seem to accept me as I am I enjoy the company of others Other students are friendly towards me I am unpopular with other students I find myself wishing I were different I have arguments with other students I listen patiently to people who disagree with me
Academic & Cultural Achievement 11 items (Alpha= .74)	<ul style="list-style-type: none"> Cultural interests self-learning abilities self-learning interests 	<ul style="list-style-type: none"> I try hard to do well in my studies I make a real effort to learn more about the world I enjoy learning about other cultures I enjoy studying I try to learn from my experience of life I get bored with school subjects I like exploring new ideas I spend time following up things mentioned in class I seem to get good results at school I tend to read novels and other books for personal interest In world events I try to understand all sides of the story
Health & Physical Aptitude 10 items (Alpha= .81)	<ul style="list-style-type: none"> General health & fitness Health promotion habits Athletic ability 	<ul style="list-style-type: none"> I make a real effort to lead a healthy lifestyle I take regular exercise to improve my fitness I find it easy to pick up new skills in games/sport If I could avoid doing exercise I would I avoid taking risks with my health I find hiking and bushwalking easy to do I enjoy outdoor activities I am happy to take on any physical challenge I have difficulty coping with outdoor activities If there is a chance to avoid outdoor activities I take it
Autonomy 10 items (Alpha= .71)	<ul style="list-style-type: none"> Self-reliance Independence Ability to work on your own Take the lead in difficult situations 	<ul style="list-style-type: none"> I am quite happy to work on my own I like to solve my own problems I am confident in my abilities to cope with life When difficult situations arise I prefer others to take the lead I like to make my own decisions I tend to follow my own interests I am capable of organising myself I try to keep control of myself in difficult situations When there is trouble I try to deal with it rather than escape I am happy to take responsibility for my own actions
Environmental Sensitivity 10 items (Alpha= .84)	<ul style="list-style-type: none"> Care for the environment Understanding of environmental issues General habits 	<ul style="list-style-type: none"> I am concerned about the way we treat the environment I do my best to avoid unnecessary waste I go out of my way to clean up the school grounds Before I act I consider how it will affect the environment I get bored with talk about the environment When I buy things I look for products with less wrapping When I go out in the bush, I take special care not to harm any plants or animals When I hear about environmental problems I try to find out the full story I take the trouble to recycle bottles and cans wherever possible When I leave a room I remember to turn off the lights

FIGURE 3.6
SUBSCALES CONTAINED IN THE SCHOOL LIFE QUESTIONNAIRE (SLQ)
(Alpha = .83)

Subscale	Constructs	Items
School Spirit 12 items (Alpha= .79)	<ul style="list-style-type: none"> • Atmosphere of the school • Rules & Regulations • School Pride 	This school is a place where: <ul style="list-style-type: none"> • I feel proud to be a student • I get a great deal of satisfaction from my experiences • I feel uncomfortable and restless • Teachers and students work well together • The teachers are willing to help when I need it • Students try to help each other in difficult situations • I get to know the teachers as real people • Teachers make an effort to understand me • Students are encouraged to be responsible for what they do • Everyone does their fair share of work for the school community • Students work together as a team • The rules and regulations are applied in a reasonable way
Interpersonal Relationships 6 items (Alpha= .71)	<ul style="list-style-type: none"> • Friendship, peer acceptance • Interactions with others • Mutual respect • Unit/dormitory life 	This school is a place where: <ul style="list-style-type: none"> • I like to mix with other students • I get a chance to take the lead in group activities • Unit/dormitory life gets me down • Students try to help each other in difficult situations • I feel free to say what I really think • Students work together as a team
Appropriateness of Curriculum 10 items (Alpha= .40)	<ul style="list-style-type: none"> • Relevance to life & work • Level of satisfaction and interest • Balance between subject areas • Academic rigour 	This school is a place where: <ul style="list-style-type: none"> • The things we learn are relevant to life in general • I get a great deal of satisfaction from my experience • Students are able to develop their skills in a range of subject areas • I get a chance to do work that really interests me • We have an opportunity to study a wide range of subject areas • Students have a chance to explore their own interests in creative arts • Mathematics has a low priority in the total school curriculum • Students learn how to cope with life • Outdoor activities seem to be more important than academic studies • Science has a low priority in the total school curriculum
Quality of Teaching 13 items (Alpha= .80)	<ul style="list-style-type: none"> • Teacher/student interaction • Preparation for life • Enjoyment from learning • Educational expectations 	This school is a place where: <ul style="list-style-type: none"> • Teachers treat me fairly • Students are taught to think for themselves • Teachers and students work well together • I get enjoyment out for learning • The teachers are willing to help when I need it • I get a chance to do work that really interests me • I get to know the teachers as real people • Students are encouraged to be responsible for what they do • Students learn how to cope with life • Students are expected to work hard at their studies • Teachers try to make the work interesting • I really feel interested to learn • Teachers' make an effort to understand me

3.3.2 DEVELOPING & TRIALLING THE QUALITATIVE INSTRUMENTS

At the outset it must be stipulated that the qualitative data collection was considered to be both crucial and complementary to the total evaluation package. As with the quantitative instruments, all qualitative instruments were also trialled and developed on both Glengarry and Timbertop cohorts.

a. Glengarry Trial - 1991

In 1991, structured interviews were conducted with 25 randomly selected students at the end of each semester program seeking detailed comment on their overall impressions of the ESOESP and what specific effects it had produced in them, what events or activities they considered to have been most influential, whether their views on outdoor education had changed during the program, and what impressions they had developed of the formal curriculum, the quality of teaching provided, and the nature of dormitory life at the school.

There were seven interview questions (see Appendix 6). These were open ended and designed to explore in greater depth the ten subscales contained in the RMQ and SLQ. In succinct terms, the interview questions not only attempted to focus on perceived development of the factors articulated in the instrumentation, but also attempted to elicit responses concerning the processes involved in the Glengarry experience.

b. Timbertop Trial - 1992

Following the format outlined in the Glengarry trial, 12 males and 12 females were randomly selected from the 1992 cohort and invited to participate in three structured personal interviews (pre-test, mid-test and post-test). The same seven interview questions used in the Glengarry trial (see Appendix 6) were once again utilized. Information gleaned from the interview sessions was recorded in note form and expanded to full text at a later stage.

Personal observation whenever the researcher was on-site also aided this phase. This was conducted in an unobtrusive manner. Finally, five ESOESP teachers and the ESOESP master were interviewed on specific qualities of participants' personal and social growth. In totality, these aspects formed the basis of the qualitative assessment.

3.4 CIRCUMSTANTIAL CONSTRAINTS ASSOCIATED WITH THE STUDY

The RMQ and SLQ measured participant's self evaluation of their attitudes, values and behaviours. As many researchers would attest, self-report data such as this is plagued with difficulties (Burns, 1979; Heaven, 1994 and McIntyre, 1987). Moreover, when an individual is required to perform a self-evaluation, Burns (1979:55) is of the opinion that "a conscious judgement regarding the significance, and importance of oneself or of facts of oneself" impact upon the final assessment. Inevitably, the accuracy of such responses remains questionable.

There are factors impinging upon self-evaluation, viz: 1) an ideal view of how one would like to be; and 2) distorted perceptions of what others think of them (Heaven, 1994). Moreover, self-report questionnaires such as the RMQ and SLQ which rely on student responses, are questionable in terms of reliability and validity. For instance, do the subjects always tell the truth? Do they confess to their weaknesses? Does the issue of anonymity impact on their responses? Or what about response bias from subjects answering in socially acceptable ways by either under or over reporting? (Harrell, 1985).

The most difficult aspect of evaluation is that of affective learning viz; feelings attitudes and values. Ford (1980:57) corroborates with this statement when she posits that "the elusive nature of the affective domain makes it difficult to show causal relationships between an outdoor program and changes in a student's attitude".

These difficulties are exacerbated by the fact that the study deals almost solely with an adolescent population which can be problematic in and of itself. This aspect is illustrated by Pipher (1995:21) when she posits that "because they (adolescents) are so secretive with adults and full of contradictions, they are difficult to study. So much is happening internally that's not communicated on the surface". The picture is further complicated by the fact that "their surface behaviors are often designed to hide their deep structure needs so that it is hard to find the real issues" (Pipher, 1995:253).

Undoubtedly, gathering reliable and valid self report data from adolescents is a dilemma facing any researcher. In part, this is due to the fact that there is a gap between the "true self" and the "self-perceived self". This is particularly true when dealing with adolescents who have cultural prescriptions which influence their self-rating scores. Quite often adolescents will answer in a way that reflects how they would like to be ideally viewed (viz; false self) rather than revealing the real picture (viz; true self). This concept is acutely true for adolescent females and as Pipher (1995:22) points out "adolescence is when girls experience social pressure to put aside their authentic selves and display only a small portion of their gifts". If this is the case for this research study, then one could assume that some of the data collected is reflective of "false self" assessment.

The onerous and somewhat troublesome task of assessing adolescent attitudes, values and behaviours in an ESOESP is further compounded by the participants perceptions of the "radical" and "unconventional" staff. As Jeremy Madin (1986: 22), an ex-Timbertop headmaster once stated:

It is difficult to know how to go about assessing a programme (Timbertop) that by design is set in what Darling termed a "less clement environment". Fourteen year olds are not always keen about every experience foistered upon them, especially from a rather eccentric band of staff.

Nonetheless, there is evidence to suggest that these problems can be overcome if the researcher ensures confidentiality and anonymity for the subjects. Studies have shown that the majority of

subjects will provide accurate accounts and responses to the questions asked of them when suitable conditions of administration and confidentiality are enforced (Gfroerer, 1985 and Reinisch, Bell and Ellickson, 1991). Likewise, the name of one instrument, viz the "Real Me Questionnaire" was purposely chosen in an attempt to elicit accurate and honest responses from participants in terms of their "real" self. Taking all of these issues into consideration, the researcher paid specific attention to do the following:

1. The researcher personally administered all questionnaires in the students' units during evening study time.
2. At every data collection point, a guarantee of anonymity and confidentiality was given to all subjects. This was achieved by using their account numbers as codes for the duration of the study.

Subsequently, another problem faced by the author was that of assessing the optimal reading length of questionnaires for adolescents. The author was mindful of two issues when constructing the quantitative instruments: 1) too lengthy and you run the risk of boredom creeping into the responses; and 2) too brief and the results maybe superficial and simplistic. Gillis (1994:14) alludes to this difficulty which faces researchers who attempt to delineate program efficacy when he states:

How can the 'scientist practitioner' pull together critical resources while not burdening the client with time consuming interviews, paper and pencil tests and other pokes and prods for information?

Furthermore, due to the longitudinal nature of the study, the development of substantial and lasting effects on personal attitudes, values and behaviour as implied in the objectives outlined in Figure 1.5 (Aims and Objectives of ESOESP's) is no easy task to achieve or measure in valid and reliable terms. Many extraneous variables could account for the changes depicted in participants twelve months after departure. For example, various life crises such as disintegration of the family, the development of intimate relationships, death of a significant other or problems associated with maturation and puberty. All of these confounding variables

come into play when attempting to assess the longitudinal impact of programs on an adolescent population.

Before embarking on the data collection phase, the author was mindful of issues raised by Ford (1980:54) who postulates that:

Evaluation is primarily a subjective process that utilizes the results of a variety of measurements to arrive at a value judgement - an appraisal made according to a set of values. Evaluation should be a means of determining the extent to which the objectives of a program are being accomplished. Therefore, to evaluate a program effectively, one must know exactly what is to be evaluated.

To this end, a precise and coherent research design at the commencement of the study was considered instrumental in alleviating a good deal of the difficulties associated with measuring the impact of ESOESP's upon adolescent participants.

3.4.1. MAIN ASSUMPTIONS

Given the constraints mentioned earlier, the author assumes:

1. All items in the questionnaires are answered honestly and thoroughly.
2. The instruments are both valid and reliable for collecting data.
3. The reading age of Year 9 students matches the maturity level of the questionnaire wording.
4. Students who were the personal interview cohort provided trustworthy and genuine comments.
5. Teachers and parents provided information to the best of their ability.
6. The ESOESP's are assumed to offer a positive and comprehensive program.
7. The test/re-test situation does not produce boredom and irrelevant responses.

3.4.2 LIMITATIONS

This study has several limitations, namely:

1. No control group. Despite extensive efforts to locate suitable control groups, no control group could be found in Victoria which provided an identical match to the experimental groups.
2. It is difficult, if not impossible, to control for extraneous factors such as maturation, family background, ethnic origin, life crises, socioeconomic factors, and personality type.
3. Objectivity is critical. This may be difficult due to the researchers' emotional affiliation with the topic (that is, "seeing" what you want to see or "interpreting" a situation in a positive light).
4. The experience will have varying effects on different participants.
5. The study deals with case studies however, generalisations will be made as the sample size is large and a pluralistic evaluation model employed.
6. There will be self-select bias due to the fact that the majority of students have voluntarily enrolled themselves in the program. If there were any doubts about their inner strength and fortitude prior to the commencement of the ESOESP students would have opted out of the program before Year 9.
7. The qualitative data may not be a true indication of the program effectiveness, due to the fact that females disclose their inner feelings more readily than males.

3.5 METHODS OF DATA ANALYSIS

In research, some variables are antecedent whilst others are consequent. The variables which are consequent upon antecedent variables are referred to as "dependent" variables, and the variables which are antecedent to the dependent variables are termed "independent" variables

(Huck, Cormier and Bounds, 1974). The major dependent and independent variables requiring measurement for the purpose of this study are identified in Figure 3.7.

FIGURE 3.7: THE CATEGORY OF VARIABLES

Independent Variables	Dependent Variables
<ul style="list-style-type: none">• Gender• Time• Cohort	<ul style="list-style-type: none">• Autonomy• Social Responsibility• Personal Relations• Health & Physical Aptitude• Academic & Cultural Achievement• Environmental Sensitivity• Appropriateness of Curriculum• Quality of Teaching• School Spirit• Interpersonal Relationships• Fitness Levels

The following section is a brief account of the qualitative and quantitative data sources and their methods of analysis. A thorough breakdown of the methodologies employed in the case study's data collection is contained in Chapter 4.

3.5.1 THE QUANTITATIVE DATA

A Statistical Package for Social Scientists (SPSSx) was utilized to perform the necessary data analysis on all quantitative data sets. The data was ordinal and ranged from one to five. When writing the statistical programs, all negatively worded items were recoded ensuring that the data was entered in the appropriate fashion.

A. REAL ME QUESTIONNAIRE AND SCHOOL LIFE QUESTIONNAIRE

In 1993 and 1994 the ESOESP provided the researcher with a list a students with their corresponding identification number. All subjects were coded for the entirety of the study using their assigned student identification number. These codes allowed individual data to be entered

into the computer in an anonymous fashion. This aspect was conveyed by the researcher to the students each time a quantitative assessment was administered.

Data gathered was initially dealt with in a descriptive manner. Then to assess possible significant shifts in each of the subscales the following statistical tests were conducted on the two cohorts:

a. 1994 COHORT

In order to ascertain whether the ESOESP had an impact upon participants (that is pre-test, mid-test and post-test) an A X B X (C X S) two-way repeated measures mixed model analysis of variance (MANOVA) was carried out on the self-report data contained in the RMQ and SLQ, where A represented time, B represented gender and C represented the subjects with time.

b. 1993 COHORT

As for the 1994 cohort, however an extra data point (follow-up test) was also analysed as an additional independent variable.

B. FITNESS DATA

Physical fitness of students was assessed by measuring their completion time over a set cross country course designated at the ESOESP. Measurements were taken at the beginning (pre-test score) and end (post-test score) for each participant. Data was analysed descriptively and inferentially using a t-test for paired samples.

C. PARENT QUESTIONNAIRE

The PQ was only given to the parents of the 1993 cohort. To ensure anonymity yet again, all questionnaires were coded before being sent to the respective parents. The data was treated descriptively for every item with means and standard deviations being reported.

3.5.2 QUALITATIVE DATA

The qualitative data was collected by a number of methodologies viz: 1) personal interviews; 2) log book analysis and time line charts; 3) personal observations; 4) teachers' perceptions; and 5) parents' perceptions.

A. PERSONAL INTERVIEWS

As noted earlier, students were randomly selected from the experimental group and invited to participate in three structured personal interviews (pre-test, mid-test and post-test). Appendix 6 outlines the interview questions. In addition, the 1993 cohort was also interviewed 12 months after their departure (follow-up test). The researcher also conducted the final follow-up interview with seven open ended questions being the basis of data collection (see Appendix 9). Each individual interview took roughly ten minutes to complete. The data was recorded by hand and then transcribed into full text at a later stage.

Progressively, the researcher built a close rapport with the interview students. Interestingly, as their stay at the ESOESP drew to a close, there was a definite bond between the two (interviewer and interviewee). In fact, so close at times, that the students were disclosing their unruly behaviours and antics undertaken during their stay. More importantly however, these sessions allowed the researcher to explore in greater depth the subscales contained in the RMQ and SLQ. As stated earlier, information gleaned from the sessions was recorded in note form.

The emerging general trends and themes became increasingly clearer as each data collection session unfolded.

B. LOG BOOK ANALYSIS AND TIME LINE CHART

In addition to the personal interviews, a new and novel method of data collection was attempted with the 1993 cohort. Timeline charts (provided by the researcher) were utilized at the end of the ESOESP experience. These involved the subjects reflecting upon their log book entries and then charting their ESOESP experience month by month on a graph (see Appendix 7). This took place at the completion of the ESOESP. Specifically, students were requested to pinpoint the emotional highs and lows of the year. From this data, general trends were recorded along with variations between the sexes.

C. PERSONAL OBSERVATIONS

Whilst visiting the outdoor education campus, the researcher paid specific attention to note student behaviours and attitudes. Remaining as unobtrusive as possible, the researcher took field notes on a number of themes. These included group dynamics, willingness to undertake tasks and chores, general ambience within the units, gender differences, school ethos and spirit, respect for teachers, interest in the academic curriculum, ability to perform environmentally friendly habits and general harmony within the ESOESP. Themes were analysed and cross referenced to subscales in the RMQ and SLQ along with some items in the PQ.

D. TEACHER PERCEPTIONS

This method of data collection was only undertaken on the 1993 cohort. A list of student names used for the personal interview session were handed to five teachers. The teachers noted general trends in the students' attitudinal and behaviour change on these sheets along with brief

summaries of their application to the ESOESP. The results were used to triangulate the data arising within the general findings of the study.

E. PARENTS PERCEPTIONS

As with the case above, only the 1993 cohort was subjected to this form of data collection. The structure of the final question on the PQ allowed for parents to make comments on issues surrounding their perceptions of their child's development as a direct consequence of involvement in the ESOESP. The parents' responses allowed the researcher to explore in greater depth the subscales contained in the RMQ and SLQ. The results were then used to triangulate the data arising within the general findings of the study. The last question on the PQ being open-ended in design, was recorded in broad themes relating to the dependent variables. In the main, these focused around the degree of satisfaction parents felt they obtain from their child's exposure to an ESOESP .

3.6 DEFINITION OF SUBSCALES

The analysis of both the qualitative and the quantitative data sets were guided by the subscales contained in the RMQ and SLQ. To minimise the potential confusion that could arise in the analysis of results given in Chapters 5, 6 and 7, this chapter concludes with a definition of the subscales. A thorough overview of the definitions contained in each subscale is provided in Figure 3.8. The subscales and their respective interpretations will then be used as a basis for discussion in proceeding chapters.

FIGURE 3.8: DEFINITION OF SUBSCALES

- **Social Responsibility**

In simple terms, this explored the students' "response-ability" - or ability to respond to the needs and interests of others. More specifically, this assessed their ability to help other people, by examining their levels of understanding and tolerance of different views, self-discipline and delayed gratification, and co-operation and fairness in their dealings with others.

- **Personal Relations**

This centred around an investigation of students' perceptions of how others viewed them, their popularity and inclusion in activities, peer acceptance, levels of mutual respect and friendships, and an assessment of their argumentative nature.

- **Academic and Cultural Achievement**

This related to the amount of effort they invested in their studies along with their self-learning abilities and interests. Cultural interests and boredom with school subjects were also investigated.

- **Health and Physical Aptitude**

Aspects associated with students' general health and fitness were analysed. Their health promotion habits, athletic prowess and ability, and enjoyment in outdoor activities also formed the basis of examination.

- **Autonomy**

This explored the students' perception of their self-reliance and ability to take the lead in difficult situations. Levels of independence and organisational skills, along with their ability to work on their own and take responsibility for their own actions were also assessed.

- **Environmental Sensitivity**

This involves an examination of the students' perceptions of their own attitudes, values and behaviours for the environment, their understanding of environmental issues and their environmentally friendly habits.

- **School Spirit**

This referred to the general atmosphere of the school, the students' perceptions of the rules and regulations, whether they were proud of their school and the general ambience of the ESOESP.

- **Interpersonal Relations**

This related to aspects of interactions with others, for example teamwork, friendships, peer acceptance, mutual respect and unit life.

- **Appropriateness of Curriculum**

This explored students' perceptions of the curriculum in regard to its relevance to life and work, the balance and range of subject areas, the level of satisfaction and interest in the school work and the academic rigour of the ESOESP.

- **Quality of Teaching**

This examined the level of teacher and student interaction and reciprocity, the amount of enjoyment the students received from learning in an ESOESP and an assessment of students' perceptions about whether the educational expectations associated with ESOESP's were being met.

Chapter 4

CASE STUDY: TIMBERTOP

This chapter provides the reader with an in-depth analysis of the Timbertop experience. The latter half of the chapter deals specifically with the research questions of this study. A detailed description of the research design assigned to the two Timbertop cohorts forms the remaining section of the chapter.

4.1 BACKGROUND TO TIMBERTOP

Timbertop, located near Mansfield on 248 hectares, is an innovative ESOESP for boys and girls attending the Geelong Grammar School, Victoria, Australia. It is a fee-paying private school with students primarily coming from affluent backgrounds. Founded in 1952 by Sir James Darling, Timbertop was originally conceived as an experiment (Montgomery and Darling, 1967). In the first instance, it was a single-sex school for boys in Year 10 (average age 15-16 years). It became co-educational in 1976 when the school admitted girls from Highton and Glamorgan (Tyler, 1992). Timbertop now provides an outdoor education experience for the entire Year 9 student population (average age 14-15 years), each of whom spends their full academic year in residence.

The demographic make-up at the commencement of the Timbertop year could best be described as "eclectic". Students arrive at Timbertop through one of two avenues viz: 1) entering after attending Year 8 in one of Geelong Grammar schools' feeder schools such as Glamorgan, Highton or Corio; or 2) as a new student coming from any number of private or public schools

scattered throughout the nation. Timbertop attracts pupils from every state in Australia as well as a small contingent from overseas countries such as Hong Kong, Thailand and Malaysia. According to Tyler (1992) roughly 12 per cent of the total school population comes from abroad.

Whilst involved in the ESOESP, students reside for seven days a week on campus engaging in a variety of outdoor activities whilst at the same time maintaining the normal academic curriculum for Year 9 pupils in Victorian schools. The academic year is roughly over four ten-week terms interspersed by either two or three weeks of school holidays when the students return home.

The outdoor education component of the Timbertop program involves on average, at least three days per week, and may extend up to six days for major expeditions. The comprehensive timetable of activities conducted at Timbertop during a full academic year is contained in Appendix 8. Regular activities at Timbertop include cross-country running, hiking, cross country skiing, canoeing and a number of locally developed games, both team based and individual, appropriate to the outdoor setting. Each student is required to undertake a solo camping experience near the school, and is assigned to assist one of the local organisations or employers in a community service project. Weekly activity sessions are also included to cater for a variety of hobbies, sports and other personal interests (Gray and Patterson, 1995). Ricketson (1993:26), summarizes the experience in the following way:

By the end of the year, a Timbertop student will have struggled through hundreds of kilometres in some of the most remote and rugged bush in Australia (the high country in Victoria's north-east) have completed a 30 km marathon, have been taught basic bushcraft and learnt the simple truth that unless they or one of the other kids in their unit chop wood for the boilers every day, there are no hot showers.

Students are assigned to "units" which are self-contained living quarters for roughly 15-16 students. It is a spartan existence as there are no curtains, central heating or fly screens. The New York Herald Tribune noted on Charles' arrival that "Timbertop is one of those curious

schools where the bleakness of life is in direct ratio to the cost of tuition", (cited by Ricketson, 1993:26).

Once designated to a unit, students need to learn to live with one another. Water is heated from wood burning boilers and students are responsible for the managing of their daily routine such as housekeeping, study regimes, collecting and chopping the fuel for water or the open fire places which heat the unit. Team work, interpersonal relationships and social responsibility are central to the Timbertop philosophy (Tyler, 1992).

The severity of the elements is heightened by the geographical location of Timbertop. Literally, the place bakes in the summer heat and freezes during the snowy winter months. But this is all part of the spartan approach and ideology. As McArthur and Priest (1993:19) explain "herein lies the nexus of the Timbertop experience - people learn to live with the reality of consequences due to their actions (or inactions)". Quite clearly, if someone within the unit shirks their assigned job or responsibility for the week, then this impact is felt not only within the unit, but in the broader school community.

Parents are only permitted to visit their child once every ten weeks. In many ways, students are "cocooned" in an existence which is devoid of the many creature comforts and trappings of our modern buffered society. Access to telephones or television is denied, and outside contact is maintained through letter writing or reading the daily newspapers. Quite clearly, the students undergo "withdrawal" symptoms as they are weaned off junk food, television, walkmans and computer games - but it is all part of the Timbertop philosophy.

Students have an integral role in the maintenance of the fabric of the school. Timbertop does not employ domestic help as the students are responsible for duties that would gladden a mother's heart such as cleaning, sweeping, scrubbing toilets, emptying rubbish and serving meals. On a rotational basis, members of each unit are assigned to various jobs such as mail room, recycling, "slushie" in the mess hall, maintaining the school grounds, or unit leader - just

to name a few. In many respects, Timbertop is representative of a microcosm of society, and each individual member must pull their weight to ensure the smooth running of their unique school community.

As such, it can be seen that Timbertop is imbued with the educational philosophy of Kurt Hahn. For the most part, students emerge from their sojourn to the bush with an observable mental and physical development. Similarly, their skills in time management, self-reliance, interpersonal relationships and community living have made appreciable gains. McArthur and Priest (1993:19) believe that Timbertop is instrumental in fostering:

....the development of initiative, personal integrity, courage, imagination, leadership, self-esteem and a sense of community...(a) heightened self confidence, greater facility in problem solving and a stronger appreciation of the natural environment.

The uniqueness of Timbertop is magnified by the fact that it integrates over 200 pubescent girls and boys into one residential setting. The logistics alone would normally be a recipe for disaster, however, according to a past master of Timbertop, Simon Leslie - the large scale program works (Leslie, 1993). He argues that "whatever the problems inherent in having 200 adolescent boys and girls living together for a year in the remote bush, they are far outweighed by the benefits" (cited by Ricketson, 1993:26).

Moreover, Leslie (1993:32) succinctly conveys the uniqueness of the program when he states that "Timbertop stands alone as the only school to remove a full year group away from the main campus and isolate it for a complete academic year". Added to the equation is the mixed gender make-up of the school. For this reason, Timbertop provides a useful comparison between male and female participants. Differential gender outcomes in and of itself are considered to be an intriguing aspect of the study.

Anecdotal evidence suggests that gender differences are evident (Gray and Patterson, 1995). Preliminary conversations held by the researcher with the teachers at Timbertop indicated that

boys initially found the transition into an ESOESP to be quite difficult. Whereas the girls were more successful in the formative stages of the program. They were perceived to be more resilient and accepting of the ESOESP. Clearly however, the teachers believed that the majority of the students benefited from the experience provided by the school.

In summary, Timbertop provides a unique school environment for private secondary students. Many believe it is a microcosmic model of real life. Further, it is an incubator for personal and social growth. At the completion of the Timbertop year, students complete their next three years of education at Corio, Geelong Grammar's senior school. It is envisaged that the graduates of Timbertop are self-confident, autonomous and socially responsible and able to approach further studies with perseverance and determination. In many respects, Timbertop represents a unique case study in its own right. One of the unique opportunities presented is to identify potential positive aspects associated with female involvement in ESOESP's within a traditionally male dominated domain.

4.2. THE RESEARCH QUESTIONS

Following an analysis of the aims of ESOESP's, the key elements appeared to be directed towards fostering self-directed learning, an enterprising curiosity, an undefeatable spirit, a sense of community belonging and positive personal relationships (Ryan and Gray, 1993). In light of this information, program impact was measured through the ten subscales: 1) autonomy; 2) academic and cultural achievement; 3) personal relations; 4) environmental sensitivity; 5) health and physical aptitude; 6) social responsibility; 7) school spirit; 8) appropriateness of curriculum; 9) quality of teaching; and 10) interpersonal relationships. These were representative of the dependant variables and have direct implications for the ensuing research questions.

The research questions are many and varied, specifically however the questions are:

Question 1:

Did the Timbertop experience favourably enhance the attitudes, values and behaviours of participants over the initial 12 months in terms of:

- 1.1 Social Responsibility?
- 1.2 Personal Relations?
- 1.3 Academic and Cultural achievement?
- 1.4 Health and Physical Aptitude?
- 1.5 Autonomy?
- 1.6 Environmental Sensitivity?
- 1.7 Appropriateness of Curriculum?
- 1.8 Quality of Teaching?
- 1.9 School Spirit
- 1.10 Interpersonal Relationships?

Question 2:

Did the Timbertop experience produce differential gender outcomes in terms of:

- 2.1 Social Responsibility?
- 2.2 Personal Relations?
- 2.3 Academic and Cultural achievement?
- 2.4 Health and Physical Aptitude?
- 2.5 Autonomy?
- 2.6 Environmental Sensitivity?
- 2.7 Appropriateness of Curriculum?
- 2.8 Quality of Teaching?
- 2.9 School Spirit
- 2.10 Interpersonal Relationships?

Question 3:

Did Timbertop improve the fitness levels of participants?

Question 4:

Was there a residual effect from the Timbertop experience in the 12 month follow-up data in respect to:.

- 4.1 Social Responsibility?
- 4.2 Personal Relations?
- 4.3 Academic and Cultural achievement?
- 4.4 Health and Physical Aptitude?
- 4.5 Autonomy?
- 4.6 Environmental Sensitivity?
- 4.7 Appropriateness of Curriculum?
- 4.8 Quality of Teaching?
- 4.9 School Spirit
- 4.10 Interpersonal Relationships?

Question 5:

Did the perceptions of parents and teachers validate the self-report data of the participants?

4.3 THE RESEARCH DESIGN

As mentioned earlier, this study has a quasi-experimental research design. Using grounded theory, the 1993 and 1994 Timbertop cohorts were tracked longitudinally in an attempt to address the research questions. Grounded theory allowed the researcher to gather the empirical data and systematically arrive at a coherent conceptual framework (Cohen and Manion, 1986). The search for meaningful relationships between the variables, and being able to more fully explain the richness and complexity of human behaviour within ESOESP's, was attained by studying it from more than one standpoint, viz triangulation. The research design followed a conventional pre-test/treatment/post-test design and as such, is referred to as a time-series design. According to Huck et al, (1974:309) "these designs are excellent techniques for researchers wishing to evaluate the effects of a *planned treatment*". Each cohort will be addressed individually as there are slight differences in the research design applied to the two cohorts.

4.3.1 THE 1993 COHORT

Data was gathered from the 1993 cohort (n=201) and assessed both qualitatively and quantitatively. At the beginning of the year the researcher gathered background information on every student. This was obtained from a one page sheet which investigated specific issues relating to their prior experience before entering the ESOESP (see Appendix 10). The information was coded and cross referenced for future data analysis.

1993 COHORT QUANTITATIVE DATA

The entire population of the 1993 cohort (n=201, females=73, males=128) were investigated (with a 100% response rate) for a full academic year whilst in residence at Timbertop. The RMQ and SLQ, being pen and paper tests were administered in February (pre-test), June (mid-test) and December (post-test) during the year. In an attempt to gather longitudinal data, the RMQ and SLQ were re-administered in December 1994 (follow-up test). This facilitated an examination of the residual effects of the ESOESP twelve months after departure.

A parent questionnaire (PQ) was mailed to all parents (n=228) along with a reply paid envelope in August 1994 to assess the long term or residual impact of the ESOESP on their child. The PQ was completed by 124 parents thereby achieving a response rate of 55%. This response rate was deemed adequate for this study as the window of opportunity for return was narrow.

Health and fitness data was obtained from run times around a set 1.6 kilometre course. Pre-test scores were recorded upon arrival at Timbertop. Post-test scores were taken in the week leading up to the students' departure.

1993 COHORT QUALITATIVE DATA

In an attempt to triangulate the data and further strengthen the research design, several qualitative data gathering techniques were adopted. These included: a) personal interviews, b) time line charts and log book reflection, c) personal observations, e) teachers' perceptions of changes in the interview group, and e) parents' perceptions contained in the last question of the PQ.

A. PERSONAL INTERVIEWS

Twenty four students (12 male and 12 female) were randomly selected at the beginning of the ESOESP and longitudinally tracked using personal interview. A series of specifically developed questions were explored during the interviews (see Appendix 6). The interviews were conducted in tandem with the quantitative assessments, viz February (pre-test), June (mid-test) and December (post-test) during 1993, and December, 1994 (follow-up test).

B. LOG BOOK ANALYSIS AND TIME-LINE CHARTS

During the final visit in 1993, the personal interview students were requested to complete a time-line chart provided by the researcher. This involved reflecting upon their log book entries and charting their kaleidoscope of emotions month by month as the year unfolded. An example of a time-line chart is given in Appendix 7.

C. PERSONAL OBSERVATIONS

During the repeated visits to Timbertop, the researcher was able to personally observe the daily routines and functions of the students. It provided another "window" through which valuable data was obtained.

D. TEACHERS' PERCEPTIONS

The master at Timbertop along with five teachers were interviewed in December 1993 to ascertain changes in values, attitudes and behaviours in the personal interview group.

E. PARENTS' PERCEPTIONS

The structure of the PQ allowed for parents to make comments on issues surrounding their perceptions of their child's development as a direct consequence of involvement in the ESOESP. The parents' responses allowed the researcher to explore in greater depth the subscales contained in the RMQ and SLQ. The results were then used to triangulate the data arising within the general findings of the study. The complete testing schedule for the 1993 cohort is illustrated in Figure 4.1.

FIGURE 4.1: OUTLINE OF THE 1993 COHORT TESTING PROGRAM

Measure	1993	1994
Real Me Questionnaire (RMQ)	Feb 93; Jun 93; Dec 93	Dec 94
School Life Questionnaire (SLQ)	Feb 93; Jun 93; Dec 93	Dec 94
Fitness Data	Feb 93; Dec 93	-
Personal Interview	Feb 93; Jun 93; Dec 93	Dec 94
Personal Observation	Feb 93; Jun 93; Dec 93	Dec 94
Time Line Chart/Log Book	Dec 93	-
Parent Questionnaire (PQ)		Aug 94
Teacher Interview	Dec 93	

4.3.2 THE 1994 COHORT

Data was gathered from two hundred and eight subjects (female n=80, male n=128) and assessed both qualitatively and quantitatively.

1994 COHORT QUANTITATIVE DATA

Identical to the 1993 cohort, the entire population of the 1994 cohort were investigated for a full academic year whilst in residence at Timbertop. As with the 1993 cohort, the RMQ and SLQ were administered in February (pre-test), June (mid-test) and December (post-test) during the year. Pre and post-test run times were also obtained using the same methodology. However, as the 1994 cohort was utilized as a subsample, parental input were not gathered from this cohort.

1994 COHORT QUALITATIVE DATA

Twenty four students (12 male and 12 female) were randomly selected and tracked using personal interview, log book analysis and time-line charts. The testing schedule depicted in Figure 4.2 displays the quantitative and qualitative information.

FIGURE 4.2: OUTLINE OF THE 1994 COHORT TESTING PROGRAM

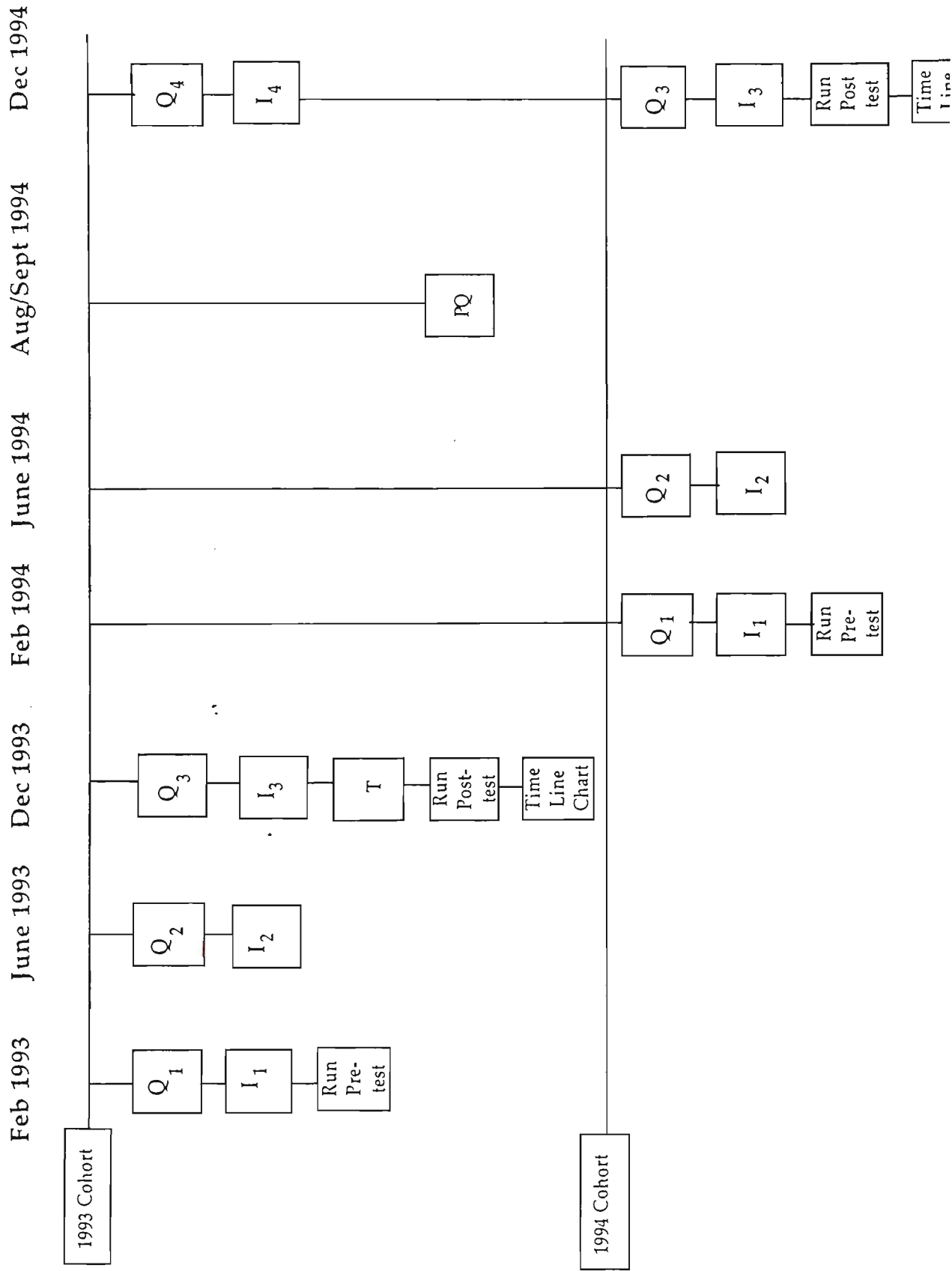
Measure	1994
Real Me Questionnaire (RMQ)	Feb 94; Jun 94; Dec 94
School Life Questionnaire (SLQ)	Feb 94; Jun 94; Dec 94
Fitness Data	Feb 94; Dec 94
Personal Interview	Feb 94; Jun 94; Dec 94
Personal Observation	Feb 94; Jun 94; Dec 94
Time Line Chart/Log Book	Dec 94

Finally, the total evaluation model for both the 1993 and 1994 cohorts is shown diagrammatically in Figure 4.3.

FIGURE 4.3: 1993 & 1994 TIMBERTOP TESTING SCHEDULE

PQ = Parent Questionnaire
T = Teacher Input

TIMBERTOP



Chapter 5

PERCEPTIONS OF THE ESOESP:

THE 1993 COHORT'S RESULTS AND DISCUSSION

This chapter is confined to an analysis of the qualitative data for the 1993 cohort. Each cohort will be dealt with individually and then an attempt will be made to interweave the emerging and consistent threads at the end of Chapter 6. As outlined in Figure 3.1, the qualitative data for the 1993 cohort had five methods of data collection. These included: 1) personal observations; 2) personal interviews; 3) log book analysis and time-line charts; 4) parents' perceptions; and 5) teachers' perceptions. Within this chapter, all five are addressed individually and presented by chronological reference points to assist with the provision of this data.

The subscales contained in the quantitative assessment viz: social responsibility, personal relations, autonomy, health and physical aptitude, environmental sensitivity; academic and cultural achievement; school spirit; quality of teaching; interpersonal relationships; and appropriateness of curriculum were used as cornerstones for the qualitative assessment. In short, the qualitative data exposes some interesting and significant findings. There were both commonalities and incongruencies within the 1993 cohort's responses when it came to investigating the constructs being studied. These will be elaborated upon as the chapter unfolds.

As stated in Chapter 4, the commencement of the Timbertop year is rather foreign and daunting for most students. They arrive at the ESOESP either as a student from one of three

Geelong Grammar's feeder schools (Corio, Glamorgan or Highton), or as a newly enrolled student from any school scattered throughout Australia or the globe. Given this scenario, students are initially confronted with a barrage of new and unfamiliar faces. At best, some students will have spent Year 8 with only a handful of their peers. Consequently, the chance of being placed in a unit with close friends is extremely remote.

It is not surprising therefore, that at the commencement of the academic year the students interviewed for this study generally made comments about the agitation and discomfort they experienced at the ESOESP. For the majority, their state of dissonance was also heightened by general anxieties associated with entering a boarding school for the first time in their academic life. Unquestionably, many approached their Timbertop year with a mixture of trepidation and excitement.

Lastly, to avoid any potential ambiguity in this chapter, when students make reference to "Corio", they are referring to Geelong Grammar School's main campus. They will complete Years 10, 11 and 12 of their formal education at this site after graduating from the ESOESP.

5.1 1993 COHORT BACKGROUND INFORMATION

As is the case in any school, yearly intakes may differ markedly from one group to another. Anecdotal evidence gleaned from the teachers indicated that the 1993 cohort was "one of those years" - in other words, on the whole, the year was considered to be rebellious, uncompromising, and resistant. The unruly, recalcitrant and unacceptable behaviour of some students resulted in several suspensions and expulsions during the year. As far as the 1993 cohort was concerned, 24 students (12 males and 12 females) were involved in the personal interviews at the beginning of the year. However, only 22 remained at the end of the academic year as two males were expelled for their misdemeanours.

5.1.1 PERSONAL OBSERVATIONS

The protocol followed during the personal observation phase was outlined in Section 3.5.2. The most striking feature associated with the personal observation phase was the kaleidoscope of emotions witnessed throughout the year. At both a covert and overt level, the students went through an emotional roller coaster ride. This phenomenon is best represented chronologically as the academic year unfolded, that is February (pre-test), June (mid-test) and December (post-test) of 1993 followed twelve months later by December 1994 (follow-up test).

February 1993

Early in the program, the most significant difficulty encountered by the majority of students was the lack of spare time made available to them. This was compounded by their perceived regimented lifestyle and there were frequent comments such as "we don't even get a 47 second fart break". For the most part, this was associated with the highly ordered and structured routines which, according to their perceptions, had been "lumbered and foistered" upon them at the commencement of the ESOESP. Most behaved in such a manner which seemed to indicate a high level of agitation, disillusionment and bewilderment about the intensity of the program. Some questioned their "stick-ability" and wondered if they possessed the inner fortitude to endure one year of this so-called "hellish" existence. Interestingly, from personal observations, the large majority of females appeared to handle the transition into their new environment more comfortably than their male counterparts. This viewpoint is also reinforced by Leslie cited by Ricketson (1993:26)"they (the girls) tend to pick up on the philosophy of Timbertop more readily and sometimes help the boys early on when they are struggling to adjust".

June 1993

According to the staff, June is notoriously a depressive time as students are very much homesick and disenchanted. The weather is cold, bleak and miserable. The harshness of the season seems to exacerbate the stress associated with the end of term two exam period. Most are looking forward to the fast encroaching school holidays and the chance to return to their families and friends. There is a general ambience of "when will this ever end?" transcending the campus. Nonetheless, even though the mid-year was considered to be a "down" time in the year, the hardships students endured during this period were an integral component of the ESOESP. Adversity and hardships were evident in their comments, but from inner pain came great things. The researcher noted that students progressively grew in terms of self-responsibility, fitness, self-discipline and autonomy as a consequence of the pain endured.

December 1993

By this stage, students have encountered cross country skiing, canoeing, running a marathon and spring hiking in the majestic high country surrounding the campus. The atmosphere of the ESOESP has undergone a miraculous transformation. There was a renewed energy and vitality associated with the school spirit. Interestingly, there was an apparent reluctance to leave the school and almost every participant commented on the positive nature of their sojourn to the bush. Statements such as "I'm going to miss this place when I leave" were the norm rather than the exception. By now there has been a general acceptance of the rules and regulations, and ironically, many value the highly ordered structure of the ESOESP and wouldn't change a thing.

Probably the most noteworthy feature associated with the final day as the students board the buses to return to the main campus, is the flood-gate of emotions which surface. Tears of joy and sadness are shared by both students and teachers alike. The sense of personal accomplishment heightens the emotional nature of this phase. The students' rite of passage had come to fruition.

December 1994

Observing the students back in mainstream society was somewhat of a culture shock. On a tangible level, the most notable being the fact that this was the first time that they were dressed in their school uniform - a far cry from the baggy clothes and hiking boots which were very much part of the Timbertop culture. Secondly, there was a new-found maturity and confidence evident in their responses as they reflected upon the experience. Invariably, the impact of the ESOESP had been positively etched in their memories. Furthermore, many students made the comment that they would do it all again tomorrow if they were given the chance.

5.1.2 PERSONAL INTERVIEW

The personal interviews were conducted in February (pre-test), June (mid-test) and December in 1993 (post-test) and again in December, 1994 (follow-up test). For the most part, they provided an ideal opportunity to investigate the students' innermost thoughts and feelings. As the year progressed, it was clear that their attitudes waxed and waned. The winter months compounded by mid-year exams, appeared to intensify the home sickness and general anxieties within students. The teachers reaffirmed this point and felt that the second term was the most difficult period for students. They indicated that this term was a psychological hurdle and if they could get through this period, the next two terms were relatively easy. This was also evident in the interviews conducted at the end of the year where a new-found love for the ESOESP had emerged in their responses.

To assist the reporting phase, the results of the personal interviews have been presented in two ways. Firstly, a section containing general comments which describe the total program impact of the ESOESP and secondly, by using the categories contained in the subscales of the quantitative data viz: health and physical aptitude; personal relations; social responsibility;

autonomy; academic and cultural achievement; environmental sensitivity; school spirit; quality of teaching; interpersonal relationships; and appropriateness of curriculum.

Lastly, the gender breakdown of the 22 students who remained in the interview group at the completion of the ESOESP were 10 males and 12 females.

5.1.2.1 GENERAL COMMENTS

At times, the interview group gave "global" answers which made it very difficult to tease out the issues inherent within the research questions and hypotheses. For this reason, the first section includes statements by students which pertain to the acquisition of general life skills rather than the specifics contained in the individual subscales.

February 1993

Divergent views which included both positive and negative comments were evident in February as the new intake commenced their ESOESP. The most noteworthy feature associated with the interview responses early in the year was that the students' made very brief and succinct comments. This was primarily attributed to the fact that they lacked substantive evidence to quantify their perceptions. The following statements exemplify their superficial interpretations of the experience at the beginning of the year .

- | | |
|------------|--|
| Student 1 | It is a chance of a lifetime, and I am one of a fortunate few who can be up here. (Male) |
| Student 4 | I am boarding for the first time in my life, so being away from home will be a big challenge. Its much more peaceful I don't have dad telling me I'm a slob all of the time. It is nice not to have pressure from your parents. (Male) |
| Student 3 | First time that I have been a boarder and haven't had to catch a bus to and from school. (Female) |
| Student 21 | It is like I'm living in my own house, but it is pretty cramped. (Male) |
| Student 5 | Nearly all of our unit have had trouble adjusting in the early stages. I don't know if the experience will be good or bad - it will probably be a fantastic year, but I just can't see it at the moment. (Female) |
| Student 19 | Sometimes I just get sick of people and the routines. (Female) |

- Student 6 The meals aren't like what I'm used to having. (Female)
- Student 14 It is strange not having access to creature comforts or junk food. (Male)

June 1993

By June, the researcher noted that roughly 50%-60% of the interview group were more tolerant of the ESOESP and accepting of its associated regimentation. Some were beginning to enjoy their experiences. However, their responses are for the most part, succinct in nature. Perhaps this can be attributed to the fact that they have not at this stage, had the opportunity to process the experience at a meaningful level. Typical responses at this period were:

- Student 14 At Timbertop, everything is here for a reason. (Male)
- Student 20 Hey, I'd like to change lots of things, but this place wouldn't work then. (Female)
- Student 5 You walk around "blank" for the first few days at the beginning of the year. Everyone told me I'd love it - but I'm afraid I didn't early in the piece ...it was really hard work. It is getting much better now though. (Female)
- Student 7 First term I didn't enjoy it, now it is great. (Male)
- Student 16 This place pushes you, but at the same time there is a sense of accomplishment. (Female)
- Student 17 It is worthwhile, hard and fun. (Male)
- Student 20 I like it and I'll be sad to leave. I'd like to bring my mum up here so she could actually see what I do each day. (Female)

December 1993

The most striking feature at the conclusion of the ESOESP was the relative maturity and resourcefulness of the group. An amazing sense of personal accomplishment was evident within the small school community. Their descriptive and somewhat verbose answers appeared to flow from the heart. Students needed very little prompting by the researcher in order to clarify the essence of their statements. Moreover, they spoke with passion and insight about their year at Timbertop.

- Student 5 I'm grown up - I know who I am now.....it is weird, this place makes you think about everything more. Timbertop has a strange "magical" power that you don't realise at the start - you hate it but then you look back on it and it is

unreal like running up mountains. I've enjoyed the boarding - in some respects the freedom was taken away but it was given back in another way - you feel really safe here. It has had a huge impact on me - I'm more "together" now. It has been one of the best years of my life. It is an experience that everyone should go through. Different, very different. You have to stick at it until the end - it is important that you have to experience it. It is best to come here with no expectations - but it is unreal - unreal friends - big achievements. I've got so many regrets - I'd do it all so differently if I did it again. You have to get used to this place before you can enjoy it. (Female)

- Student 12 I appreciate my free time and holidays now - I use my time much more wisely. All those hard things in the beginning seem so trivial now. In the end, you get so much satisfaction from the experiences because you've done it yourself. I guess I've been "Timbertopized". (Female)
- Student 11 Timbertop is "special". Unique. It only happens once in your life. There will be emotional highs and lows throughout the year - but it is worth it. (Female)
- Student 9 It is hard to believe it is nearly over - at the beginning of the year the end seemed nowhere in sight. Now here we are about to do the marathon and I wonder where the year has gone - it's just flown. It is a place where you learn to be sociable and responsible. There is a lot of physical activity and even though some bits are hard, most of it is fun. It is great to look back on all the things you have done and you feel so much better about yourself when you've overcome a challenge. A great experience. (Female)
- Student 1 There are many benefits throughout the year - you learn to live by yourself without others, and a place where it is totally different to a normal school - like the runs and hikes. The routine is different. Later in life you will cope better, you accept others for what they are - because you are forced to live with them. A worthwhile year and I advise others to send their children here. (Male)
- Student 3 Full of fun activities and new experiences that you can't get anywhere else. You learn to appreciate nature when you are in the surrounding area. It helps you to live with others and be independent in your own little world up in the hills. (Female)
- Student 14 I found out much more about myself - I can do things that I thought I never could. Now it is behind you, it hasn't been as difficult as you expected it to be. (Male)

December 1994

At the completion of Year 10, back at Corio (the main campus of Geelong Grammar School) students had undergone yet another transformation. Inarguably, any pain associated with the ESOESP had faded, but more importantly, the positive memories remain firmly engrained in their consciousness. The large majority (around 90%) spoke in admirable and glowing terms about the school.

- Student 3 It gives you the most amazing experiences. It is hard on you but you always forget the bad things and remember the fun things. It is remote and extremely enjoyable and challenging. Timbertop was the most spectacular year of my life, I've gained confidence, friendships and unforgettable memories. (Female)
- Student 12 It is a wholistic approach to school, fitness, life, work and so on. It teaches a lot of initially immature people many "laws of life" and it gives teenagers the chance of independence and challenge. It is a place where you have to fix your own mistakes and there is no-one running after you to pick up the pieces. It was the best year of my life. It has taught me so much that I will use throughout my life. I've made life long friends in my unit. I had a chance to be one with the environment and live in a community basically made up of people my own age. (Female)
- Student 9 Timbertop is all about growing up and learning to think for yourself. You find yourself growing more confident, independent and healthy without having adults hanging over your shoulder the whole time. The teachers treat you like adults, other schools treat you like children - like this year back at Corio. (Female)
- Student 15 Instead of going home after the final bell, we learnt in other ways around the school. You learnt how to start a fire in the rain and you learnt to push through pain. You were always learning something new. I enjoyed the Timbertop experience as it is a great achievement. I can look back and say "I did it". At times, it seemed impossible, but this is where great mateship occurred. Now, my mates that I have made there are still great friends. It was a great year to pull yourself into gear, to get focused on what you want to do with yourself. This made you strong and you could then go from strength to strength. (Male)
- Student 1 Timbertop was an excellent experience that I will remember forever. It has made me realize that I shouldn't take everything for granted. Timbertop is a place where you get to know yourself and try to strengthen the weaknesses in your character. Timbertop was a totally worthwhile experience. (Male)
- Student 4. It has been worthwhile because I can say to myself that I finished one of the hardest things I've done in my life so far. (Male)
- Student 6. Definitely a great experience - I look back and think how hard it was for me, but also how much it did for me. I made the closest friends I will ever have. Hiking was tough, but extremely fulfilling. I missed my family SO MUCH, but I can now live away from home without TOO much trouble. (Female)
- Student 20 A life experience, I found real happiness around the friends up there. I had the best time in term four. My hike group never fought - that was one of the things I also learned "to negotiate instead of arguing" and if we disagreed (which was rarely) we just agreed to disagree. I learnt all about leadership and commonsense. I also learnt the value of teamwork as well as improving my mental capabilities, coping skills and survival skills. (Female)
- Student 11 I have become much more of an individual. I appreciate many more aspects of life such as family, friends, HOT SHOWERS, free time and things like that. (Female)

Perhaps if the researcher had to identify the biggest success story over the duration of the ESOESP, it would be the following student.

Student 9 Timbertop was a great learning and growing up experience. I started out unfit, unpopular and relied very heavily on my parents. After three terms, I could see a change in the way I did things and how they were accepted. It improved my self-confidence which in turn, helped the way I was accepted. (Female)

On the other hand, a very small minority retained their mixed feelings about the ESOESP and isolated specific aspects which caused innate difficulty.

Student 17 On the whole it was a really great year but there are many things I would go back and change such as Unit life mainly. I loved the hiking, running and the friendships I developed. (Male)

Not every student had fond recollections of the ESOESP. One student spoke in scathing terms of the school. Interestingly however, not only was he negative during the reflective stage, but also during the actual experience he had voiced his disapproval of the school.

Student 13 My Timbertop experience was a waste of time and money. I did not enjoy any of the activities we did up there. The more I think of Timbertop today, the more I hate it. I am much happier here at Corio and I find it more worthwhile here. (Male)

The next section deals with the ten subscales individually and follows the 1993 cohorts' development longitudinally over two academic years.

5.1.2.2 HEALTH AND PHYSICAL APTITUDE

February 1993

An improvement in physical fitness and the opportunity to become involved in outdoor activities were seen as the primary benefits by most students at the beginning of the ESOESP. Usual comments during this period were:

Student 1 The physical activities and running should make me a lot fitter. After this experience I won't watch TV half as much. (Male)

Student 3 All the exercise and activities should be great. It is a highly active school with lots of challenges. My fitness level should improve. (Female)

- | | |
|-----------|---|
| Student 4 | I'm looking forward to the different outdoor activities we get to do throughout the year. The physical things - like running and hiking because at present I'm so unfit. (Male) |
| Student 2 | The hiking should make me pretty fit. (Female) |
| Student 6 | The long runs will be a killer. Hiking should be fun and exciting and I'm sure I'll become much fitter by the end of the year. (Female) |

Alternatively, the physically demanding nature of the ESOESP were considered by some students to be a major obstacle at the commencement of the year. This point is illustrated in statements such as:

- | | |
|------------|--|
| Student 14 | Running is torture and the hiking isn't much better. (Male) |
| Student 21 | Running as a punishment for being late isn't very fair. (Male) |
| Student 13 | The experience so far hasn't been worthwhile. I've never wanted to run, do cross country or hike, but I suppose I'll have an educated viewpoint after this. (Male) |

June 1993

By June, most students could actually see the tangible benefits accruing for their highly active lifestyle and admired their newly acquired fitness levels.

- | | |
|-----------|--|
| Student 1 | I'm much more fitter now. (Male) |
| Student 4 | One of the benefits is that I'm loosing weight. (Male) |
| Student 7 | I hope to carry my fitness with me when I leave - I exercise more now because it has become just like a habit. When I go home for school holidays I find myself getting into my running gear at the end of the day. (Male) |

Others (although a small minority) still held negative attitudes towards the high levels of physical activity.

- | | |
|------------|---|
| Student 13 | No I don't think this place will change me - we are doing things that don't really interest me, like running and hiking. (Male) |
|------------|---|

December 1993

By the end of the ESOESP, the majority of students (roughly 80%) were overwhelming positive about their enhanced level of health and fitness. Many implied that they would retain these health promoting habits back in mainstream society.

Student 4	I've lost 16 kgs in weight and I'd like to stay fit - I really didn't think I'd make it through the year.....staying out of trouble and stuff. But now I'm proud that I did. (Male)
Student 3	I like all the exercise and activity because it keeps me fit. This is such an active place, you are striving/working on a physical challenge the whole time. (Female)
Student 17	I'm going to try to keep fit. (Male)
Student 19	I'd like to stay as fit as I am now. (Female)
Student 20	I love camping and I'd like to continue this when I'm older. (Female)
Student 2	Facing up to challenge - and overcoming it. I never thought I could hike like this. (Female)

Even the two students who vehemently opposed the physically taxing and arduous nature of the activities at Timbertop, ended the year with changed attitudes.

Student 13	I'm so much fitter - I've climbed some big mountains and the views make it all worth the effort. (Male)
------------	---

But the physical nature of the program did not have students escape without casualties. Knee and ankle problems affected some members of the group (around 20%).

Student 5	I have knee problems when running. People think I am faking it just to get out of the runs - but I'd much rather be doing them than being stuck in here. I had to go home because I got sick but when I was home I realised how much I missed this place. I even had an argument with my doctor because I wanted to come back and he wouldn't let me because I wasn't well enough. (Female)
Student 3	I would only recommend this place to capable students - not fragile ones because their body wouldn't stand all of the physical activity. (Female)

December 1994

Twelve months after their ESOESP departure, it was the norm, rather than the exception, for students to mention health and fitness as a fundamental benefit of the program.

Student 1	I achieved a high level of fitness. (Male)
Student 2	I also became fit and healthy. (Female)
Student 9	My health and fitness have decreased a little since Timbertop but I am much fitter and healthier now than I was at the beginning of Timbertop. It

- is funny - the 6-day hike and the marathon were difficult at the time, but looking back, it was better than it seemed. (Female)
- Student 17 All the different experiences that happened to me will, and have, altered my life. In particular, I have been able to stay fit and healthy. (Male)
- Student 18 Timbertop was definitely worthwhile - I loved getting extremely fit. (Female)

5.1.2.3 PERSONAL RELATIONS

February 1993

Early into the experience students frequently mentioned that they perceived that the ESOESP would provide them with the opportunity to have high level of interaction with their peers.

- Student 3 I'm looking forward to making lots of new friends. The friends you make seem like "true" friends. (Female)
- Student 4 It will be good to spend more time with kids my own age. (Male)
- Student 2 You can make more friends because you are not stuck to one group. (Female)

June 1993

Newly forged friendships were commonly mentioned as a benefit of Timbertop mid way through the program. Conversely however, several others (around 30%) noted the oppressive nature of the rigorous school program as a factor which appeared to be taking its toll.

- Student 2 I'm enjoying being with a bunch of great friends. (Female)
- Student 4 I've made lots of new friends. (Male)
- Student 3 Probably the best thing about this place is that it gives you the chance to meet a group of new friends. (Female)
- Student 6 I'd like one free day a week when we could socialize. Perhaps more visiting days for parents, because I think one day a term is a little tough. And to be able to mix with the boys more because we only ever get to see them in classes and that's not enough. A public telephone would also be nice. (Female)

December 1993

The consolidation of strong friendships emerged during this stage. In part, this was attributed to the manifestation of a "special bond" which had arisen as a result of students going through the experience together. As was the case in June, several students (roughly 30%) consistently mentioned the hardships they had experienced when dealing with irreconcilable personal relationships within their unit.

- Student 15 I have some really great friends now - probably because we have gone through so much together. (Male)
- Student 16 You know people well - you get to see their different sides (for the better and worse). (Female)
- Student 4 Lots of new friends my age. (Male)
- Student 6 You make some of the closest friends that you will ever have. (Female)
- Student 2 You get a wide circle of friends because you are not stuck in one peer group. (Female)
- Student 13 You learn how to work as a team with friends - and work with people you may not get along with. (Male)
- Student 20 You can be yourself and no-one cares. I am now able to sort out trouble that arises out of clashing personalities. (Female)
- Student 7 Stress in the unit - a few of the boys get under your skin. (Male)
- Student 1 You learn how to cope with people in your unit that got on your nerves. (Male)

December 1994

Similar responses were given 12 months later where a heavy emphasis was continually placed on their "Timbertop induced" abilities to compromise with others and work as a team.

- Student 22 I learnt how to live with others and how not to get on people's nerves, and to control my emotions more. I loved Timbertop because of the friends I made and the things I learnt. (Male)
- Student 2 I learnt how to work and compromise in a group. (Female)
- Student 4 I think I have changed because I am able to get along with people my own age easier than before. (Male)

Likewise, in retrospect the lack of free time available to students had caused angst amongst a select few (around 10%-15%).

Student 11 It was difficult because I missed home and felt alone at times. There wasn't much free time and I felt I was different. (Female)

5.1.2.4 SOCIAL RESPONSIBILITY

February 1993

ESOESP's aim to promote increased levels of tolerance, self-discipline, empathy, group cohesion and responsibility amongst the school community. In February, several students (around 30%-40%) alluded to their vested interest in the achievement of this goal.

- Student 2 Learning all about group work is part of the Timbertop philosophy. (Female)
- Student 3 Working with the others, doing jobs like slushie, wood chop and things like that, should be a benefit of this place. Later in life I should become more tolerant and a group worker. (Female)
- Student 14 We have to behave maturely and honestly without some form of authority being around all of the time. (Male)
- Student 8 Becoming a member of a sharing community should change my outlook in the future. (Female)
- Student 15 During my stay here I should learn cooperation and tolerance - because this is so important at Timbertop where we are forced to live together. (Male)
- Student 16 I think this place will turn me into a caring community member - tolerance and communication are so important. (Female)

June 1993

By June, this attribute was being mentioned as a perceived benefit from their inclusion in the ESOESP.

- Student 12 This place is teaching me about the importance of self-discipline. I'd like some members of my unit to pull their weight more often, but I know that would never happen. (Female)
- Student 2 I've learnt to live and work with others. (Female)

- | | |
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| Student 8 | Unit life makes you less selfish. (Female) |
| Student 13 | I guess the main benefit so far has been the social tolerance I've gained. (Male) |
| Student 20 | I am happy to accept the consequences of my decisions. (Female) |

December 1993

By the conclusion of the ESOESP, many students (roughly 70%) could identify that the ESOESP had innately nurtured the quality of social responsibility. Furthermore, several mentioned that their newly acquired levels of social responsibility would be carried with them back into mainstream society.

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| Student 9 | I'm more responsible now than when I came. This place has taught me the meaning of self-discipline. (Female) |
| Student 2 | I've become more tolerant of others as a result of being here. (Female) |
| Student 3 | Learning how to "live" and work with others in our own little community. When I look back on the year, nothing was too difficult - you just learn to tolerate it. (Female) |
| Student 15 | I'm much more tolerant and accepting because of this place. (Male) |
| Student 17 | Self-discipline for the rest of my life stop me doing the things that I shouldn't. (Male) |
| Student 21 | It is easy to do jobs that I hate doing, I guess you would say I've got more self discipline now. (Male) |
| Student 7 | It teaches you responsibility whether that be with the long jobs, unit jobs or essentials. (Male) |

December 1994

Twelve months later as they reflected upon their year at Timbertop, issues surrounding social responsibility were commonly mentioned. They believed that the experience was instrumental in fostering this admirable quality within them.

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| Student 11 | Yes it made me more mature. I now think far more differently about other people's feelings and I am much more sensitive. (Female) |
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| Student 20 | Definitely a wonderful experience - I loved it. I got so much out of it - mainly the empathy I felt towards the others who shared the experience. (Female) |
| Student 10 | It was hard living in close proximity with others and having to cope with it when others let you down. (Male) |

5.1.2.5 AUTONOMY

February 1993

An underlying aim of any ESOESP is to produce autonomous and self-reliant individuals who take responsibility for their own actions, illicit organisational skills and face up to challenges. In February, some students (roughly 30%-40%) anticipated that the program would enhance their levels of autonomy and independence.

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| Student 1 | Later in life I'll be able to take on challenges because there is no way to get out of it. I think it will also teach me a lot about independence and how to lead a group. (Male) |
| Student 2 | When I get older I will be able to cope with very trying circumstances. (Female) |
| Student 7 | I'm certain that I'll be more self-reliant and independent - the amount of responsibility given to the students soon makes you learn this. (Male) |
| Student 14 | I'll be able to look after myself when I have to run my own house. (Male) |
| Student 13 | I'm an unorganised person so this place has been a rude shock. (Male) |

June 1993

By June, several students (around 50%) suggested that they had made positive gains in this subscale.

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| Student 3 | I've become more independent. (Female) |
| Student 2 | I'd probably say that I've become a leader and I know how to survive on my own now. Confident within myself - I don't mind bad things happening now because I tell myself it is OK - just give it your best shot. (Female) |
| Student 4 | I'm sure that I can look after myself if ever I had to do it. (Male) |
| Student 6 | I've turned into an independent person - and I'm much more of a leader now. I know what it takes to survive. (Female) |

Student 7 Time management - in your spare time you've got to do so much. Before I started here five minutes seemed like one hour - now one hour seems like five minutes. (Male)

December 1993

It is significant to note that improved levels of independence and autonomy were consistently articulated as an expectation that had been met through their involvement in the ESOESP. At the end of the year the roughly 80% of students offered the following comments:

Student 1 The independence I've gained from living away from my family has been great. Yes - it will change my outlook on life - I know I can overcome tasks which seem impossible. (Male)

Student 2 Yes - I've learnt how to survive on my own. I'll be able to look after myself when there is no-one else around. (Female)

Student 6 The friendships, leadership qualities, survival skills - I could live by myself so easily now. (Female)

Student 13 Timbertop is about learning to look at challenges differently. You learn how to motivate yourself to conquer these challenges - you can't give up. (Male)

Student 16 In this school you have to face up to the consequences - you can't run away from it. (Female)

Student 20 You've got to be organized otherwise it is impossible to survive in a school like this. (Male)

Student 19 There are lots and lots of miseries, but it is worth it. I've gained independence and I'm so glad I've tried. (Female)

Student 15 This place toughens you up - both mentally and physically I have gained self discipline and the ability to organise myself. (Male)

Student 21 It is a school where you gain self-reliance and independence you are able to organise your life for yourself. It is very physical because you're always working, hiking, runningit is not a school for "slackers". (Male)

December 1994

Retrospectively, the ESOESP was viewed in a favourable light in terms of independence and autonomy. Many students (around 80%) conveyed that the experience was invaluable in teaching them to be self-reliant, organised and tenacious.

Student 1 I learnt to be independent. (Male)

Student 9	I became very independent and responsible. My confidence improved greatly. I can handle situations differently and it is easier for me to give my opinion. I feel more mature and able to handle difficulties on my own. (Female)
Student 12	It has taught me the value of hard work. Pain, anger and frustration ie. getting lost whilst hiking and then getting yourself out of these situations. I'm more tolerant generally as a person and it has showed me not to rely on other people or adults. (Female)
Student 15	I think that it has changed me because it has opened up part of myself that I didn't know. It showed me that I had willpower and determination and before this place, I didn't know that it existed. It taught me how to motivate myself and others, how to push for higher goals and how to organise myself. (Male)
Student 2	I became very independent and responsible. (Female)

5.1.2.6

ACADEMIC AND CULTURAL ACHIEVEMENTS

February 1993

The enjoyment students' derived from studying and their subsequent application to school work, along with cultural enlightenment and academic advancement are considered to be a fundamental objective of an ESOESP. Although this subscale was not mentioned on a frequent basis, nonetheless, some students (around 15%-20%) perceived that the experience would strengthen this quality within them.

Student 2	My homework should get done. (Female)
Student 3	The school lessons are a lot different because everything is connected. (Female)

June 1993

In June, there were divergent views amongst the students. Some (roughly 20%) expressed their satisfaction in personal study habits, whereas others (around 40%) noted that the stress of exams and insufficient "quality" study time had been detrimental in their academic development.

Student 7	My study habits have improved because of time management. I have a program now when studying and academically I'm doing much better. (Male)
Student 12	My organisational skills have really improved my school work. (Female)
Student 7	Stress of exams. (Male)
Student 14	Academic workload is hard. (Male)
Student 1	The pressure of exams. (Male)
Student 2	School work is hard. (Female)

December 1993

By December, it was the norm rather than the exception to mention the adversity faced in regard to this subscale. The inability to spend quality time on their studies was primarily attributed to the intensive nature of the school curriculum. The problem was further exacerbated by the less than conducive atmosphere in the units during study time. In accordance, these aspects appeared to hamper the academic and cultural achievements of the majority of students (roughly 70%).

Student 11	Not enough time to do effective studying. (Female)
Student 1	Exams are stressful. (Male)
Student 8	Homework in your unit is difficult at times - people keep talking and distracting me. (Female)

December 1994

An interesting outcome recounted by students one year later, was the fact that Timbertop thwarted their academic development. Some perceived that the ESOESP did little to enhance their academic achievement. In the main, students felt that the intensive and broad curriculum left very little time for effective studying. In retrospect most students (around 70%-80%) also stated that their grades dropped significantly.

Student 9	My marks went down but they have improved this year. (Female)
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Student 2 Concentrating on school work was hard for me because there was so many other things going on in the school. (Female)

5.1.2.7 ENVIRONMENTAL SENSITIVITY

February 1993

Recycling habits, concern for the environment and an awareness of environmentally friendly habits was another construct investigated in this study. Interestingly, this subscale infrequently surfaced during the student interviews. Only a handful of students (around 20%) made reference to environmental issues and very few spoke of the perceived benefits accruing from the program.

Student 2 Later in life I should have a good understanding of the bush and in that respect, I think it will change my life when I am older. (Female)

June 1993

This phenomenon was also echoed in June when only a fleeting reference was made to this subscale.

Student 20 I'm definitely more environmentally aware. (Male)

December 1993

By the completion of the ESOESP this trend changed. Quite a few students (around 50%) articulated that the ESOESP had made them more sensitive to environmental issues.

Student 6 I appreciate the bush and nature a lot more now. It is beautiful to live in the bush and hike in the high country. (Female)

Student 7 The hiking is fantastic in the high country. (Male)

Student 15 I worry about what is going to happen to our environment. (Male)

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| Student 13 | Even though I didn't think it at the start, city people can learn about the bush. (Male) |
| Student 14 | It is a school in the middle of the bush ... there are no city amusements - the amusements are the mountains. (Male) |

December 1994

Although environmental sensitivity underpins the philosophical make-up of an ESOESP, strangely enough, it was rarely mentioned one year after graduating from Timbertop. The author is somewhat perplexed by this incongruency. Perhaps in part this trend can be attributed to the fact that the students were so immersed or entrenched within an "environmentally friendly" ethos that it became conditioned within their attitudes, values and behaviours. Nonetheless, several students (around 30%) did acknowledge the contribution that Timbertop had made in this regard.

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| Student 1 | I learnt how to care about the environment. It made me appreciate the advantages of living in a civilized place, you know, all the things we take for granted because of our creature comforts. (Male) |
| Student 9 | I'm more wary of the environment and recycle whenever possible. (Female) |
| Student 12 | Appreciating hiking and the natural environment around us. Learning that you can live without life's luxuries eg. TV. (Female) |
| Student 2 | I don't think it has changed my life in any dramatic way. But I have learnt more about safety in the bush . (Female) |

5.1.2.8 SCHOOL SPIRIT

February 1993

This subscale explored aspects such as the school ethos and pride, harmonious relationships within the school community and the implementation of the rules and regulations. In February, the student responses were far from unequivocal. For some, the regimentation associated with the rules and regulations of the ESOESP were found to be somewhat confrontational. Others were more accepting of the ESOESP in this regard.

Student 1	Its great the way it is - I love the place. (Male)
Student 14	The time restrictions are hard - you know, having to fit all of our jobs and homework into one day, but I suppose if we make it easy for ourselves, then we won't gain anything. (Male)
Student 20	The discipline of this place is really quite punishing. (Male)
Student 7	It is a complicated life here - no free time. I'm having trouble coping with parts of the discipline - but then I got a letter from mum, and it all seemed worthwhile. (Male)
Student 10	We are busy all the time - we don't even get a 47 second fart break. (Male)
Student 4	I'm still having trouble fitting into the rules. (Male)
Student 21	Running as punishment for being late or whatever, is not fair. (Male)
Student 8	You aren't allowed to have fun here. In my last school, I got away with heaps, but here it is a different story. (Female)
Student 15	The punishments here are much more sterner . (Male)
Student 2	Isolation from my boyfriend - no physical relationship - like holding hands. Early rises are difficult because I'm not a morning person. (Female)
Student 3	This place would be a lot better if they would paint the units nice colours, make the showers more modern and put curtains on the windows. (Female)
Student 17	The regimentation - up at 6.30am for breakfast and "prep" every night. We aren't allowed to socialize with the girls at recess or lunch - and I find that very different. (Male)

In reference to the above comment by Student 17, it should be noted that socializing with the opposite sex is allowed at recess and lunch time, however, inter-unit visiting is prohibited.

June 1993

By June, the majority of students had "acclimatised" to their ESOESP. By the same token however, the school spirit had taken a nose-dive especially amongst those who considered the intensity of the program to be rather brutal and tiresome.

Student 17	The discipline is getting better - either they aren't as strict or we are learning to be better behaved. (Male)
Student 12	More accepting of the routine - we know what is expected now. (Female)
Student 14	We have to help around the school with all the jobs. (Male)

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| Student 21 | Everything runs to a tight schedule, there is no free time. I'd like to have a weekend. (Male) |
| Student 2 | Second term has been the hardest, I've wanted to go home so many times. (Female) |

December 1993

In December, the school spirit had experienced a metamorphosis. Students made reference to the inclusive nature of the school (that is, Year 9 only on campus) as a major contributor to the enhanced school spirit. Likewise, the spartan and archaic features of the school were also mentioned as worthwhile inclusions. Only a select few voiced their disapproval of the rules and regulations.

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| Student 5 | You are sheltered from society - this is a community in itself. No bullying from older year groups - its nice just to have Yr 9. (Female) |
| Student 19 | A sense of community and teamwork . (Female) |
| Student 11 | I have learnt so much.....it is a special place - it sort of makes you feel like "it's your year". It is nice just having Year 9 here no-one looks down on you or bullies you. (Female) |
| Student 3 | The experiences have bonded the group together - there will be stories to tell at our school reunions. (Female) |
| Student 14 | All of the things here are part of the deal - no phones, TV, parents ... so why change it? (Male) |
| Student 16 | We just accept it and learn to love it for what it is. (Female) |
| Student 17 | We all said earlier that a day off for everyone now and again would be nice, but you know what - we would only waste it. So I guess I'm saying things are fine just the way they are. (Male) |
| Student 21 | I have found that there haven't been enough choices for us - the rules seem immature. (Male) |

December 1994

In terms of school spirit, the recollections were primarily positive in this regard. The only negative statement made reference to the authoritarian nature of the school, but for most, this did not cause any angst. In fact, when the students reflected on the year they held the school in very high esteem.

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|------------|---|
| Student 4 | I found it hard to do what you were told and being watched 24 hours a day by someone in authority. (Male) |
| Student 3 | The satisfaction I received from my experiences was absolutely fantastic, the friendships, the responsibility, the self-development you learn to live with who you are and be happy. (Female) |
| Student 17 | The satisfaction of completing something that seemed impossible at the start of the year. (Male) |

5.1.2.9 QUALITY OF TEACHING

February 1993

The constructs being investigated in this subscale related to the relationships between student and teacher, the professionalism of the staff, and the humanistic nature of the ESOESP. In accordance with their disdain of the rules and regulations of the ESOESP, the students felt in February, that the quality of teaching was far from impressive. Only a select few indicated that the teachers were approachable and personable.

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|------------|---|
| Student 5 | The teachers never smile they are just stoney cold - they're authoritarian and love laying down the rules. (Female) |
| Student 10 | The environment here is so strict - does it have to be like that? (Male) |
| Student 2 | Teachers are stricter. (Female) |
| Student 16 | The teachers take a "no nonsense" approach. (Female) |
| Student 1 | The teachers are friendly. (Male) |

June 1993

As the year progressed, their opinions of the teachers became more favourable.

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|------------|---|
| Student 3 | Different school life - the teachers are "homely" because they live on campus with us. (Female) |
| Student 5 | The best thing is how close the teachers who are the unit leaders and kids become during the time here. (Female) |
| Student 12 | Teachers - especially the unit staff, know us better. But some staff hold grudges and that makes it unpleasant at times. (Female) |

- Student 14 The teachers are much nicer now. (Male)
- Student 22 I'm starting to get into trouble - I suppose I can see myself going downhill. I don't think the teachers are fair. (Female)

December 1993

For the most part, students were positive in their appraisal of the quality of teaching. The shared experiences by both students and teachers alike, had strengthened the relationships between the two parties. The nurturance and guidance by the teachers were held in high esteem by the students. Yet again, a select minority viewed the teachers as authoritarian and militaristic.

- Student 20 Less dependent on teachers and become more of a leader myself. I've learnt that hard work is the best way to succeed. Some of the older members of staff should go, they don't offer the program anything. (Female)
- Student 16 We have gotten to know the teachers. (Female)
- Student 2 The teachers do everything with you, there is equality. (Female)
- Student 3 The staff get to know you like they are part of your family. (Female)
- Student 14 Teachers are better - they are supportive and cooperative. (Male)
- Student 15 There has been a bonding between teachers and students. We have needed the rules - otherwise this place wouldn't work. (Male)
- Student 12 Some of the teachers are closely related to us. The unit masters/mistresses who are more friendly, seem to gain the respect of students. I also think that having no TV or telephone was good. (Female)
- Student 13 The teachers here are the worst I've ever had. (Male)
- Student 4 The rules and the teachers - it was just like a prison. (Male)
- Student 1 Perhaps the teachers are a little too strict. (Male)
- Student 5 I think the teachers need to be a little brighter ... you know ... smile more. (Female)
- Student 8 I would like the unit staff to spend more time with us and Mr "X" (the Master) to come to each unit once a week to talk to us. (Female)
- Student 11 Perhaps all the teachers should agree on the same things, we got lots of mixed messages through out the year. (Female)

December 1994

When back at Corio, the students tended to change their opinion of the quality of teaching. There was a reversion in the trend noted during 1993, and in fact, some made critical evaluations of certain teachers.

- Student 20 Coping with the teachers insecurity and the way they gang up on particular students (at one stage I was one of them). (Female)
- Student 22 I found some of the teachers very hard to live with (Mr XXX) as he used power badly and was psycho. (Male)

5.1.2.10 INTERPERSONAL RELATIONSHIPS

February 1993

The constructs of this subscale examined the students perceptions of the unit life, parental attachment, the reciprocal relationships between students and team work within the ESOESP. Early in the experience, students views on the interpersonal relationships were disparate. For some the unit life was oppressive, whilst others found it enlightening. Many students expressed that they were homesick and missing their parents.

- Student 1 We get to meet a lot of new people - we are like one big family. But on the same hand I'm homesick - it makes me sadder when I receive letters from home. (Male)
- Student 6 The boarding should be fun because I've never done it before. But I'm "mum-sick" and not getting along with some people. (Female)
- Student 2 When things go wrong I'd like to speak to my parents - but they are not here for me. (Female)
- Student 11 I miss the security of home. (Female)
- Student 12 Unit life will be hard - I'm already annoyed with some people in my unit not pulling their weight. (Female)
- Student 19 Being stuck with the same people. (Female)
- Student 18 I'd like to mix with other units, I get sick of seeing the same girls all the time. (Female)
- Student 4 Being a new kid at the school is difficult - it is hard to mix with people. (Male)

June 1993

At this juncture, the students conveyed both advantages and disadvantages of their unit life. The issue of homesickness was less frequently mentioned and one could assume that they were more accepting of this hurdle. A few students also voiced their disapproval of not being allowed to socialize with the opposite sex.

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|------------|---|
| Student 6 | The friendships within my unit will change me later in life - I know so many people at a deep level now. (Female) |
| Student 8 | In your unit you learn how to get along with everyone - you just have to when you are one big group. (Female) |
| Student 1 | People in your unit get on your nerves. Cooperation within the unit living with others can be a bit trying at times. (Male) |
| Student 22 | Living with lots of people makes it more complicated - especially when you've got two-faced people in your unit. (Male) |
| Student 7 | Coping with some people is very testing at times. (Male) |
| Student 10 | Trying to cooperate with people who are trying to be purposely difficult . (Male) |
| Student 17 | I wish we could socialize with the opposite sex. (Male) |

December 1993

At the end of the year, mixed reactions were evident amongst the group in respect to interpersonal relationships. Some students appreciated the camaraderie offered by the ESOESP, others felt that it was somewhat stifling and crippling, especially if they had been unfortunate enough to have been placed in a dysfunctional unit.

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| Student 2 | I've learnt to work together as a team otherwise nothing gets done. This is a place where you get to know other people, the bush, and you work together as a big happy family. Because of the routine, you have something to do every minute of the day - but that is why it is important that people work as a team. (Female) |
| Student 12 | Students need to be prepared to make a lot of sacrifices. It is hard and it tests your patience. The first week is the hardest in the whole year learning how to live in a unit, being isolated from your parents, the runs and the routines. But there are enormous benefits and a sense of satisfaction to be gained from the year. (Female) |

Student 9	I'm much more sociable now. It is easier to open up with your friends and I'm much more confident doing that now. But the isolation from my parents was hard for me. (Female)
Student 3	I've become more of a "group worker" and cope with stress much better now. (Female)
Student 8	Living in a community makes you learn how to communicate and share. (Female)
Student 1	It was hard coping with homesickness at the start - but it has gone now. (Male)
Student 6	Living away from home and being stuck with the same people for a year has been hard. (Female)
Student 19	Living with so many people is a disadvantage at times. (Female)

December 1994

On reflection, students admired the qualities and attributes they received from Timbertop in terms of interpersonal relationships. They frequently mentioned the advancements that were made in this subscale and indicated that this was a major bonus of the ESOESP.

Student 1	I also learnt to work as a team within the unit. Getting used to being away from my family in the first term was very difficult. (Male)
Student 3	Gaining the most unforgettable memories. Making new friends, and having the fulfillment of mixing with everyone all of the time. (Female)
Student 4	Being able to live in an environment with people in a small unit - and being able to look after myself. (Male)
Student 20	Living together with 16 girls for a year is not an everyday experience.....I have only realised many of its important lessons this year (one year later). (Female)
Student 18	It definitely changed my life - I had to live away from home for the first time in my life with people I hardly knew. It gave me a chance to start a new and in a way, find myself. (Female)
Student 9	It was hard coping with homesickness for the first few months and then problems emerged within the unit. People started to fight more frequently but luckily we left on a positive note. (Female)

5.1.2.11 APPROPRIATENESS OF CURRICULUM

This subscale analysed the range of subject areas available to the students, the relevance of what they learnt to life in general, the satisfaction they received from the ESOESP curriculum

and the appropriateness of the outdoor activities. Early in the year several issues came to light. Lack of privacy and time for introspection was articulated as a hardship associated with the intensive ESOESP curriculum. Others mentioned difficulties surrounding their technology withdrawal such as no computer games for recreation. They envisaged that the adjustment into the ESOESP would be difficult especially given the hardship encountered in the first week.

- Student 1 It isn't your average school it is something quite different. The activities we will do here aren't found anywhere else. (Male)
- Student 16 I would like some quiet time - just for yourself - time to reflect on things. (Female)
- Student 2 We need more time to relax - maybe half-an-hour a day. I'm extremely tired, angry and argumentative. (Female)
- Student 19 Having no privacy makes this place really difficult to cope with. Seven-days a week - it is just full on. (Female)
- Student 10 Routines with no free time. (Male)
- Student 6 Seven-days a week focus - with no weekends. (Female)
- Student 7 We have a lot of stress in our lives - perhaps they could think of a way to break us into it gradually. (Male)
- Student 9 The isolation get to you, I'd like to talk to my parents once in a while. It is nice not having to wear a school uniform for the first time in my life. (Female)
- Student 3 The cold hikes in the winter months is going to be hard on me. (Female)
- Student 4 I'll miss my computer games. (Male)

June 1993

By mid year, exposure to various new experiences in the ESOESP curriculum has had a positive impact on students. However, students still make reference to their lack of introspective time and rigorous school program.

- Student 7 I've experienced a "solo" for the first time in my life - being in the bush in winter all by yourself is amazing. (Male)
- Student 20 Hiking gives me a positive attitude - it has taught me to be myself. (Female)
- Student 1 The bush setting is great - it is nice to be away from the rest of the world. (Male)

Student 3	Outdoor schoolwork - the way our lessons are centred around the environment or the outdoors is great. (Female)
Student 9	I hate the cold weather here - it's freezing inside our units. (Female)
Student 6	There is lots of work - both physically and academically. (Female)
Student 12	Our week is so busy - there isn't any free time. (Female)
Student 8	It is so claustrophobic - there is no freedom. I'm a person who likes to have time to themself. (Female)
Student 16	Sometimes I'd like to escape and find some time for myself, I've gone to the chapel by myself. (Female)

December 1993

By the completion of the ESOESP, there has been a marked turn around in the students' perceptions of the appropriateness of the curriculum. Many acknowledge that early in the ESOESP, they would have liked to change the curriculum, but now that the program is complete, they appreciate the intricacies assigned to the year.

Student 8	I've learnt a lot about bush skills. (Female)
Student 13	Well I haven't enjoyed it here because I'm not into outdoor stuff. I'd like to see more luxuries and free time. Just sticking it out has taught me the value of not giving in. It has been a challenge because in the past I would have never found the motivation to stick something like this out. (Male)
Student 9	After all the changes I wanted to make to this place at the start - I think it is good the way it is. (Female)
Student 1	I look back and we have all achieved so much, it has been a hard task, but it has taught me the importance of a positive attitude and being able to stick at things until I have succeeded. I know how to survive in the bush - and I wouldn't have learnt that anywhere else but here. But I would have liked more spare time. (Male)
Student 2	I'm much more confident, and I know I can cope in trying circumstances.....but I got extremely tired and I suppose I'd like one day off a week just to rest and relax. Sometimes I found it all too suffocating though. (Female)
Student 5	A huge impact - it is one of the best years of my life. I'm much more "together" now. (Female)
Student 12	I'm more aware of who I am - I'll be grateful when I'm older that I've had this experience. (Male)
Student 3	During the year - when you are doing the activities you ask yourself "why am I doing this?" - now I'd like to repeat it all again because it was so fantastic. (Female)

Student 20 The subject choices aren't as wide - but there are other compensations.
(Female)

December 1994

The broad and intensive nature of the Timbertop curriculum was constantly mentioned when students were asked to reflect on the ESOESP. Many students made reference to the fact that it was a hard year, but totally worthwhile and fulfilling.

Student 11 Definitely worthwhile because it taught me so many valuable skills that no other special place could teach you. (Female)

Student 3 The outdoor life was fantastic - learning to cope with different and new experiences. (Female)

Student 17 At times it was hard getting along well with my whole unit, there were lots of disagreements. I missed my privacy. (Male)

Student 4 It was like the army, you don't get any spare time and you need to put in a lot to succeed at Timbertop. (Male)

5.1.2.12 SUMMARY OF THE 1993 COHORT'S PERSONAL INTERVIEWS

In summary, from the perspective of the 1993 cohort's personal interviews the following main points surfaced over the duration of the ESOESP:

1. SENSE OF PERSONAL ACCOMPLISHMENT AND ACHIEVEMENT

Without question, the ESOESP was personally challenging in every respect, whether it be physically, socially, emotionally or academically. Most students interviewed articulated the fact that "this place pushes you, but at the same time there is a sense of accomplishment". (Student 16 - Female). Undeniably, an outgrowth of the adversity and hardship was a sense of both personal and social growth. Clearly, most students were enamoured by this perceived benefit of the program and this is typified in comments such as:

"It is great to look back on all the things you have done and you feel so much better about yourself when you've overcome a challenge. A great experience.....Timbertop was a great

learning and growing up experience. I started out unfit, unpopular and relied very heavily on my parents. After three terms, I could see a change in the way I did things and how they were accepted. It improved my self-confidence which in turn, helped the way I was accepted.". (Student 9 - Female)

"I'm grown up - I know who I am now.....it is weird, this place makes you think about everything more. Timbertop has a strange "magical" power that you don't realise at the start - you hate it but then you look back on it and it is unreal" (Student 5 - Female).

"All those hard things in the beginning seem so trivial now. In the end, you get so much satisfaction from the experiences because you've done it yourself. I guess I've been *Timbertopized*" . (Student 12 - Female)

"It gives you the most amazing experiences. It is hard on you but you always forget the bad things and remember the fun things. It is remote and extremely enjoyable and challenging. Timbertop was the most spectacular year of my life, I've gained confidence, friendships and unforgettable memories". (Student 3 - Female)

Interestingly, the researcher maintains that females appeared to be more vociferous in their beliefs within this area than their male counterparts.

2. AN ACCEPTANCE OF THE REGIMENTED LIFESTYLE

Most students become "Timbertopized" along the way and readily accept the rules and regulations which govern the establishment. This is illustrated in statements such as "you walk around "blank" for the first few days at the beginning of the year. Everyone told me I'd love it - but I'm afraid I didn't early in the piece ...it was really hard work. It is getting much better now though". (Student 5 - Female). On the whole, females tended to be more compliant and accepting of the rules and regulations than their male counterpart.

3. APPRECIABLE GAINS IN HEALTH AND FITNESS

Improved fitness levels are perceived as a definite bonus accruing from the program. The majority implied that "all the different experiences that happened to me will, and have, altered my life. In particular, I have been able to stay fit and healthy. (Student 17.- Male). Only a small minority suggested that Timbertop had an adverse effect on their health and fitness, for example "I would only recommend this place to capable students - not fragile ones because

their body wouldn't stand all of the physical activity. (Student 3.- Female). Both males and females equally mentioned this subscale.

4. A SPECIAL AFFINITY OR BONDING WITHIN THE GROUP

Both sexes mentioned the gains they had made with regard to personal relations. Most were more understanding and more self assured when it came to relating to their peers. For example, students' articulated that they had " learnt how to work and compromise in a group." (Student 2 - Female) whilst also alluding to the fact that they had "changed because I am able to get along with people my own age easier than before. (Student 4 - Male). Both males and females commented on this gain, however the researcher noted during the personal observation phase that the females "practiced what they preached" to a greater extent than the males. This issue was echoed by the master of Timbertop when he stated that:

.... the girls are much 'closer' and less inhibited than the boys. Girls show that they enjoy each others' company better than the boys do. The camaraderie is greater as the year progresses.

These aspects are discussed in greater depth in Chapter 8.

5. THE ENHANCEMENT OF SOCIAL RESPONSIBILITY

Many indicated tolerance and understanding was evident within the small community, for example "learning how to "live" and work with others in our own little community. When I look back on the year, nothing was too difficult - you just learn to tolerate it. (Student 3 - Female). Similarly, reciprocity and empathy were frequently mentioned as perceived benefits, for instance "it was hard living in close proximity with others and having to cope with it when others let you down. (Student 10 - Male). Both males and females made reference to this subscale throughout the interview component of the study.

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6. GREATER LEVELS OF INDEPENDENCE AND AUTONOMY

Without question, the ESOESP was viewed in a positive light as far as self-reliance and autonomy was concerned. This was poignantly displayed in the following comment "I became very independent and responsible. My confidence improved greatly. I can handle situations differently and it is easier for me to give my opinion. I feel more mature and able to handle difficulties on my own. (Student 9 - Female). Another student suggested that "it is a school where you gain self-reliance and independence you are able to organise your life for yourself" (Student 21 - Male).

7. INCONSISTENT FEEDBACK ON ACADEMIC ACHIEVEMENT

The intensive nature of the school program had mixed reactions from students. Firstly, some mentioned that their organisational and study skills should be better because of the tight daily schedule which should precipitate effective time management. This was echoed in "my study habits have improved because of time management. I have a program now when studying and academically I'm doing much better". (Student 7 - Male). Others felt that the relentless nature of the ESOESP was detrimental to their academic achievements. In the main, this was attributed to the inferior quality of study time given at the campus. An example of this criticism is provided in "concentrating on school work was hard for me because there was so many other things going on in the school". (Student 2 - Female) whilst others suggested that there was "not enough time to do effective studying" (Student 11 - Female) and "homework in your unit is difficult at times - people keep talking and distracting me". (Student 8 - Female). Quite clearly, the findings are ubiquitous, however on the whole, females appear to be more concerned about their substandard academic performance.

8. INFREQUENT REFERENCE TO ENVIRONMENTAL SENSITIVITY

The findings in this area are rather perplexing. Although some students indicated that they were more environmentally aware as a result of the experience and subsequently behaved in an environmentally friendly manner, most students consistently failed to acknowledge advancements in this area. It is interesting to note that females generally were more vociferous than males when it came to discussing this independent variable.

From the researchers' viewpoint, the ESOESP delivers a comprehensive environmental education program which is linked to all components of the curriculum. This interdisciplinary approach is ideologically sound and a valuable component of the school curriculum. Environmental sensitivity is part and parcel of their daily existence. The researcher hypothesises that the students become so entrenched within the "environmentally friendly" lifestyle that they fail to detect their changed attitudes, values and behaviours.

9. POSITIVE SCHOOL SPIRIT

For the most part, school spirit steadily increases throughout the year, although a marked deterioration occurs when students return to commence term two. By the end of the year, the large majority of students are passionate about the ESOESP and the experiences they have endured. Typical comments reaffirming this stand are illustrated in "I have learnt so much.....it is a special place - it sort of makes you feel like "it's your year". It is nice just having Year 9 here no-one looks down on you or bullies you" (Student 11 - Female). It is also noteworthy to mention that females were generally more positive about the experience than their male counterparts. Only a handful of students have resented the year and made negative comments about the school spirit for example "I have found that there haven't been enough choices for us - the rules seem immature" (Student 21 - Male).

10. MIXED REACTIONS TO THE QUALITY OF TEACHING

By the completion of the year, the students' perceptions of the quality of teaching are disparate. Some indicate that the teachers adopt a humanistic and personable approach to their job, for example "the best thing is how close the teachers who are the unit leaders and kids become during the time here" (Student 5 - Female). Conversely, others felt that the teachers were too rigid and uncompromising for instance, "the rules and the teachers - it was just like a prison" (Student 4 - Male). It is interesting to note however, that the recalcitrant and lazier students were the ones who took this stand. This assumption is based on the teachers' perceptions of the students along with personal observation.

11. ENHANCED INTERPERSONAL RELATIONSHIPS

Students acknowledged the hardships associated with unit life as typified in "living away from home and being stuck with the same people for a year has been hard" (Student 6 - Female). Interestingly however, out of the hardships and pain, strongly forged friendships emerged. An example of this phenomenon is provided in "students need to be prepared to make a lot of sacrifices. It is hard and it tests your patience. The first week is the hardest in the whole year learning how to live in a unit, being isolated from your parents, the runs and the routines. But there are enormous benefits and a sense of satisfaction to be gained from the year". (Student 12 - Female). Females tended articulated gains in this area more so than males.

12. SUPPORTIVE COMMENTS FOR THE APPROPRIATENESS OF THE CURRICULUM

The majority of students were firm advocates of the ESOESP and viewed the curriculum in a positive light, for instance "during the year - when you are doing the activities you ask yourself "why am I doing this?" - now I'd like to repeat it all again because it was so fantastic". (Student 3 - Female). Similarly, many indicated that they had acquired valuable life skills

from the program "definitely worthwhile because it taught me so many valuable skills that no other special place could teach you". (Student 11 - Female). Only a very small minority implied that the curriculum was inappropriate, for instance "my Timbertop experience was a waste of time and money. I did not enjoy any of the activities we did up there. The more I think of Timbertop today, the more I hate it. I am much happier here at Corio and I find it more worthwhile here". (Student 13 - Male). It is significant to note that the students who made these comments were perceived by the teachers as being totally unsuited to the program.

13 GENDER DIFFERENCES

As far as the 1993 cohort personal interviews were concerned, the females tended to verbalise the changes which had occurred to their own feelings, behaviours, values and attitudes as a result of the intervention. In particular, they made reference to gains in interpersonal relationships, school spirit and environmental sensitivity more so than their male counterparts. This reinforces findings found elsewhere, for instance Bowen (1996) and Heaven (1994) who maintained that males had poor communication skills and had difficulty expressing emotions. Generally, males tended to express emotions in other ways such as becoming physically aggressive or verbally abusing one another. Further to this, the females in the 1993 cohort appeared to focus on their interpersonal skills as a "means" of coping with the ESOESP. This finding also corroborates with similar work by Jordan (1992) who suggested that females adopt supportive and caring roles in order to help others to achieve their task goals.

Moreover, these results add credence to Pipher's (1995) argument that girls' forte lie in relationship-based cooperative learning environments. Similarly, the results also collaborate with the views espoused by Mitten, Henderson, Warren, Bialeschki, Yerkes and Hampton (1997) who articulated that females are primarily preoccupied with building healthy interpersonal relationships. However, the findings of the personal interview component of this study, refute the position espoused by Gilligan (1993) who maintained that females are not capable of thinking analytically, being physically skilled or making decisions. In particular, the 1993 females articulated that they possessed physical prowess and welcomed the opportunity to make courageous decisions and undertake challenging tasks. As such, the

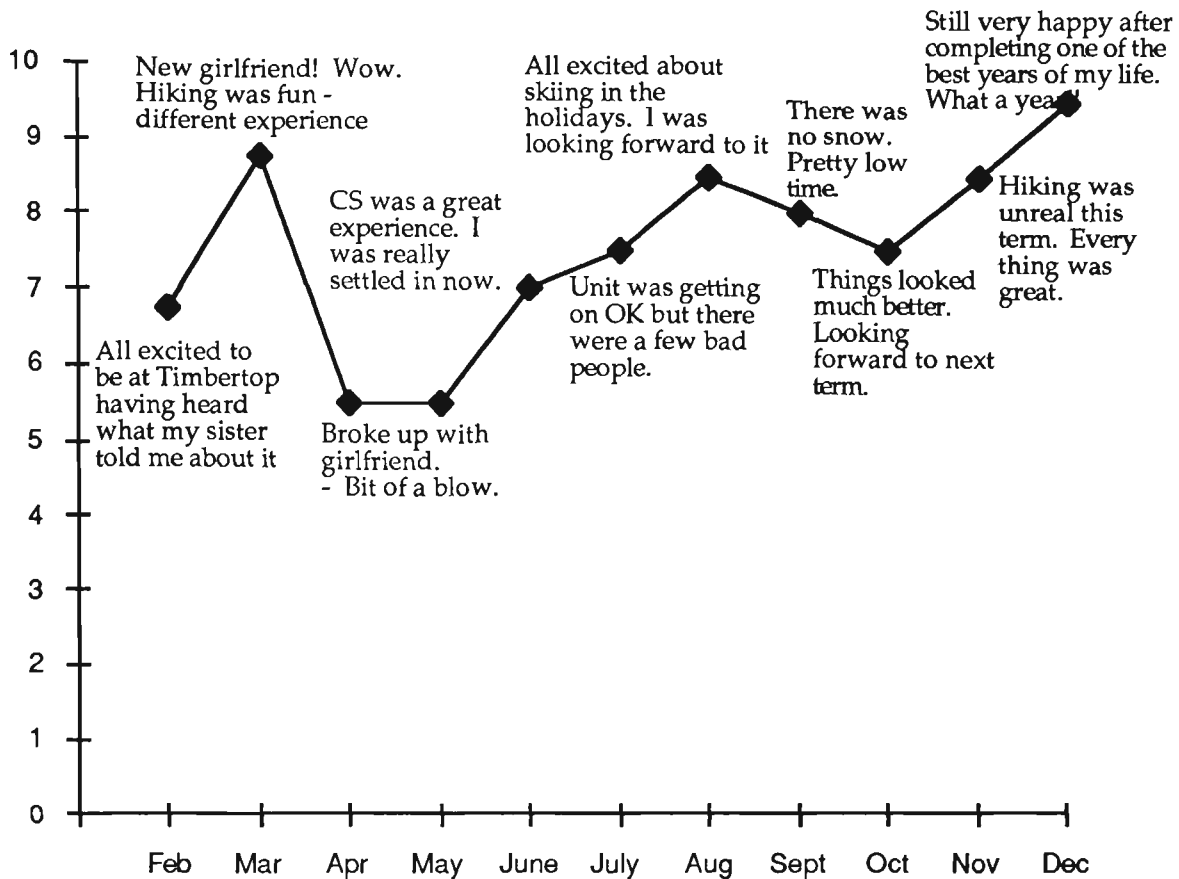
females in this cohort have broken down some of the gender stereotypes - especially those which are often considered to be the stronghold of males, for instance independence and being physically gifted to take on demanding tasks. These findings are also mirrored in a study conducted by Miranda and Yerkes (cited by Henderson, 1992) who proffered that women in outdoor education have a freedom from the gender-imposed roles. Given this stance, the ESOESP appears to foster a certain degree of androgyny within participants. If this assumption is correct, then the views put forward by Pipher (1995) and Cadzow (1996) which articulated the need for the nurturance of androgynous individuals in order to handle the adversity and hardships in contemporary society, are also reinforced by this study. The gender issues of this study are discussed in greater depth in Chapter 8 (sections 8.1.6 and 8.2.1.2).

5.1.3 LOG BOOK ANALYSIS AND TIME LINE CHARTS

The log book analysis and time line charts provided another dimension to the qualitative data gathering phase. In December (at the completion of the ESOESP), students were asked to re-read their log books and translate the information onto a chart provided by the researcher (see Appendix 7). Whilst charting their year at Timbertop the students were requested to record why they felt "high" or "low" at particular times throughout their stay at the ESOESP.

Furthermore, the log book analysis and time line charts allowed the researcher to triangulate the data obtained from different aspects of the study. In particular, the findings from the time line charts were used to verify the data gathered at various points in the personal interviews. Unquestionably, triangulation increases the validity of the study. In particular, if there was a general consensus of views provided by the interview students then the qualitative data would be deemed as valid. The following selected examples clearly depict the kaleidoscope of emotions which the students endure throughout the ESOESP. Teachers' perceptions of the students is given at the end of each student's graph along with some anecdotal evidence gathered during the personal interviews to help clarify the individual interpretations of the ESOESP. Please note that "CS" in the graphs refers to community service.

CHARTING STUDENT # 1's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

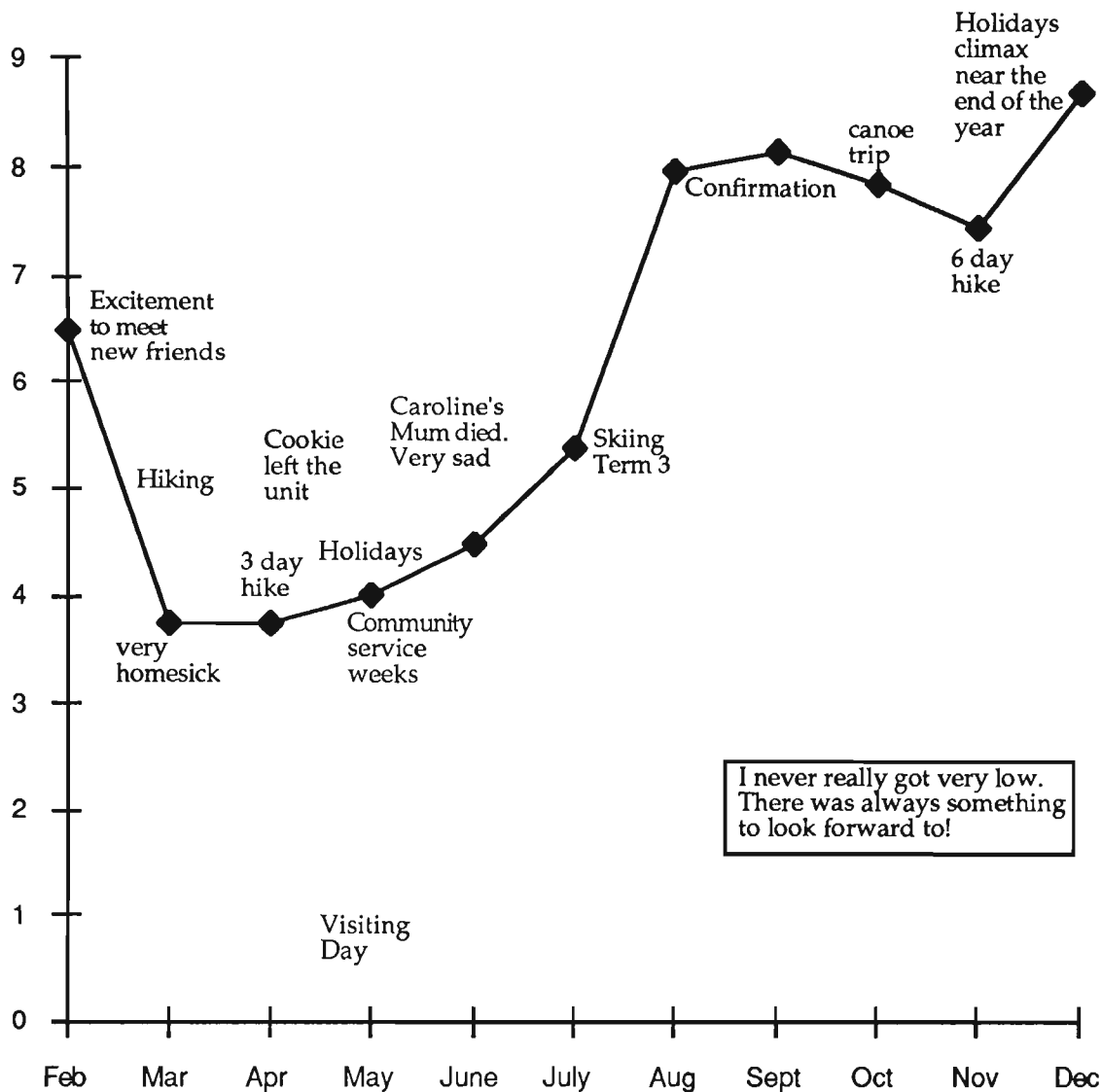
A snap-shot of some of Student #1's perceptions as the year unfolded.

- | | |
|----------|---|
| Feb.'93 | It is a chance of a lifetime, and I am one of a fortunate few who can be up here. We get to meet a lot of new people - we are like one big family. But on the same hand I'm homesick - it makes me sadder when I receive letters from home. (Male) |
| June '93 | People in your unit get on your nerves. Cooperation within the unit living with others can be a bit trying at times. (Male) |
| Dec '93 | There are many benefits throughout the year - you learn to live by yourself without others, and a place where it is totally different to a normal school - like the runs and hikes. The routine is different. Later in life you will cope better, you accept others for what they are - because you are forced to live with them. A worthwhile year and I advise others to send their children here. You learn how to cope with people in your unit that got on your nerves. Its great the way it is - I love the place. I look back and we have all achieved so much, it has been a hard task, but it has taught me the importance of a positive attitude and being able to stick at things until I have succeeded. I know how to survive in the bush - and I wouldn't have learnt that anywhere else but here. But I would have liked more spare time. (Male) |

Teachers' perceptions of Student #1.

- A sweetie
- Pleasant and co-operative in class. Really positive about Timbertop but not in the best Unit.
- A happy, cheerful fellow, but not without naughtiness.

CHARTING STUDENT #3's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

A snap-shot of some of Student #3's perceptions as the year unfolded.

Feb '93. I'm looking forward to making lots of new friends. The friends you make seem like "true" friends. Full of fun activities and new experiences that you can't get anywhere else. You learn to appreciate nature when you are in the surrounding area. It helps you to live with others and be independent in your own little world up in the hills. I like all the exercise and activity because it keeps me fit. This is such an active place, you are striving/working on a physical challenge the whole time. (Female).

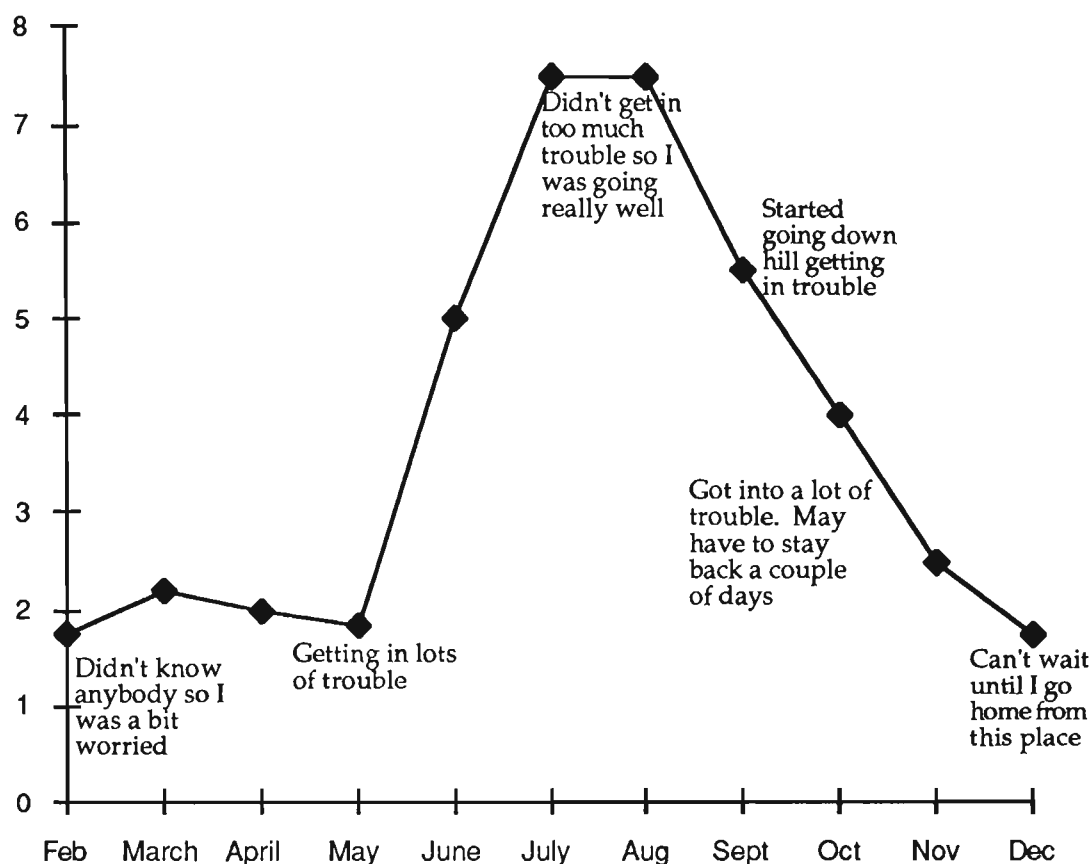
June '93. I've become more independent. (Female)

Dec '93. The experiences have bonded the group together - I am much more of a group worker now - and there will be stories to tell at our school reunions. The satisfaction I've received from my experiences was absolutely fantastic, the friendships, the responsibility, the self-development you learn to live with who you are and be happy. (Female)

Teachers' perceptions of Student #3.

- Great, good runner.
- Went really well in class, a great competitor, very in tune with Timbertop.
- Came self-sufficient and left self-sufficient. Didn't really grow as "a person". She always came first. A little blind of others' needs.

CHARTING STUDENT #4's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

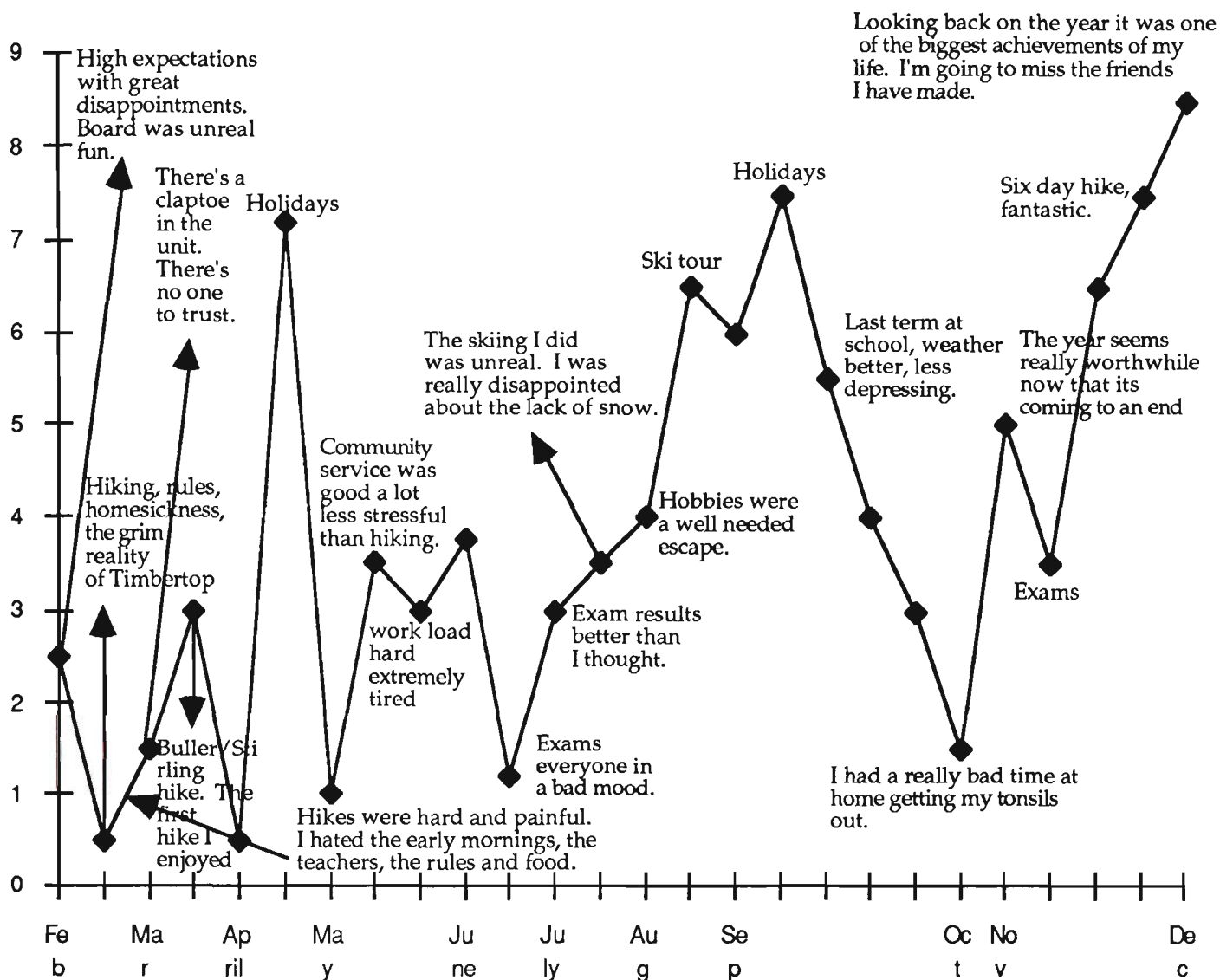
A snap-shot of some of Student #4's perceptions as the year unfolded.

Feb '93	I am boarding for the first time in my life, so being away from home will be a big challenge. Its much more peaceful I don't have dad telling me I'm a slob all of the time. It is nice not to have pressure from your parents. I'm looking forward to the different outdoor activities we get to do throughout the year. The physical things - like running and hiking because at present I'm so unfit. (Male)
June '93	I've made lots of new friends. I'm sure that I can look after myself if ever I had to do it. (Male)
Dec '93	I've lost 16 kgs in weight and I'd like to stay fit - I really didn't think I'd make it through the year.....staying out of trouble and stuff. But now I'm proud that I did it. It has been worthwhile because I can say to myself that I finished one of the hardest things I've done in my life so far. But the rules and the teachers - it was just like a prison. (Male)

Teachers' perceptions of Student #4.

- There was a nice side.
- Did we make any progress with him? I doubt it.
- He did try at some things and gained personal satisfaction (eg orienteering) but around his peers he had to be the clown.

CHARTING STUDENT # 5's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

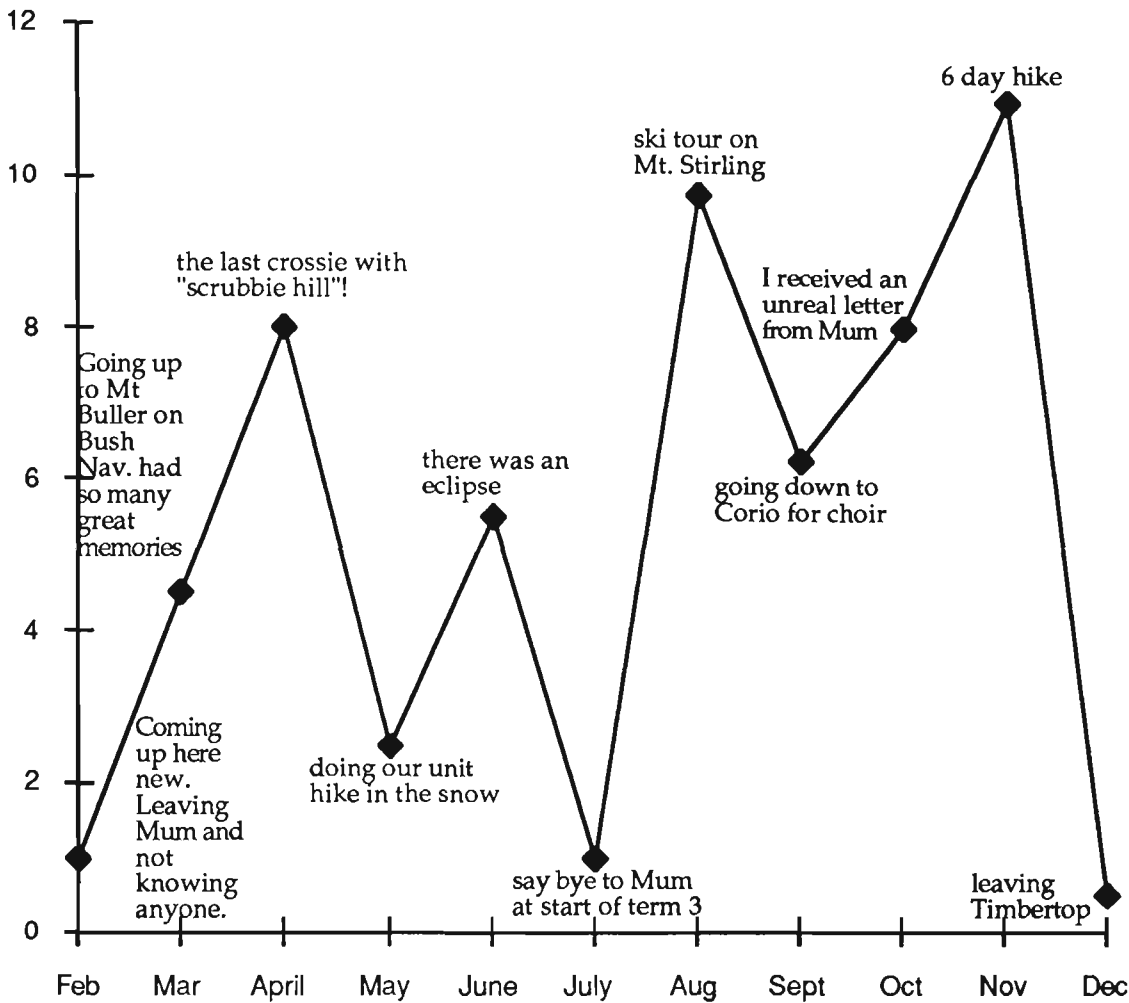
A snap-shot of some of Student #5's perceptions as the year unfolded.

Feb '93	Nearly all of our unit have had trouble adjusting in the early stages. I don't know if the experience will be good or bad - it will probably be a fantastic year, but I just can't see it at the moment. (Female)
June '93	You walk around "blank" for the first few days at the beginning of the year. Everyone told me I'd love it - but I'm afraid I didn't early in the piece ...it was really hard work. It is getting much better now though. I have knee problems when running. People think I am faking it just to get out of the runs - but I'd much rather be doing them than being stuck in here.(Female)
Dec '93	I'm grown up - I know who I am now.....it is weird, this place makes you think about everything more. Timbertop has a strange "magical" power that you don't realise at the start - you hate it but then you look back on it and it is unreal like running up mountains.....I've got so many regrets - I'd do it all so differently if I did it again. You have to get used to this place before you can enjoy it. (Female)

Teachers' perceptions of Student #5.

- Big hearted. Participated well.
- Great, but tended to look on the dark side.
- A wonderful and vibrant girl, but could be a little apprehensive when tired or stressed. A major unifier in the Unit.

CHARTING STUDENT# 6's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

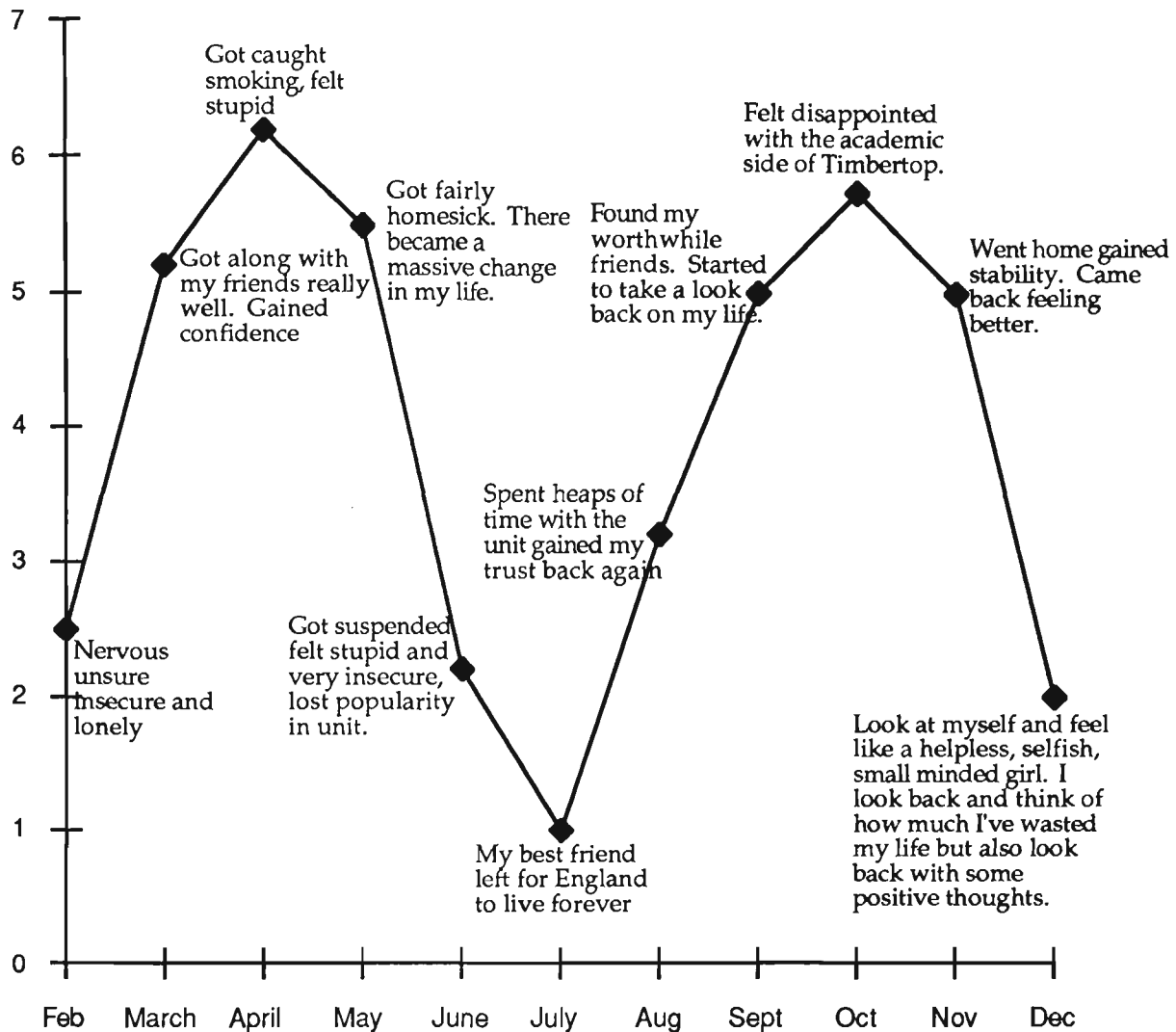
A snap-shot of some of Student #6's perceptions as the year unfolded.

Feb '93	The long runs will be a killer. Hiking should be fun and exciting and I'm sure I'll become much fitter by the end of the year. The boarding should be fun because I've never done it before. But I'm "mum-sick" and not getting along with some people.(Female)
June '93	I'd like one free day a week when we could socialize. Perhaps more visiting days for parents, because I think one day a term is a little tough. And to be able to mix with the boys more because we only ever get to see them in classes and that's not enough. A public telephone would also be nice. I've turned into an independent person - and I'm much more of a leader now. I know what it takes to survive. The friendships within my unit will change me later in life - I know so many people at a deep level now. (Female)
Dec '93	The friendships, leadership qualities, survival skills - I could live by myself so easily now. I appreciate the bush and nature a lot more now. It is beautiful to live in the bush and hike in the high country. Living away from home and being stuck with the same people for a year has been hard. (Female)

Teachers' perceptions of Student #6.

- Great
- Very Positive and caring person - also had a unique sense of fun.
- Delightful - but did she put in all that she could?
- Great girl - positive, although a little fearful at times. Loved Timbertop.

CHARTING STUDENT # 8's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

A snap-shot of some of Student #8's perceptions as the year unfolded.

Feb '93	You aren't allowed to have fun here. In my last school, I got away with heaps, but here it is a different story. (Female)
June '93	In your unit you learn how to get along with everyone - you just have to when you are one big group. But it is so claustrophobic - there is no freedom. I'm a person who likes to have time to myself. Homework in your unit is difficult at times - people keep talking and distracting me. (Female)
Dec '93	Living in a community makes you learn how to communicate and share. I would like the unit staff to spend more time with us and Mr "X" (the Master) to come to each unit once a week to talk to us. (Female)

Teachers' perceptions of Student #8.

- Lacked direction.
- Hormone problems and also terribly lazy.
- Not aware yet that she needs to try to achieve what she wants.
- Deliberate vagueness, selfish, needed self-discipline and motivation. This didn't occur.

As implied earlier, the log book analysis and time line charts was a way of triangulating the personal interview data. In summary, the following points consistently emerged throughout the year:

The general "contentedness" with the school appears to deteriorate in April and May. This coincides with the Easter school holidays where the students are reluctant to return to the ESOESP after their much welcomed break. The graphs mirror these findings and confirm the validity of the responses given in the personal interviews. Most students have depicted a slump in their ratings of the school around the same time period.

As the winter months unfold, the trend is a general increase in happiness. The graphs show a slow improvement in ratings through until August and September. At this juncture, winter skiing appeared to be the highlight of the experience thus far.

By the completion of the ESOESP, the majority of the students are unanimously in favour of their sojourn to the bush. For the most part, the students have rated the final few weeks at the school in glowing terms. The students who rated it lowly, either realised how much they had wasted their year and felt deflated as a consequence, or they failed to achieve anything worthwhile from the ESOESP and were thankful that the year had culminated. It must be stressed that this was the case with only a small minority of students.

5.1.4 PARENT INPUT

From a qualitative perspective, the PQ provided some valuable insights into the ESOESP. The final section of the PQ (see Appendix 5) was a rating scale of the experience (4 = very satisfied, 3 = satisfied, 2 = dissatisfied, 1 = very dissatisfied). This was immediately followed by an open-ended question which invited parents to make additional comments about their perceptions of the ESOESP. The vast majority of parents who responded to this section offered extremely astute comments. Their comments ranged from the residual effects of the program, to the inherent difficulties associated with assessing behavioural change, and in particular, validating "Timbertop-as-causative" analysis. These issues will be explored after an investigation of the general comments and ten subscales.

5.1.4.1 GENERAL COMMENTS

From the perspective of the majority of parents, the Timbertop experience was instrumental in fostering qualities such as resiliency, tenacity and inner strength in their children. For the most part, they mentioned that Timbertop was character building and gave their child an enormous sense of accomplishment and achievement. Furthermore, they indicated that the ESOESP offered positive social and personal growth in terms of self actualisation and self confidence. These aspects are articulated in the following comments:

- Parent 217. My son emerged from what he saw as a very difficult year (physically and emotionally) with a great sense of achievement and good self-esteem. He himself, places enormous importance on the year as a crucial stage in his maturing process.
- Parent 32. A comment in one of the letters sent home "now I have climbed that mountain, I now know I can do anything".
- Parent 8. One point I would like to make is that this experience will go down as the most exciting school year ever spent. The emphasis for our child (female) was on life skills - getting on with others, nature and learning to cope with decision making and survival skills (both physical and emotional).
- Parent 38. An environment which pushed them (my two children) to achieve far beyond what they believed to be their capabilities. I wish I had been given this opportunity.

- Parent 64. Our child benefited enormously from the experience. She has had peer group problems all through school, but has always been supported at home. Last year she had to stand alone and find her own place in the unit - and she did (many tears and lots of letters). A very valuable experience.
- Parent 177. Now she can face life's most difficult situations from a position of strength.
- Parent 192. During his Timbertop year my son experienced a separation between his parents and nearly lost his father in a car accident. Both were very difficult for him - he faced both problems well - with good results at the end of the year. Timbertop has a lot to do with this end result.
- Parent 1. Although it was very tough for her, our two older sons had very rewarding experiences at Timbertop. The teachers commented on her resiliency and ability to cope with a difficult unit.

In particular, one parent was overwhelmingly convinced of the value of the ESOESP. He provided a typed one-and-a-half page letter which specifically outlined the benefits accrued from the experience. It reads:

- Parent 182. Our son thoroughly enjoyed his year at Timbertop. As parents, the changes we noticed in him were many.

At times we look at him, see and hear from others what he does and we are in awe. That year gave him great self-confidence, but it goes beyond "self-confidence". He has a great sense of self-worth and a belief in his ideas. This is coupled with a tolerance for others; a willingness to listen to all points of view and then, not to be swayed from what he believes to be right. This might make him sound like a "pain" but he isn't.

He is at ease with his peers and with adults. That brashness that is bravado in adolescents has gone and has been replaced with quiet humility. He seems to be at peace with himself - as if he doesn't have to prove himself to anyone. I think that is what is called "having perspective"..... He has always set high standards for himself in all areas of school life. At Timbertop the challenge was for him to maintain those standards (which he did) and gained academic and outdoor distinctions - as well as a distinction for slushing!

He has learnt that life isn't black or white and to be tolerant of others and of his own failings. He has learnt to relax and see the funny side of the situation - and, most importantly of all, he has learnt to laugh at himself.

It might sound a contradiction, but he is an individual who is also a team player. Timbertop taught him the necessity of thinking of others and working together whilst encouraging the students to have a say and to sort out their problems openly..... I think this is indicative of the ethos which this year at Timbertop tries to engender. It doesn't suit all students but for our son, it was a year of great growth personally and great success.

Collectively, the statements provided above clearly encapsulate the perceived benefits of program involvement. On the contrary however, a small number of parents did not share the same views. The counter argument was framed in terms of:

- Parent 114. Timbertop was a dramatic change from the less rigorous environment of a State school. My child didn't develop the strengths (confidence, leadership, physical endurance) that we had expected but remained a bookish, unathletic, pleasant person. My child loathed the Timbertop year.
- Parent 36. I feel that there are children more suited to Timbertop than others. Those children unsuited to Timbertop are expected to gain similar benefits as those who are more suited to the experience. Timbertop has little effect on character building.

It became increasingly apparent that there were disparate viewpoints on the subject. An investigation of the ten subscales also confirms this trend and this is provided in the following section.

5.1.4.2 HEALTH AND PHYSICAL APTITUDE

Some students derived appreciable health and fitness benefits from the ESOESP. A recurring theme in the parent data centred around the positive lifestyle adjustments made by their child, for instance:

- Parent 177. It made her love sports - she cannot do without sport now.

Yet, one must be mindful of the fact that students sacrifice their traditional sports and recreational pursuits, for example weekend football or netball, horse riding, swimming squad training or surfing to be part of Timbertop. Understandably, this is a considerable price to pay for the experience. This point is echoed in:

- Parent 17. He missed his tradition sports.

Some indicated that the intense nature of the outdoor program either instigated or exacerbated physical problems. A handful mentioned that the menstrual cycle was adversely effected by the rigorous exercise regimes, for instance:

Parent 13. This was our third child (first daughter) and was a very different experience for us as parents. She communicated much clearer messages to us and generally it was the first time we learnt a broader picture. I feel certain female issues need to be addressed eg. the very high incidence of amen/dysmenohera (sic).

Others strongly objected to the physically taxing nature of the ESOESP and alluded to the injuries accrued from the program:

- Parent 61. My only criticism is that the degree of physical activity is perhaps, too much for 14-15 year olds who are growing rapidly. Damage to the knee (chondromalacia patellae) appears to be a reasonably common problem.
- Parent 1. Eventually my daughter suffered leg and foot injuries which hampered participation in running and hiking.
- Parent 173. The program has not changed and the children are a year younger, thus putting more stress and strain on their bodies eg. knees and ankles problems, and this is not helping their mental approach to activities.
- Parent 19. The amount of running required is not good for those not built to run and she sustained a number of injuries which spoiled some of the hiking and precluded her from the marathon at the end

This criticism was noted quite frequently and should be of concern for the staff at Timbertop.

5.1.4.3 PERSONAL RELATIONS

Parents noted a number of contradictory features associated with this subscale. Some believed that the experience was beneficial especially in terms of the level of self actualization that was fostered through personal relationships.

Parent 60. Timbertop was a very positive experience for both my children. It taught them a great deal about themselves and they were both far more mature for the experience. For my son, (1993) in particular, it taught him that it was not necessary to be seen as "cool" by his peers and has enabled him to develop his own personality and be himself. He is no longer drawn to the "in" crowd, but has begun to make real, valuable friendships.

- Parent 124. The most challenging thing was to get on with 14 other Year 9 girls. Very distressing problems at first, but they sorted things out. Moral courage is a major Timbertop legacy (and process).
- Parent 204. Coming from the land, Timbertop reinforced rather than changed many of her well developed skills and attitudes towards the environment and physical activities experienced in farm life. There was a marked change in her relationships with other girls/groups; her self-esteem and independence.

Whilst others held a contrary position and suggested that the ESOESP had an adverse reaction on their child's social and personal development.

- Parent 130. A rather macho/bullying culture in the boys and this rather limited my son's ability to develop. Too much of his energy had to be expended by him in coping with group norms created by leaders of cliques or gangs.

5.1.4.4 SOCIAL RESPONSIBILITY

Generally there was universal agreement amongst the parents that the ESOESP facilitated the development of this quality. They made frequent reference to the increased levels of patience, tolerance and understanding as a result of attending Timbertop.

- Parent 49. I feel that the year at Timbertop helped my son in many ways - but especially I noticed a change in his relationship with people. He was noticeably more patient and caring with people in general.
- Parent 81. The Timbertop year was excellent for our son - he learnt to take responsibility on many levels that would not have occurred so quickly. It was an important rite-of-passage moving from childhood to young adulthood. I think there could be more ritual to mark it.
- Parent 38. This was our second child to enter Timbertop, both have gained valuable people and community skills.

5.1.4.5 AUTONOMY

Appreciable gains in their child's autonomy and independence were indicated by parents. Interestingly however, some noted that their child's transition back into the family structure and mainstream society caused them a little angst.

- Parent 103. Having developed her own independence apart from the family for a year, there was a period of readjustment back into the family unit at the end of the year which was a learning experience for parents and student alike.

A small group of parents suggested that the gains in independence were somewhat of a misnomer. Issues related to the "depowerment" of individuals rather than "empowerment" as a result of attending the ESOESP were indicated as a cause of concern by one parent.

- Parent 115. Too much is organised and decided for the children not by the children. When they come home they cannot make decisions for themselves about anything eg. what to eat; what to wear; what to do; it takes six months to settle them back into the family.

5.1.4.6 ACADEMIC AND CULTURAL ACHIEVEMENTS

The majority of parents revealed that the broad curriculum encountered at Timbertop was advantageous for their child, however, there was a trade-off in terms of academic standards. Many articulated that their child suffered with regard to this subscale and was a cause of concern.

- Parent 48. It was a very good and busy year re: outdoor activities, but I feel re: studies, not a good year - but attained so much more in other areas re: outdoor survival, living with others and how to survive in this big world.
- Parent 92. My son very much enjoyed the unit life at Timbertop, however we feel that some aspects of academic work suffered (eg. foreign languages and music). Much time has been devoted by Year 10 subject teachers to bring the students to the required standards in these areas.
- Parent 192. The Timbertop year was truly a wonderful and unforgettable experience. There was such an emphasis on outdoor activities that I did feel my daughters' classroom studies did suffer. I also feel so much pressure was put on the child, the day is so programmed that she found it hard to unwind in the holidays and took time to settle in Year 10 the following year.
- Parent 122. The "Timbertop" experience is invaluable but needs adjusting to modern requirements - ie. 1) relevant computer studies; and 2) more encouragement about personal strengths and future development in the "real world".

5.1.4.7

ENVIRONMENTAL SENSITIVITY

There were only a few comments made by parents about their childs' new-found appreciation of nature and the environment. Parallels can be drawn to the scant number of students' responses in this regard.

- Parent 79. It was the best year of his life - he says so!.....the memory of the sunsets and sunrises will remain with him forever.
- Parent 29. Taught him to appreciate the beauty of nature and the rewards of effort.
- Parent 177. It brought her close to nature appreciated outdoor life - the simply beauty of nature she is now more aware of the environment.

5.1.4.8

SCHOOL SPIRIT

Some parents made reference to the sense of achievement their child derived from the experience. This was particularly evident when parents reflected upon the difficulties their child encountered early into the program as compared to the sense of satisfaction and enjoyment they exhibited with their achievements at the conclusion of the ESOESP.

- Parent 151. It was a very good experience for both parents and child. As the parents, we didn't worry about the new environment that our son had to adjust. However, he did complain and we were frustrated by the letters that were written home everyday asking for his resignation from the school. He got better after third term and it produced a good result in fourth term - we were all very happy.
- Parent 169. Towards the end of the year (beginning of term 4) he was very unhappy and did not want to return - he eventually did and at the end of the year, was glad he did. I think he has a greater appreciation for it now, than then and I feel it will continue with time. It will be interesting to note his reactions when his sister is there in 1995.

Others conveyed that the school spirit at the ESOESP was scarifying and detrimental to their childs' growth and development.

- Parent 138. Our son has not talked very much at all about Timbertop, but we suspect that it was a very difficult and possibly confusing year for him. There were personality conflicts, both with staff and some in his unit.
- Parent 51. Still too much emphasis on material wealth of individual students which leads to "power and value" problems in units. A dog-eat-dog attitude prevails rather than "sharing". The promotion of the Timbertop experience

is far different to the actual experience - we felt it actually "hardened" many of the students rather than promoting a more caring and Christian way of life. However, there were many advantages that will, hopefully, eventually outweigh these problems.

5.1.4.9 QUALITY OF TEACHING

There were mixed reactions and no overall consensus by parents when it came to analysing the quality of teaching. Some positive comments were made in terms of the supportive and understanding nature of teachers.

Parent 81. The support and insight of the teachers was generally excellent. Good teacher/parent relationship also.

Parent 1. Staff were very kind and understanding.

Conversely, some negative statements were made about the maternal or paternal qualities of some exhibited by a number of the staff.

Parent 189. The whole concept depends entirely upon the relationship between pupil and surrogate parent - ie. the house master/mistress. In the case of my son the relationship was catastrophic.

5.1.4.10 INTERPERSONAL RELATIONSHIPS

Similar to the quality of teaching subscale, there were contrary positions expressed by the parents when it came to analysing the relationships which existed between students and teachers with respect to the unit life. Notably, a strong barrage of comments was made about the inflexibility of staff in attempting to solve the interpersonal problems evident within units. The parents strongly oppose the non-interventional methods employed by the staff and suggest that compensations should be made if the impact of unit life is detrimentally affecting their child's social development.

Parent 199. Our daughters' unit NEVER got it together because of a few strong personalities. She is a kind and sensitive child who had to endure 12 months with these same girls. I would like to see units changed when it is so obvious they are not working.

- Parent 30. We feel that the inflexibility in recognising that it is possible that a unit may not be capable of "getting it all together" is a problem. Our son's unit did not work and he was disillusioned and disappointed in the year. The staff were aware of the difficulties and apparently were unable to change or alleviate the situation.
- Parent 86. I feel strongly that the units should not remained fixed ie. if a unit is not working well after say 6-8 weeks, then there should be changes made. My son's year was marred by some of the members of his unit's inability to learn to do their jobs and cooperate. Timbertop is too rigid - times are changing.
- Parent 112. He was in a particularly antisocial group of children in the unit - some of whom were in serious trouble. This tainted his experience as although my son is well behaved and positive, he was exposed to some pretty negative behaviour at very close range. It could therefore have been much better. Overall he did benefit.
- Parent 1. She began well but much unpleasantness in her unit. Undermined her self-confidence. Became a loner and was extremely demoralised after being extremely cheerful.

5.1.4.11 APPROPRIATENESS OF CURRICULUM

As indicated earlier in the academic and cultural achievement subscale, many parents appreciated the broad curriculum offered at the site. Their supportive comments ranged from relevance to life, attaining life-skills, enjoyment and satisfaction received from learning and the academic rigour of the school.

- Parent 206. The Timbertop year is a once in a life-time experience - quite unique, very developmental just at the beginning of adolescence. In no other way could a child have such intense physical training allied with the academic and social development. A credit to Geelong Grammar School.
- Parent 26. My daughter was already independent, intelligent and successful before attending Timbertop. What she lacked was the ability to be part of a functioning group and physical as opposed to intellectual. Timbertop did for her what no other experience could have done. It made her be part of a powerful group and be able to enjoy her strengths. She became an athlete - which blew me away! She began to communicate powerfully and she realised others respected her. She was already organised, a good problem solver, environmentally aware etc, Timbertop simply confirmed all those talents. She says herself that it was the best year of her life. I agree.
- Parent 229. As a former student of the school and Timbertop, and having had another child go through the system, I remain convinced of the benefits of the program. The results are entirely as hoped and expected.
- Parent 2. Who could reasonably send their children elsewhere if they could afford to send them to Timbertop? An experience of a life-time for my children.
- Parent 171. My son loved his year at Timbertop and benefited greatly. He matured mentally and physically and has developed a zest for life and a genuine love for the mountains and the places he explored on the hikes and runs. I am

thoroughly pleased with the impact the year at Timbertop had on my son. His comment was "I could do it again Mum" - this was just after he had completed.

- Parent 7. Our son was keen to go to Timbertop and positive about the year ahead as his sister (Timbertop '90) had enjoyed her year so much. They don't use the adjective "enjoy" but rather "hard year - but wouldn't have missed it for the world".
- Parent 23. As parents of two children that have been to Timbertop (1991 and 1993) we feel they have both gained tremendously. A very challenging year with highs and lows, but a character building year and I know they will look back - as they do - even now - and appreciate their time and experiences at Timbertop.
- Parent 124. She tells me that it has been the most significant year of her life. Year 10 is an anti-climax. The whole family was involved with Timbertop - a new kind of communication with letters and parcels. Radically different and wonderful year for all of us - tough (very tough), but exhilarating and very worthwhile.

As was the case in the student interviews, parents suggested that time for reflection and introspection should be negotiated into the school curriculum.

- Parent 115. There is not enough time allocated for the children to be alone - to have time to contemplate away from others.

5.1.4.12 PARENTS' PERCEPTIONS OF THE PROBLEMS AND LIMITATIONS

This section explores some of the problems encountered by parents when they attempted to analyse the impact of the ESOESP on their child. The difficulties range from: 1) issues associated with maturation; 2) attempting to assess change in behaviours that were already well established prior to entering Timbertop; 3) aspects of "secretive" children who share very little with their parents; 4) the fact that the 1993 cohort was a less than desirable year; and 5) their problems with the construction of the questionnaire.

Firstly, many parents suggested that it was difficult for them to "tease-out" the intricate causal web. In other words, they were undecided whether it was maturation or the Timbertop experience which provided the catalyst for change.

- Parent 82. Difficult to know how he would have changed anyhow - if he didn't go to Timbertop.

- Parent 122. At age 14 there are inevitable changes in all young people which are not related directly to school.
- Parent 124. Sometimes hard to separate Timbertop-induced changes from growing up and maturity changes.
- Parent 190. The Year 9 is a year in which children develop and change enormously (ask any teacher - it is one of the, if not the most interesting/difficult years) where children change a great deal.

Secondly, others indicated that there were no marked changes in their child's values, attitudes or behaviours because the habits or characteristics were already well established before they went to Timbertop.

- Parent 101. I think prior experience needs to be factored into your "Timbertop-as-causative" analysis.
- Parent 230. What the survey misses (which is extremely important) is the benchmark status - eg Question 20, the validity of the answer depends on whether or not the child was confident in himself/herself before going to Timbertop.
- Parent 59. What about qualities that were already a feature of my son's character before he went to Timbertop?
- Parent 37. We considered our child was well adjusted and achieving confidently in most of the above areas prior to Timbertop. But the experience was still a happy and satisfying one.

Thirdly, some parents suggested that it was difficult to assess their adolescents' behaviours, attitudes and values. In the main, this was attributed to the secretive nature of children, particularly adolescents who at times appear to operate in an existential vacuum. This can be isolating for parents. Likewise some adolescents, by their very nature, don't allow their parents to get close to them and this is conveyed in the following comment:

- Parent 71. He keeps things close to his chest and we simply don't know so it is hard to answer all his letters were about hiking - not friends at Timbertop..... he never talks about his feelings to us, he may to his friends, we don't know.

Fourthly, parents also indicated that they were cognizant of the fact that the 1993 cohort was the "bad year". In their opinion, this had a deleterious effect upon their child's development and this point is shown in:

- Parent 19. Our child's experience was perhaps not as good as it could have been as it seemed an unfortunate year with a number of suspensions etc.

Lastly, the questionnaire design posed several problems for a number of parents. To this end, their following comments are both valid and accurate.

- Parent 19. A number of the questions could just as well be applied to any boarding experience and as she is a long term boarder, there was no sudden or dramatic change just because of the Timbertop year.
- Parent 41. Third category "slightly minor changes and not consistent "very ambiguous category". This questionnaire is open to misinterpretation for instance, in those areas of a child's personality already well developed - it implies change was necessary - also implies Timbertop only influenced that year.
- Parent 89. Where "no change" has been indicated, this denotes that I am saying that a very good situation already existed.
- Parent 86. The questions are fine but the responses are not well worded.
- Parent 21. This paper allows no chance to record change that may be negative.

Issues associated with PQ design will be elaborated upon when the author revisits in Chapters 8 and 9.

5.1.4.13 PARENTS' PERCEPTIONS OF THE RESIDUAL EFFECTS

A large number of parents also indicated that they had witnessed marked changes in their child as time passed. In other words, the residual effects were what had impressed them the most. Likewise, some parents commented on how their child's "painful" memories had been replaced by the a renewed love of the place as they reflect upon the experience through a different set of lenses.

- Parent 82. When asked he said he enjoyed the year, but didn't give the impression of being super enthusiastic - however, now nine months later is talking of applying as an assistant at Timbertop after Year 12.
- Parent 64. While at the time our daughter was unhappy and struggled to cope, she now (12 months later) sees it as a valuable experience. Her family and friends have noticed a huge change in her during her Timbertop year - definitely a change for the better!

- Parent 13. I have had three children attend Timbertop and for each one, it has been a positive experience. Whilst at Timbertop they each enjoyed it, but the tangible and long term benefits have been what has impressed me most.
- Parent 82. Changes seen in our son have not really manifested themselves until recently when he has at last seemed to gain a little maturity many Timbertop benefits appear when time has begun to mellow the experience.
- Parent 61. Overall, I believe these young people will in the main, look back on Timbertop as their most memorable year of schooling.
- Parent 19. I suspect the benefits of it all slowly become apparent as time goes by afterwards as they meet other challenges in their life.
- Parent 182. The benefits to him will be shown as he looks back over the Timbertop experience.
- Parent 103. We feel that only a year after the experience of Timbertop that the full benefits have not yet been realised.

5.1.4.14 PARENTS' PERCEPTIONS OF THE GENDER DIFFERENCES

Two parents made reference to the differential gender outcomes of the program based on the fact that both their sons and daughters had been through the program.

- Parent 39. We are very happy with Geelong Grammar. Our older daughter had a very fulfilling but different experience two years earlier because the challenges are more novel for the girls.
- Parent 182. As a general observation, girls tended to adjust more quickly than the boys to this type of challenge.

It should be noted that this set of parents (with a boy and girl both attending the same school) was an extremely small sample and therefore, comments about gender differences were scant.

In summation, the parents proved to be an invaluable source of information in the study and provided a wealth of data to the collective pool.

5.1.5 TEACHER INPUT

Teacher input was derived from two sources. Firstly, due to the Master of Timbertop's long association with the school, he was invited to make general comments about the 1993 cohort. His responses were both generic comments and specific statements. Secondly, the teachers at the school were asked to write individual comments on each of the students involved in the personal interview phase. Their responses provided the researcher with insights into the behaviours and traits of certain students which may not necessarily be visible during personal observation phase.

5.1.5.1 MASTER OF TIMBERTOP COMMENTS

In terms of social responsibility, the following comments were offered by the master:

The students have a wonderful reputation in the community - they visit farms, churches, schools, people's homes and other suitable locations. They are seen as "independent and responsible" and I would say that the girls are better at the cleaning-type tasks.

With regard to personal relations, he reported that:

There are arguments - as in any community the girls are much 'closer' and less inhibited than the boys. Girls show that they enjoy each others' company better than the boys do. The camaraderie is greater as the year progresses.

As far as academic and cultural achievement was concerned, the master stated that:

Studying at night is not easy after a full day of lessons. Both boys and girls can be studious. The boys in 1993 found it particularly hard to settle and concentrate and needed close supervision.

With respect to health and physical aptitude, some interesting comparisons were drawn:.

More boys avoided exercise in 1993 than is the norm - overall, the bulk were keen to take on physical exercise. A positive year of girls who tried hard throughout.

In terms of autonomy and self-reliance, the master articulated that:

As the year progresses, both boys and girls like to solve their own problems.

Lastly, as far as environmental sensitivity was concerned, the differential gender outcomes were noted:

Yes, they are concerned about the environment. The girls recycle better than the boys, but there is a marked difference between the beginning of the year (both boys and girls) in the way they care for the bush whilst hiking.

5.1.5.2 TEACHER PERCEPTIONS

For the most part, the teachers' comments confirmed many of the ideas expressed by the personal interview cohorts. Those who were experienced teachers at Timbertop, could fairly accurately pinpoint the physical, social and emotional problems that emerge during the course of an ESOESP. As implied earlier, these teachers provided feedback about the students who participated in the personal interviews.

Student 1: Male

- A sweetie
- Pleasant and co-operative in class. Really positive about Timbertop but not in the best Unit.
- A happy, cheerful fellow, but not without naughtiness.

Student 2: Female

- Started pretty negative, but became a pretty good kid.
- Great girl.
- Good value

Student 3: Female

- Great, good runner.
- Went really well in class, a great competitor, very in tune with Timbertop.
- Came self-sufficient and left self-sufficient. Didn't really grow as "a person". She always came first. A little blind of others' needs.

Student 4: Male

- There was a nice side.
- Did we make any progress with him? I doubt it.
- He did try at some things and gained personal satisfaction (eg orienteering) but around his peers he had to be the clown.

Student 5: Female

- Big hearted. Participated well.
- Great, but tended to look on the dark side.
- A wonderful and vibrant girl, but could be a little apprehensive when tired or stressed. A major unifier in the Unit.

Student 6: Female

- Great
- Very Positive and caring person - also had a unique sense of fun.
- Delightful - but did she put in all that she could?
- Great girl - positive, although a little fearful at times. Loved Timbertop.

Student 7: Male

- Something subversive about this one. Said one thing to you (as a staff member) and did another.
- Negative, clung to his peers.
- Arty, eccentric.
- Sinister.

Student 8: Female

- Lacked direction.
- Hormone problems and also terribly lazy.
- Not aware yet that she needs to try to achieve what she wants.
- Deliberate vagueness, selfish, needed self-discipline and motivation. This didn't occur.

Student 9: Female

- Real trier. Really got into the spirit of things.
- Quiet plodder
- Achieved her personal goals through hard work and perseverance.

Student 10: Male

- Non-descript

Student 11: Female

- Conscientious and friendly
- A pleasant trendy
- Lacking in self-esteem because of perceived demands expected by her peers (popularity etc). Found it difficult to be herself and relax. Very level-headed.

Student 12: Female

- Great
- Very motivated in the classroom.
- Always polite - I saw only her positive side.
- Great - but could have been even greater.
- Went down in the middle of the year, but reasserted herself at the end. Highly motivated.

Student 13: Male

- Zany, went his own way.
- A dill - but likable.
- An affected weirdness - image is all. Lazy and disorganised.

Student 14: Male

- Good natured, at times timid.

- Developed a sense of humour. Was keen and very much tried to participate in all aspects of the program.
- A real battler, tried to the end.

Student 15: Male

- Afraid to go against his peers but he tried pretty hard.
- Delightful, eager to do well.
- Didn't do what he could have done, lots of potential but swayed or cowered?

Student 16: Female

- Sweetie - I don't know how deep it went.
- She was pleasant most of the time. Positive about things but prepared to direct the Unit to her way of thinking in order to get her own way.
- Went through a lot of growing up/thinking. Finished the year off well although she went through bouts of silliness and following trendies. Gained in self-confidence in the end.

Student 17: Male

- Happy, determined strong "had the spirit"
- Good, solid, highly motivated.
- The voice of C Unit. Very motivated, irritated others by being a bit piggish.
- Good value.
- High motivation, solid citizen, although inclined to expect too much without understanding his peers.

Student 18: Female

- Off the planet
- Up and down
- So much for Timbertop and all it stood for in her own way.
- Erratic, everything was difficult for her.
- Life very much determined by her severe asthma problems, medication and diet (self-imposed) Absent for a good part, loved the camaraderie side of things.

Student 19: Female

- Selfish, willful, never really got with the program.
- Lazy, vague.
- Totally self-centred.

Student 20: Female

- Great
- Dynamic. Into everyone's business in the most possible way. A dramatist of life's little events. Very positive about Timbertop by about the end of term 2.
- Could be stropky but channeled would be great value.
- Blossomed during the year - gained a lot but could have been more of a forceful leader if she wanted. Succumbed to peer pressure to act a certain way. Has the ability to be influential.

Student 21: Male

- A lovable rogue.
- Pleasant mannered on a one-to-one basis. Cheerful and willful and selfish. Wanted Timbertop to adjust to fit to him.
- A very young boy unused to discipline, organisation etc.

Student 22: Male

- Could be strong and stropky
- Problems at home distracted him greatly. Very much wanted to be on side, but a very negative Unit so he was between a rock and a hard place. This led to some aggressive behaviour.
- Could have performed better, tended to be negative, irritable.

In summary, this chapter has outlined the potent nature of the ESOESP under investigation. Undeniably, a powerful matrix and allegiance is formed between student-to-student and student-to-teacher. For the most part, the researcher noted that the female participants were more vociferous than males during the personal interviews. As highlighted in section 3.4.2., one of the limitations of this study (in terms of gender) is that there is a difference in response. The results may be biased because the research tool (in this case, the personal interviews) is different for boys and girls. It must be stipulated that the personal interview tools were not different, but rather, the author feels that their skills for answering or responding the interviews were different. The research tool appeared to be gender biased as females were more articulate with their responses whilst males at times, were monosyllabic with their responses.

The log book analysis and timeline charts which were used as an adjunct for participant self-examination and introspection, proved to be a significant source of qualitative data. Furthermore, this method of data collection mirrored the findings articulated during the personal interview phase. Finally, the impact of the parent input was incalculable. Their astute and insightful comments enriched the findings of the study. These aspects will be discussed in greater depth in Chapter 8.

Chapter 6

STUDENTS' PERCEPTIONS OF THE ESOESP:

THE 1994 COHORT'S RESULTS AND DISCUSSION

For the most part, the 1994 cohort was used to validate the findings from the previous year group. As outlined in Figure 3.1 and addressed in Chapter 3 and 4, the 1994 cohort was only subjected to various parts of the research design that was employed for the 1993 cohort. As such, this chapter is confined exclusively to an analysis of the students' results in the 1994 cohort. In simple terms, there were three methods of data collection for this cohort which included: 1) personal observations; 2) personal interviews; and 3) log book analysis and time-line charts.

As was the case in the previous chapter, the three methods are addressed individually and presented by chronological reference points. Similarly, the ten subscales contained in the quantitative assessment viz: social responsibility, personal relations, autonomy, health and physical aptitude, environmental sensitivity, academic and cultural achievement, school spirit, quality of teaching, interpersonal relationships and appropriateness of curriculum were used as a platform to address the qualitative assessment.

6.1 1994 COHORT'S BACKGROUND INFORMATION

At the commencement of the 1994 year, the teachers intuitively felt that the new intake was more amicable, flexible and positive than the previous cohort. Early signals indicated that the group were inspired by the challenges that lay ahead and eager to imbue themselves

within the Timbertop philosophy. In line with the 1993 cohort, 24 students (12 male and 12 female) were randomly selected at the beginning of the year to take part in the personal interviews. However, only 20 remained at the end of the academic year and this will be addressed in Section 6.1.2.

6.1.1 PERSONAL OBSERVATION

In contrast to the 1993 group, the 1994 cohort was perceived by teachers as more positive, compliant and accepting from the very outset. Interestingly, their amiable and enthusiastic approach was infectious and very few students exhibited unacceptable behaviours. In accord with the previous year, the students experienced a gamut of emotions as the course of the ESOESP unfolded. These observations will be presented as pre, mid and post-test data.

February 1994

Undoubtedly, at the commencement of the year the highly structured existence was a culture shock for the newly enrolled students. In February, the ESOESP illicit behaviours which indicate bewilderment and awe at what lays ahead. Some are disturbed and perplexed, others are inspired and eager to partake in the adventure.

June 1994

June found the students rather depressed and homesick. The harsh weather conditions compound the problems and they were eagerly awaiting the school holidays. Many students expressed an interest in opting out of the program at this juncture, but they are mindful of the fact that personal growth occurs from inner pain. To this end, it was clearly evident at an overt level that the students had matured and become more stoic in the face of adversity.

The ambience of the ESOESP is entirely positive at this stage. Their energy has been rekindled as a result of the spring hiking, cross country skiing and canoeing which the students have undertaken. Many view Timbertop in a favourable light and are amazed at how quickly the year has passed. The rules and regulations are unbegrudgingly accepted and the ESOESP was very much a tight knit community. As the buses prepared for departure the tears flowed yet again for both students and teachers. The sense of personal achievement is overwhelming.

6.1.2 PERSONAL INTERVIEW

The personal interviews for the 1994 cohort were conducted in February, June and December. Inarguably these sessions proved to be an invaluable source of information for the researcher. As with the 1993 cohort, the students' attitudes fluctuated as the year progressed. The same trends of initial euphoria and excitement about the ESOESP were replaced by home sickness, apathy and general exhaustion as the winter months approached. By the end of the year most students spoke in passionate terms about their ESOESP.

The 1994 results will be treated in the same manner as the 1993 cohort and presented in two ways. Firstly, a section containing general comments which describe the total program impact of the ESOESP and secondly, by using the categories contained in the subscales of the RMQ and SLQ viz: health and physical aptitude; personal relations; social responsibility; autonomy; academic and cultural achievement; environmental sensitivity; school spirit; quality of teaching; interpersonal relationships; and appropriateness of curriculum. Furthermore, comments which made reference to general life skills were also given their own category.

As was the case in the previous year, 24 students were involved in the personal interviews, however, only 20 remained in the group at the conclusion of the school year (10 males and 10 females). In the main, this was attributed to four students who lacked the necessary motivation to attend the interview sessions following their February involvement. Although numerous reminders were sent to these four students in June and December, they obviously displayed a reluctance to progress any further with this form of data collection. The researcher did not feel it was appropriate to persevere with these students given their ambivalent attitude and also considering this was not a compulsory requirement of the program.

6.1.2.1 GENERAL COMMENTS

At certain points in the interview, students gave sweeping comments about the ESOESP. In turn, this made the process of categorising the general themes extremely difficult. For this reason, the following section deals with the statements made by the students which are "global" rather than "specific" in nature. In the main, these comments pertain to the acquisition of general life skills and feelings of personal accomplishment and achievement.

February 1994

At the beginning of the experience some students attempted to look through a crystal ball and imagine the benefits acquired from the ESOESP. Comments made during this initial period included:

- | | |
|------------|---|
| Student 34 | I'm sure that I'll appreciate home and modern life more after experiencing Timbertop. I think it is great to do it in Year 9 - it is the perfect time for kids.
(Male) |
| Student 35 | I'll be fitter, have closer friendships, increase my knowledge about the bush and become a better person because my attitudes and behaviours should change. (Male) |
| Student 31 | I'll have a better mental attitude - knowing how to put in the work to succeed.
(Male) |

- Student 38 Nothing so far has really impressed me about this place. I don't know how this year is going to fit together - or for that matter, how I am going to achieve it. (Female)
- Student 37 It should be great. I'll be more confident after being here. I heard that it is like a prison camp, but it is also the best year of your life - so I want to get the most out of it. At the moment I can't say it is wonderful. But I hope it will get better.....it is hard on you. (Female)
- Student 33 This is really nice here - it is a perfect place to be. (Female)
- Student 42 It's just great - I've been looking forward to it for years. (Female)

June 1994

By mid-year the interview group exhibited greater acceptance and tolerance towards the ESOESP. Their experiences were being viewed from a philosophical standpoint rather than a critical or naive perspective. Interestingly, the 1994 cohort's responses were a little more verbose than their 1993 counterpart and perhaps this can be attributed to the different dynamics witnessed between the groups. In general terms, the 1994 cohort was more compliant and respectful and typical responses at this period were:

- Student 23 The benefits of Timbertop are that you will never get another chance to do it. Any other normal 15 year old wouldn't be out hiking every weekend and its good to have a change of lifestyle, it gives a different outlook toward nature and life. You take it for granted when your here or when your at home you look at it from a different aspect. (Female)
- Student 24 Becoming fit is a totally new experience for me. You feel secure with no protection or having no locks on doors is something I've never felt before. Learning about nature and getting along without phones is a benefit of living here. It's a year in which you will make friends for life - and it is challenging trying to work together in a group of 16 for the whole year. You learn a lot about yourself. (Female)
- Student 34 A school in a different environment combining physical and moral advancement along with academic work. It's a challenge, but an adventure, a once in a lifetime thing. (Male)
- Student 35 Timbertop is a good place to be. It is a special year. It gets you away from the city and helps you to enjoy the bush. It helps you become a good person especially in the units living with others and also caring for them. (Male)
- Student 37 A place where you really look at yourself and see what sort of a person you are. It has its difficulties but its also heaps of fun.(Female)
- Student 38 A different place to be for a year, and I'm glad I am here because only 200 kids do it a year and the year can be the same. It has been great so far, and it has gone so quickly nearly half the year has gone already. (Female)

In accord with the 1993 cohort, the most observable and tangible feature displayed by the group at the conclusion of the ESOESP was the maturity and inner strength they had acquired. The sense of personal satisfaction and achievement literally radiates from their persona. They answer their personal interviews in a passionate manner and provide descriptive statements of their inner feelings. Their new-found confidence and appreciation of Timbertop is echoed in the following comments.

- Student 30 It is an experience that you will remember for the rest of your life! It expands both your mind and body and although its tough some time it has great rewards. (Male)
- Student 31 I think a benefit of this place is the memories - with the knowledge that I am capable of hiking for 6 days, of climbing many mountains and the incredible sense of confidence it gives you. (Male)
- Student 32 Yes I've had a lot of experiences that lots of other people can only dream about. I'm 15 years old and I have run a marathon - that is longer than most adults ever run in their life. I guess I can look back and say I've completed a huge challenge. It's been unreal! (Male)
- Student 33 I'll have lots of memories and stories to share to my children. I'll have better experience in the bush and coping with hard situations when lost and things like that. It's just all comes from being here. It's such a learning year. It's generally a different way of looking at life. Teachers are different and so is the class schedule. Running which made a huge impact on our fitness here. There isn't as much sport-like games but hiking replaces that. It's also different coming from the city to the country. (Female)
- Student 34 Yes, it's been a fun experience, living in my unit, seeing the bush as it should be, feeling fitter etc. I think I'd recommend it to other people as a challenge to conquer. To make it better, I'd make everything a bit more difficult. I get the feeling that the program is starting to get a bit soft, and the only really difficult thing is living away and chopping boiler wood. (Male)
- Student 29 Timbertop is a place alone, it is unique with a strong emphasis on the outdoors, you learn to live with others and yourself. (Male)
- Student 27 A worthwhile experience. Timbertop is a place where through the year you encounter a lot of pain but it all turns out good at the end. (Male)
- Student 25 I guess the motto for this place is "Live it, learn from it and pass it on". (Female)
- Student 24 I have really enjoyed this year. It is really special to me. I have really learnt a lot about myself and my peers. (Female)

6.1.2.2 HEALTH AND PHYSICAL APTITUDE

The opportunity to become physically fit is perceived by most students as a justifiable bonus emanating from the experience. Typical comments at the commencement of the year were:

February 1994

- Student 42 I love it - the physical side is a challenge. I'm sure I'll be much fitter as a result of the experience.(Female)
- Student 34 The physical fitness will most definitely be a benefit. (Male)
- Student 26 I'll be fitter and know how to run long distances. (Female)

Others viewed the physically demanding nature of the ESOESP as somewhat tortuous. Even so, they could see that the program would be beneficial to them in the long term and this is reflected in statements such as:

- Student 24 The hiking and all the running will be difficult because I'm so unfit. I don't like having to run the "wood-sheds" for lateness because I'm a person who is notoriously late. Even though the exercise will kill me - I think it should be beneficial. (Female)

June 1994

Generally speaking, by June the 1994 cohort was more positive in their outlook of their health and physical advancements. Many admired the physical nature of the hiking and running and made frequent reference to their enhanced fitness levels.

- Student 26 Yes, definitely. It is great living away from home at 15, with non-stop activity to increase your fitness. Learning that I can actually run has been an advantage of being here. (Female)
- Student 39 I'm fitter and much prefer the country lifestyle. (Male)
- Student 40 Hiking and running have been great because I've never done much before this. (Female)

At the completion of the year, most students were appreciative of their improvements in health and fitness. Many articulated these benefits in terms of:

- | | |
|------------|---|
| Student 33 | I think that my physical co-ordination has been a bit better this year. I've lost weight and I'm more enthused in PE. (Female) |
| Student 24 | The physical side of this place is good - I mean I will keep running and won't go back to eating as much junk food. (Female) |
| Student 23 | Your health and fitness has increased by far, you don't realise how fit you are. (Female) |
| Student 26 | Being fitter than what I was when I started. (Female) |
| Student 27 | I think that the main benefits that I have got out of this year would be my better fitness level. (Male) |
| Student 29 | I'm the fittest I've ever been. (Male) |
| Student 32 | Probably the fact that I am so fit now is great and I just need to keep running to keep up my fitness level. (Male) |
| Student 39 | Becoming much fitter than I used to be. Some students never got anything out of it - they have not been able to do any sport and have considered it a waste of time. (Male) |

Quite clearly, the physical nature of the program does not appeal to all students. There appeared to be less injuries to knees or ankles in the 1994 group. Furthermore, even those who experienced problems in this regard still tended to view the experience as beneficial.

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| Student 38 | Hiking I found the hiking very difficult mentally and physically. (Female) |
| Student 34 | The hiking/running side of things was difficult because I hadn't previously been used to such a high demand physically, on myself. (Male) |
| Student 35 | Well the tough Timbertop program which is mostly running and hiking are really hard for me. Before I came here, I had never done any of these things. Since then I have been running 3 times a week and it is really hard especially the marathon. (Male) |
| Student 24 | Not being able to do the things I want eg. running and hiking (because of an injury). (Female) |

6.1.2.3 PERSONAL RELATIONS

February 1994

At the beginning of the year the ESOESP was seen by many students as allowing them an opportunity frequently interact with their peers. This was perceived by many as a beneficial element of the program. However, not being able to socialise with people outside of their unit was mentioned as a detrimental aspect of the school structure.

- Student 42 I like the idea that I'll be making new friends to keep forever but trying not to fight with people in my unit is pretty difficult. (Female)
- Student 24 It is hard watching your old friends grow apart from you because they are in another unit. (Female)
- Student 23 This place is sort of good but I'd like more time to socialize with the other units. (Female)
- Student 27 Yes this place is enjoyable but we need more social time with the other units. (Male)

Notably, the newly enrolled students mentioned the difficulties they encountered at the commencement of the year.

- Student 23 I'm a bit shy because I am a new student, I'm homesick and uncertain. (Female)
- Student 27 It was difficult the first day here meeting all the new people - you see, I'm a new student. (Male)

June 1994

The development of genuine friendships are seen by some students as a benefit of Timbertop mid way through the program.

- Student 32 This place shows you how to learn about yourself. To get to know yourself and others in a way and environment which is totally different to most of what you've experienced before. A place where you can only strive for full potential if you are accepted as one of the friends of others. (Male)
- Student 42 The friendships seem more real compared to the superficial and materialistic friends I have in Hong Kong. (Female)

December 1994

By the completion of the year, the newly forged friendships are commonly mentioned. Others noted the oppressive nature of unit life as a controversial aspect which appeared to be taking its toll.

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|------------|--|
| Student 23 | Timbertop helps you to gain stronger friendships within your circle of friends. You share so many difficult times together it brings you really close. (Female) |
| Student 24 | I have learnt to accept others for what and who they are. (Female) |
| Student 25 | Having a fight with someone, as it affects everyone in the unit. Rumours are also hard, because then the whole school usually knows and, it drags you right down. (Female) |
| Student 26 | Living in a unit with 16 other people that I had never met before. It makes it difficult because some are very selfish and don't care about anyone. But on the other hand having more closer friends is really nice. (Female) |
| Student 27 | Probably having to get along with everybody in my unit because you get so sick of them and little things they do. (Male) |
| Student 28 | The most difficult things about being here is probably in the units. There was some bullying in our unit by one person, and I was one of the victims. (Male) |
| Student 29 | Peer pressure in units because you live with them. (Male) |
| Student 30 | One of the most difficult parts about Timbertop is learning to live with 15 other people in such a small space for such a long time. I have been fortunate enough to have a great unit. (Male) |
| Student 33 | Living in an environment everyday with 15 other people breathing down your neck has been terrible at times. (Female) |
| Student 37 | It hasn't really been a worthwhile experience for me because I have lost a few friends because they have found out some well kept (until this year) secrets about me. But I would recommend it to others, even though I have not had a great year, because if you do things correctly, everything works itself out. (Female) |
| Student 32 | It has been extremely worthwhile to make it better, you should start at Geelong Grammar in Year 7 - so you've already got friends when you start here. (Male) |

6.1.2.4 **SOCIAL RESPONSIBILITY**

February 1994

With regard to social responsibility, the initial comments from the 1994 cohort indicated that about 30% of students viewed this aspect as advantageous. The comments suggested that the "small community" atmosphere was endearing. Others alluded to their perceived benefits in terms of tolerance and understanding of others.

- Student 42 It seems a nice community to live in. (Female)
- Student 24 Learning to live in a small community should be a benefit of this place. (Female)
- Student 42 It should be a great experience - it will make me learn that I can't depend on people all my life - like mum cleaning the house. Living with people should make me more tolerant and understanding. (Female)

June 1994

Surprisingly, at the mid-year interview session only one student made specific reference to their perceived behaviour change in this subscale.

- Student 23 You care a lot for your groups that you hike with and you constantly check if everyone is fine, well, and not injured. (Female)

December 1994

However, by the end of the year several students articulated the personal and social change that had occurred as a direct consequence of their involvement in the program.

- Student 25 I think a benefit of being here is learning to live in a big community with different people and different backgrounds. Patience is also a big experience because not everything works out the way you want it to. (Female)
- Student 23 Yes, you have a broader mind towards life and you respect other people and their belongings, personal space and things like that. I've had relatives go

through the school and they have changed after it, they respect other people a lot more. (Female)

- Student 31 The "cosmetic" differences are obvious, namely the whole lot less concrete and more natural bush around the place, but there is a greater sense of community here because it is so small, being small is an important thing, meaning everyone relies on each other for making the place work. (Male)

6.1.2.5 AUTONOMY

February 1994

Early into the year, the 1994 cohort did not indicate as frequently as their 1993 counterpart the perceived advancements in independence or self-reliance emanating from the ESOESP. Notably, only two students specifically highlighted this feature.

- Student 34 I think after spending a year here I'll be able to better appreciate what it's like living in a tough situation. (Male)
- Student 41 It is a great place in the bush. I'll learn to be independent and be more positive about myself. I think I'll have stronger will-power at the end of it. (Male)

June 1994

By June a similar trend continued which suggested that the 1994 cohort may have perceive that the ESOESP was not instrumental in nurturing this quality.

- Student 26 I'm not sure if it will change my life but it will surely help because of the independence that you learn. Independence is learnt by hiking by ourselves, and living by ourselves. (Female)
- Student 37 You become more independent and become really close to your friends. You find out a lot about yourself and are really grateful for what you have at home. (Female)

December 1994

A reversion of this earlier trend was seen at the end of the year when the majority of students made reference to the appreciable gains they had made in this subscale.

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|------------|---|
| Student 34 | Knowing within myself what I can achieve. I've learnt that I can push myself beyond what previously I may not have. Also learning independence away from my parents while learning to live with a group of other boys. (Male) |
| Student 30 | At Timbertop we learn to live with little privacy, little comfort and tremendous physical and mental strain. This will help us survive through any rough times to come in the future. (Male) |
| Student 23 | You learn not to be so dependent on your parents, you can get around a lot more obstacles without them. (Female) |
| Student 24 | I think that I have become more independent this year. (Female) |
| Student 26 | Knowing that I can be independent. (Female) |
| Student 27 | I think that the main benefits that I have got out of this year would be being able to be independent. (Male) |
| Student 29 | I'm confident now and I think I'm also more independent. (Male) |
| Student 39 | I have learnt to be much more independent than I used to be. (Male) |
| Student 33 | It was hard to accept that I wasn't going to have my parents to look after me all the time. In that way I became more independent. (Female) |

However, not all students shared the same opinion. One in particular suggested that the school had "depowered" him in terms of independence and autonomy. Moreover, he indicated that going home was the only way he could rectify the problem.

- | | |
|------------|--|
| Student 28 | I am not sure whether it will change my life I had a lot of independence before I came here. This school took away a lot of that but I should have things back to normal when I get home. (Male) |
|------------|--|

6.1.2.6 ACADEMIC AND CULTURAL ACHIEVEMENT

February 1994

Ironically, in February students failed to mention that academic or cultural advancement was considered to be a positive attribute of the program.

June 1994

In June a similar trend continued when only one student made reference to this subscale, and in addition, in derogative terms.

Student 24 I find it hard to concentrate academically with all the things going on around me. (Female)

December 1994

By the end of the academic year mixed responses were given. Two students felt that the ESOESP had been beneficial in this regard, however, the remaining four comments by students suggest otherwise.

Student 29 I've improved my grades and I think that I am more confident with my school work. (Male)

Student 31 It is a well balanced and well governed school that is unlike any in the world while still sustaining a high academic record. (Male)

Student 33 This year I've slipped back a bit, in my school work but have produced several satisfactory reports that I'm sure will get better next year. The exams are hard up here because of the many demands that Timbertop has.(Female)

Student 23 Academically I have mainly kept the same stage but I've gone a bit behind my usual standard. (Female)

Student 30 Another thing that I found difficult was keeping up with the academic side of things when there was so much general work to complete. There is much more emphasis on the physical work program at Timbertop. All this is important because it can stunt a student's academic achievement. (Male)

Student 37 It hasn't really been a worthwhile experience for me because most of my standards have dropped. (Mainly academically). (Female)

6.1.2.7 ENVIRONMENTAL SENSITIVITY

February 1994

In concert with the 1993 cohort, very few students made reference to this topic. Only in passing was a brief statement made about the tranquillity of life in the country.

Student 24 The silence at night-time - you know, no traffic noise or sounds from city life. (Female)

June 1994

This trend was sustained in June when only two students spoke of their newly acquired traits.

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|------------|--|
| Student 33 | It makes you more wary of the environment. (Female) |
| Student 38 | Yes, I think TT will change my later life, because I would have the experience of having a year in the bush and being environmentally friendly. (Female) |

December 1994

Surprisingly, this phenomenon was echoed in December and it can be concluded on the basis of the personal interviews that the 1994 cohort appeared less environmentally aware at the completion of the year than the previous group .

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|------------|---|
| Student 33 | I'll have a better insight to the environment and already I recycle even at home. I realise that we are putting rubbish through the mountains so I try to keep it clean. (Female) |
| Student 25 | Yes I think it has changed a lot of things in my life but probably the main one is coming back here to hike more in the mountains - I just love the bush. (Female) |
| Student 31 | I don't think it will change my life in later years except for an interest in the high country I might not have had before. (Male) |

6.1.2.8 SCHOOL SPIRIT

February 1994

Several themes were evident within this subscale. Firstly, the manner in which the school rules were implemented along with the highly structured program devoid of any rest days. This caused a considerable angst amongst students early in the year. Secondly, others mentioned that it was beneficial to have one year group on site as this produced a harmonious atmosphere and school spirit. Thirdly, some indicated that they were belittled if they were

high achievers who set themselves high goals. In many ways these factors collectively contribute to the school spirit.

- | | |
|------------|--|
| Student 33 | The rules and regulations are really hard and settling in has been difficult. (Female) |
| Student 41 | I think one free day a term for study or rest would be nice. (Male) |
| Student 34 | Just having one year group here is nice. (Male) |
| Student 32 | It is hard working to the best of my ability when people tend to give me a hard time. (Male) |

June 1994

By mid-year most students have become "conditioned" to the Timbertop regime. Some still have difficulty coming to terms with the teaching style and rules and regulations.

- | | |
|------------|---|
| Student 39 | The rules suck and the teachers hard on me. (Male) |
| Student 25 | I suppose you learn a lot from self-efficiency as there are no bells to tell you to go some where. (Female) |
| Student 38 | No older students to boss you around makes the place pretty relaxed. (Female) |
| Student 34 | I miss home and my parents. I get sick of running and it's hard to concentrate on school work sometimes because the emphasis isn't on it. But, there are always people who claim to hate it, but I'm sure that deep down they really do enjoy it and are just saying they don't. (Male) |

December 1994

At the conclusion of the ESOESP the school spirit had undergone a miraculous transformation. As was the case with the 1993 cohort, the inclusive nature of the school (that is, Year 9 only on campus) had undoubtedly enhanced the school spirit. At this juncture the group had become "Timbertopized" and only a very small minority voiced their disapproval of the rules and regulations.

- | | |
|------------|---|
| Student 37 | I am more aware of things - like other people, the environment, how to look after myself, and that I shouldn't take people and things for granted. I enjoy working hard instead of slacking off. I want to do something I can be proud of, for myself in life. (Female) |
|------------|---|

- Student 24 This year is very special because you are just in one year group therefore you get to know the whole year group rather than only a small fraction whereas at Corio there are other years and you are more spread out. (Female)

- Student 28 In this campus it is a lot easier to get in trouble. You spend so much time enclosed. You can not do things that you would do at home eg. drinking, doing stupid things, spending time with opposite sex, hanging out and things like that. We need more free time. (Male)

6.1.2.9 **QUALITY OF TEACHING**

February 1994

This subscale explores the relationship between student and teacher, the professionalism of the staff and the personable nature of the ESOESP. In February, the quality of teaching received mixed reactions. Some conveyed that the teachers were approachable whilst others felt that the teachers were too regimented in their approach.

- Student 32 The teachers are closer to the students. (Male)

- Student 33 The staff are different - we get to know them as friends. (Female)

- Student 27 The teachers are stricter here - you can't escape them because they are with you 24 hours a day. (Male)

- Student 38 I can't see what I'm going to get out of this place but it should be less strict. (Female)

- Student 39 It is a challenge, but I think the staff overdo the strictness. (Male)

June 1994

As the year unfolded, their perceptions of the quality of teaching became more positive. Alternatively, a small minority indicated that the teachers lacked empathy and understanding.

- Student 37 Teacher's sometimes don't understand and they think they know everything. (Female)

- Student 33 It's a good chance to see the environment that we're in, with such strong enthusiasm from staff. It helps you to learn more about yourself and others around you. (Female)

- Student 24 I think Timbertop is wonderful. It is a year in which the teachers and the students are treated almost as equals) meaning they do our runs, hikes, eat the same food etc.) (Female)

December 1994

At the completion of the year, the 1994 cohort made infrequent reference to the quality of teaching during the interview session however their responses were far from unequivocal. Some reported that the teachers were authoritarian and militaristic whilst others were firm advocates of their teachers' professionalism.

- Student 25 The teachers, you seem to get along with a lot more and know them a lot better. (Female)

- Student 26 I've learnt that I can do much more than I thought. I would recommend it to other people now that it is over. Probably it would be better if the teachers weren't so strict . (Female)

6.1.2.10 INTERPERSONAL RELATIONSHIPS

February 1994

Students' perceptions of their unit life and the associated ambience of the boarding school was mentioned in the early stages of the ESOESP. The reciprocity between unit members and the development of understanding and tolerance towards individual differences were discussed.

- Student 23 I think that after being here I'll be more aware of people and their feelings and how to cope in difficult times. (Female)
- Student 24 It is trying at times when we have to make the unit stick together - but I think I'm going to like it. (Female)
- Student 35 Yes Timbertop will have a big impact on me in later years. When I start working, it will help me work with other people and understand them. I will be able to be more responsible for myself and others. (Male)

June 1994

Mid-way through the program there were varying reactions evident amongst the group with regard to interpersonal relationships. Some students appreciated the mateship and camaraderie offered by the ESOESP. However, others felt that this was an undesirable aspect of the ESOESP especially if their unit failed to “get it together”.

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|------------|---|
| Student 33 | It's a good to see the country and to have such great opportunity to know the area. Getting to know people in a stronger relationship. Learning to share with each other eg. on hikes when you have low morale, and someone shares their food and drink with you. To see yourself in a much wider way. (Female) |
| Student 26 | There are benefits associated with living in a small unit and learning how to get along with each other . (Female) |
| Student 40 | One of the main benefits of Timbertop is the unit life and the close relationships that occur. (Female) |
| Student 38 | In first term I found it really draining and hard living with the same girls at the beginning but now it is really good. (Female) |
| Student 24 | In a way I can see what this place is teaching me. It's made me more confident and patient. (Female) |
| Student 37 | Living so close to 16 people in the unit can get on your nerves. (Female) |

December 1994

By the end of the year mixed reactions were retained within the group. Some students were firm believers in the newly forged friendships acquired from their involvement in the ESOESP whilst others felt that the interpersonal relationships within their unit had been deleterious upon their social and personal growth.

- | | |
|------------|---|
| Student 23 | It has been a worthwhile year and I would recommend it. A little bit more free time would be nice - more time allowed to socialize with people from other units. (Female) |
| Student 28 | This my firsts year of boarding so I have learnt about other people because I never spent so much time with so many people before. (Male) |
| Student 33 | I've created a better bond with my friends this year and I try to help people enjoy the life here. (Female) |
| Student 35 | The main benefits I gained this year would be probably the unit life. Living with other people and learning from them has really helped me become a better person. (Male) |

- | | |
|------------|--|
| Student 38 | Having to get on with other people in the unit, and know when your older you may be to share a flat with some people. |
| Student 25 | In many ways it has made me learn a lot more self defence, and if I don't like something or I don't agree I say so. (Female) |
| Student 39 | Fighting with people in the unit because no matter what happens you can't avoid them. I find that difficult. (Male) |
| Student 31 | Probably living in a unit with 15 other kids and almost no privacy, this is just because it is so consistent all year - yeah I found that the unit life can be hell and it'll be until you fix it. (Male) |
| Student 37 | I was not used to living so closely with others until this year. This was important because it made me realise that everybody has problems no matter how perfect they seem. I am able to understand people better now than last year and it is also probably good to get used to living closely with others to try to see and feel what Uni will be like. (Female) |

6.1.2.11 APPROPRIATENESS OF CURRICULUM

February 1994

This subscale investigated the range of subject offerings available to students, their perceptions of the relevance of what they learnt of life in general, their satisfaction of the ESOESP curriculum and the appropriateness of the outdoor activities. At the commencement of the year some students articulated their satisfaction in the broad curriculum on offer at the ESOESP. Others indicated that the outdoor activities were a major draw card for them at the school.

- | | |
|------------|--|
| Student 25 | It will be good here because I'll have a bigger range of activities I can do. (Female) |
| Student 27 | I'm eager to know more about outdoor education - like map and compass work and knowing how to do things for yourself. (Male) |
| Student 32 | Better outdoor education facilities here. (Male) |

June 1994

By June, the students had encountered many new experiences at the ESOESP and the curriculum had primarily had a positive impact on students. However, students still make reference to the intense nature of the program and the rigorous demands of the school program. Notably however, they were philosophical and positive about the appropriateness of their experiences.

- Student 33 If people living in the city's have had past problems and they want to get rid of that and look for a positive aspect in life, this is probably the best way to achieve that. It's really relaxing to wake up to the stillness outside in such a remote place. (Female)
- Student 34 Improved physical fitness, learning how to be independent in a different environment, new challenges (hiking etc.) and things to learn, learning to live with others and away from home. It's a new and different challenge, a change from all the normal school routine and I'm beginning to feel all the better for it already. (Male)
- Student 35 It makes me a better person. Helps me understand and work with other people. Helps me in my future career. (Male)
- Student 25 For people to come here and enjoy it I think they would have to be self motivated. It's a great place, where you can get away from the city and depend on yourself. It's also good for people who want to get fit, and explore new places. (Female)
- Student 23 The difficulties at Timbertop is that it demands a lot of physical and academic work and sometimes you feel buried underneath it all. Timbertop is a busy, very physical school. It is very different to any other school and it is a lot of fun.(Female)
- Student 33 The difficulties are mainly with the tight schedule that we follow. Its sometimes hard to keep up with work but I must admit that running relieves that stress that may have been building up inside. I'm used to the boarding routine that's not a problem. (Female)
- Student 24 Yes what we do up here is great - I already have told some people to come here next year. (Female)

December 1994

At the conclusion of the year there has been a dramatic change in the students' perceptions of the appropriateness of the curriculum. The broad, intensive and fulfilling nature of the Timbertop curriculum was frequently mentioned as a positive attribute of the school. Many acknowledge that it was a grueling year. But by the same token, a beneficial experience due to the relevance of the school curriculum and the preparation for life which they received.

- Student 38 Yes it has been a worthwhile experience for me, I have loved it. Yes I would recommend it to others, I don't think I would change it, it's good the way it is. (Female)
- Student 36 I wish other people could come here because you change your outlook on life. I don't want any thing to change about this place. (Female)
- Student 30 Timbertop has taught me to live and work under what I think are some of the toughest conditions possible. This alone will benefit me for many years to come. I believe that Timbertop is one of the most worthwhile experiences there is and I definitely recommend it to other people. I wouldn't alter it in any way. (Male)
- Student 27 I think that it will change my life in latter years because it has given me another way of looking at the world. (Male)
- Student 34 Timbertop has a much more regimented timetable, and you're involved fully within the campus 7 days a week — you never have a free day to yourself. At Corio, it's really only a 5.5 day a week commitment. This is important as it teaches you to cope with a full timetable in your life. Yes, those who have been suspended. also, those who slack off/cheat or don't fully throw themselves into the many challenges presented this year. I'm sure they'll regret it later when they look back. It's just been an enjoyable year, but all the same, I'm glad to be going home, but proud to be able to look back and say - "I went to Timbertop". (Male)
- Student 31 This year has been worthwhile and good for me because I have gained so much back out of it, I will always remember it, I would recommend it to a kid who I knew was going to put in a big effort and therefore, get a lot out of it. (Male)
- Student 26 It is very hard while you are doing it but you get a great satisfaction when you have done it. (Female)
- Student 28 I am not sure if it is worthwhile but I'd say it is more an interesting experience. It was good to try something different but one year is definitely enough. Academically - this is my second year in Year 9 but I still feel I have learnt a lot more . The standard here was a lot higher than my old school and I tried harder here. (Male)
- Student 25 Yes, has had it's ups and downs but that's how life is, and you usually blot out the bad things and remember the good things. Yes I would recommend it to other people but they would have to be quite committed. And bring heaps of TUCK - you can't survive without. (Female)
- Student 35 Yes. Coming here has really helped me become a better person. I would recommend it to people who I think would enjoy it and benefit from it. (Male)
- Student 33 It's a real learning experience. If someone was having trouble at home or school and were really negative, it would be good to come here. I'll be really sad to leave.(Female)
- Student 37 I've done some stupid things like wishing the year away. I would do it so differently if I had another chance.

6.1.2.12 SUMMARY OF THE 1994 COHORT'S PERSONAL INTERVIEWS

In summary, the personal interviews consolidated the following issues:

1. INNATE SENSE OF ACCOMPLISHMENT AND ACHIEVEMENT

Invariably, the students mentioned that the ESOESP was challenging in every respect, whether it be physically, socially, emotionally or academically. An enormous sense of accomplishment is visible in their responses for example "I've had a lot of experiences that lots of other people can only dream about. I'm 15 years old and I have run a marathon - that is longer than most adults ever run in their life. I guess I can look back and say I've completed a huge challenge. It's been unreal!" (Student 32 - Male).

Irrefutably, a sense of both personal and social growth is evident, in their responses for instance.

"I guess the motto for this place is "Live it, learn from it and pass it on".
(Student 25 - Female)

"I have really enjoyed this year. It is really special to me. I have really learnt a lot about myself and my peers." (Student 24 - Female)

2. GREATER TOLERANCE OF THE REGIMENTED LIFESTYLE

As was the case with the previous year, most students become "Timbertopized" during the experience and are more accepting of the rules and regulations. On the whole, this cohort was more positive in their views about the rules and regulations.

3. ENHANCED LEVELS OF HEALTH AND FITNESS

Undeniably, improved fitness levels emanating from the high levels of physical activity were frequently articulated as a significant bonus of the program. This is in keeping with the findings from the previous cohort.

4. THE GROUP HAD FORMED A POWERFUL MATRIX

Personal relations whether it be compromising within a group or a new-found affinity between certain group members was continually stated. Both males and females commented on this gain and both year groups were consistent in their responses.

5. GAINS IN SOCIAL RESPONSIBILITY

Similar to the previous year, many students alluded to an increased level of tolerance and understanding within the school. Collectively, both males and females (in the two year groups) made reference to this subscale throughout the study.

6. THE ENHANCEMENT OF INDEPENDENCE AND AUTONOMY

Becoming self-reliant and autonomous was another frequently mentioned benefit derived from the program. This feature surfaced in both the 1993 and 1994 year groups.

7. UBIQUITOUS FINDINGS IN ACADEMIC ACHIEVEMENT

Incongruencies also surrounded the 1994 cohort in respect to their organisational and study skills . However, the 1994 cohort appeared to voice their disapproval of the academic standards a little more often than the previous year Yet again, most suggested that lack of effective study time was instrumental in their declining grades.

8. DISPARATE RESULTS IN ENVIRONMENTAL SENSITIVITY.

Another perplexing finding to emanate from this group was the infrequent reference to this gain. Clearly, some were more environmentally aware as a direct consequence of the experience but the majority of students failed to articulate their advancements in this area. However, it should be noted that the females tended to mention gains in this subscale, more so than their male counterparts. This mirrors the findings obtained from the 1993 cohort.

9. THE ENHANCEMENT OF SCHOOL SPIRIT.

Invariably school spirit takes a nose dive around the beginning of term two. Most are homesick after the school holidays and the end doesn't seem to be insight. However, by December the school spirit has been rekindled. Females were more vociferous than males in this regard, and the same trend was noted within the 1993 cohort.

10. INCONSISTENT REACTIONS TO THE QUALITY OF TEACHING.

Disparate viewpoints are evident. Some are staunch believers that the teachers are professional and compassionate, while others suggest that they are too hard and inflexible in their approach. As was the case in the previous year, the unruly students generally took this stand.

11. APPRECIABLE GAINS IN INTERPERSONAL RELATIONSHIPS.

Living in close proximity to 15-16 other students in a unit did take its toll. But on the other hand there appears to be marked benefits to be gained from the experience in terms of interpersonal development. Males were less likely to articulate the positive aspects associated with interpersonal relationships at the ESOESP. These findings substantiate the 1993 data.

12. POSITIVE COMMENTS ASSOCIATED WITH THE APPROPRIATENESS OF THE CURRICULUM

The curriculum although very intensive, is for the most part, interpreted in a positive light. The satisfaction the students gained from the experiences contained in the broad school curriculum is immeasurable. Yet again, only a handful found the curriculum inappropriate to their needs and interests.

13 GENDER DIFFERENCES

In keeping with the trends which surfaced in the personal interviews associated with the 1993 cohort, the females tended to articulate their inner feelings more so than their male

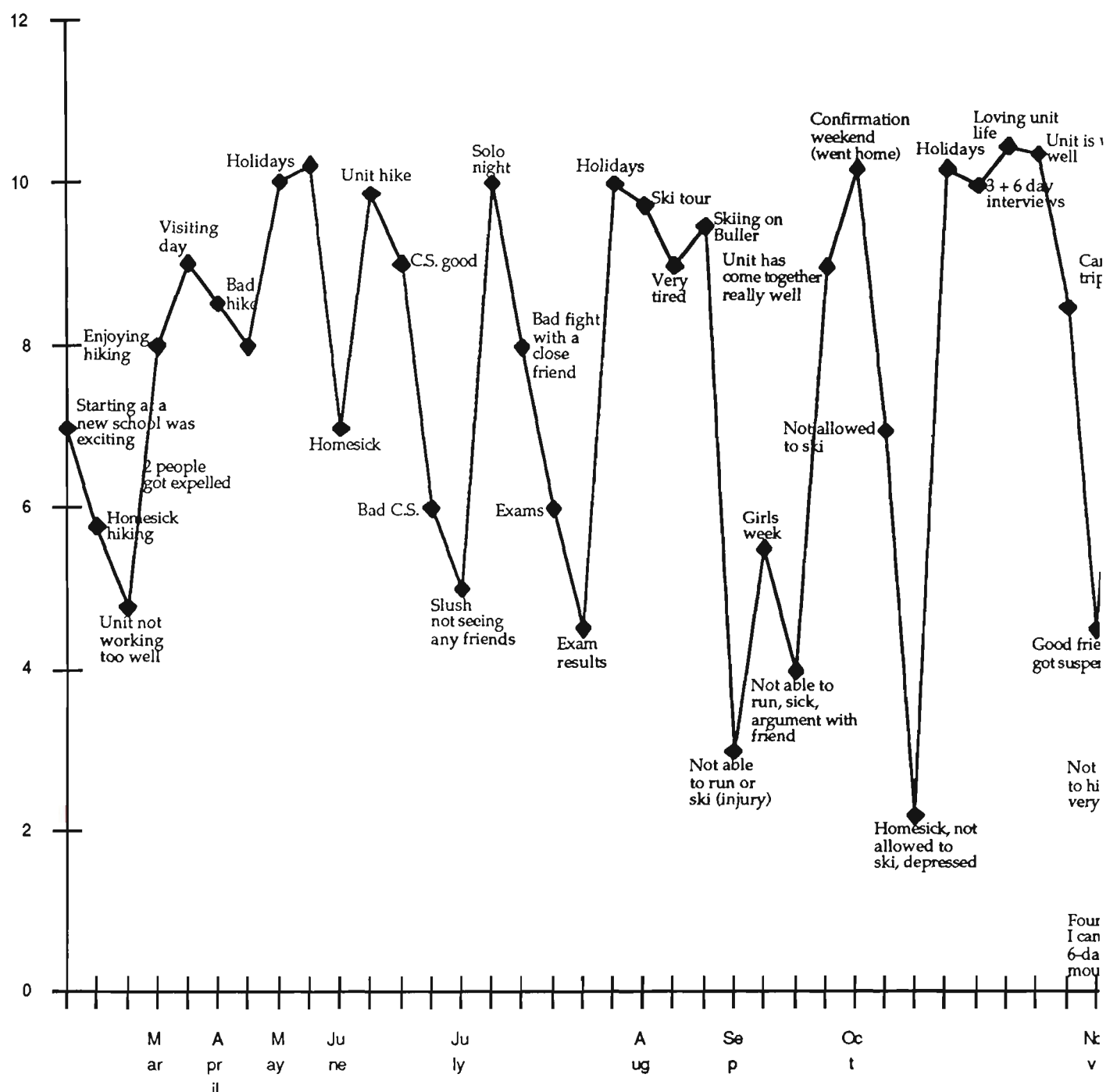
counterpart. Yet again, this substantiates similar findings by Bowen (1996), Heaven (1994), Jordan (1992), Mitten, et al (1997) and Pipher (1995) who argue that girls' forte lie in relationship-based cooperative learning environments. Notably, the females in both the 1993 and 1994 cohorts were more positive about the school spirit, interpersonal relationships and environmental sensitivity than the males.

The females articulated a freedom from the gender-imposed roles, in particular, those which were the strongholds of a male domain for instance physical prowess and assertiveness. It is the author's belief that the ESOESP enables an androgynous individual to develop as a result of participation in the program. The gender issues of this study are discussed in greater depth in Chapter 8 (sections 8.1.6 and 8.2.1.2).

6.1.3 LOG BOOK ANALYSIS AND TIME LINE CHARTS

It was felt that the log book analysis and time line charts provided some interesting qualitative data with the 1993 cohort and so it was decided to replicate it on the 1994 cohort. In December (at the completion of the ESOESP), students were asked to re-read their log books and translate the information onto a chart provided by the researcher (see Appendix 7). In particular, when students were charting their year at Timbertop they were requested to record all the emotional "highs" or "lows" during the year. The following three examples clearly exemplifies the roller-coaster of emotions attached to the ESOESP. Some anecdotal evidence gathered during the personal interviews is also provided in an attempt to clarify the student's interpretations of the ESOESP.

CHARTING STUDENT # 23's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

A snap-shot of some of Student #23's perceptions as the year unfolded.

- Feb '94

I'm a bit shy because I am a new student, I'm homesick and uncertain. I think that after being here I'll more aware of people and their feelings and how to cope in difficult times. The difficulties at Timbertop is that it demands a lot of physical and academic work and sometimes you feel buried underneath it all. Timbertop is a busy, very physical school.. It is very different to any other school and it is a lot of fun. (Female)
- June '94

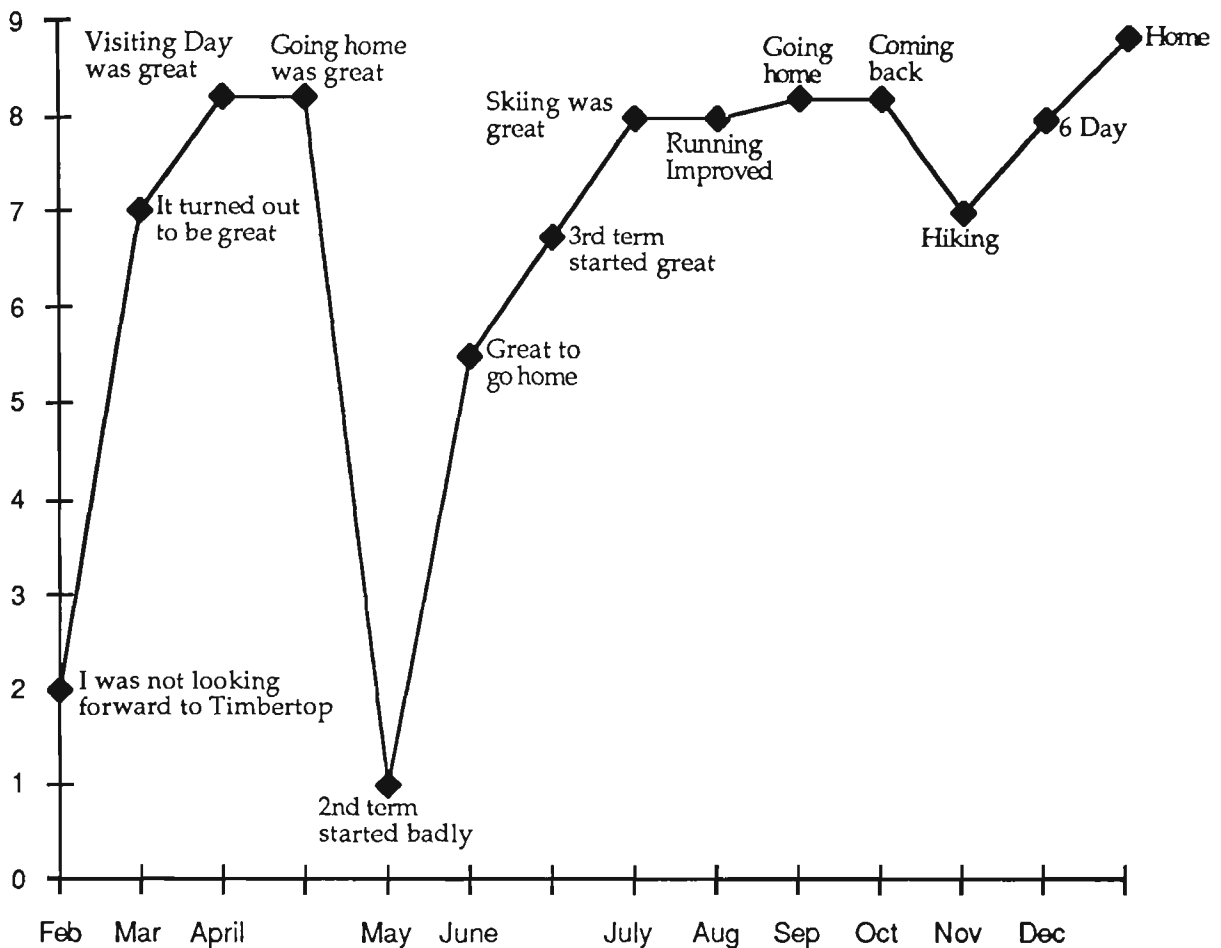
The benefits of Timbertop are that you will never get another chance to do it. Any other normal 15 year old wouldn't be out hiking every weekend and its good to have a change of lifestyle, it gives a different outlook toward nature and life. You take it for granted when your here or when your at home you look at it from a different aspect. You care a lot for your groups that you hike with and you constantly check if everyone is fine, well, and not injured.

The difficulties at Timbertop is that it demands a lot of physical and academic work and sometimes you feel buried underneath it all. Timbertop is a busy, very physical school. It is very different to any other school and it is a lot of fun.(Female)

Dec '94

Timbertop helps you to gain stronger friendships within your circle of friends. You share so many difficult times together it brings you really close. Yes, you have a broader mind towards life and you respect other people and their belongings, personal space and things like that. I've had relatives go through the school and they have changed after it, they respect other people a lot more. You learn not to be so dependent on your parents, you can get around a lot more obstacles without them. Academically I have mainly kept the same stage but I've gone a bit behind my usual standard. (Female)

CHARTING STUDENT # 30's YEAR AT TIMBERTOP



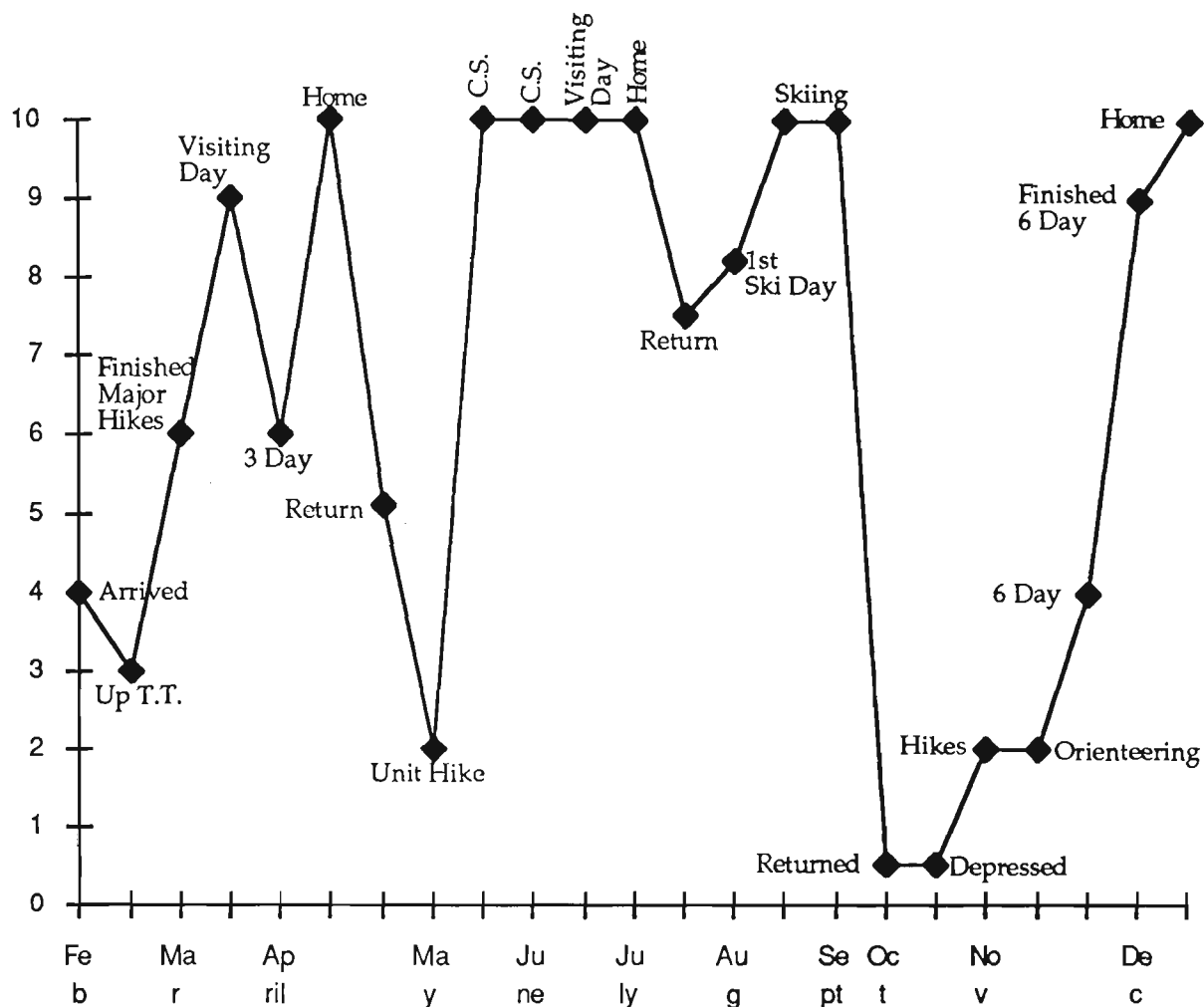
NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

A snap-shot of some of Student #30's perceptions as the year unfolded.

Feb '94 One of the most difficult parts about Timbertop is learning to live with 15 other people in such a small space for such a long time. I have been fortunate enough to have a great unit. (Male)

Dec '94 It is an experience that you will remember for the rest of your life! It expands both your mind and body and although its tough some time it has great rewards. At Timbertop we learn to live with little privacy, little comfort and tremendous physical and mental strain. This will help us survive through any rough times to come in the future. Timbertop has taught me to live and work under what I think are some of the toughest conditions possible. This alone will benefit me for many years to come. I believe that Timbertop is one of the most worthwhile experiences there is and I definitely recommend it to other people. I wouldn't alter it in any way. Another thing that I found difficult was keeping up with the academic side of things when there was so much general work to complete. There is much more emphasis on the physical work program at Timbertop. All this is important because it can stunt a student's academic achievement. (Male)

CHARTING STUDENT #34's YEAR AT TIMBERTOP



NB Key for X-Axis: 1= Feeling extremely low about the ESOESP - 10= Feeling extremely high about the ESOESP

A snap-shot of some of Student #34's perceptions as the year unfolded.

Feb '94

I guess some of the benefits will be improved physical fitness, learning how to be independent in a different environment, new challenges (hiking etc.) and things to learn, learning to live with others and away from home. I'm sure that I'll appreciate home and modern life more after experiencing Timbertop. I think it is great to do it in Year 9 - it is the perfect time for kids. It's a new and different challenge, a change from all the normal school routine and I'm beginning to feel all the better for it already. (Male)

June '94

I miss home and my parents. I get sick of running and it's hard to concentrate on school work sometimes because the emphasis isn't on it. But, there are always people who claim to hate it, but I'm sure that deep down they really do enjoy it and are just saying they don't.....it's a school in a different environment combining physical and moral advancement along with academic work. It's a challenge, but an adventure, a once in a lifetime thing. (Male)

Dec '94

Yes, it's been a fun experience, living in my unit, seeing the bush as it should be, feeling fitter etc. I think I'd recommend it to other people as a challenge to conquer. To make it better, I'd make everything a bit more difficult. I get the feeling that the program is starting to get a bit soft, and the only really difficult thing is living away and chopping boiler wood I think after spending a year here I'll be able to better appreciate what it's like living in a tough situation. Knowing within myself what I can achieve. I've learnt that I can push myself beyond what previously I may not have. Also learning independence away from my parents while learning to live with a group of other boys.(Male)

Chapter 7

RMQ, SLQ, PQ AND FITNESS

DATA AND DISCUSSION

This chapter is confined to an analysis of the quantitative data for the 1993 and 1994 cohorts. As outlined in Chapter 3, the quantitative data had four aspects of collection which included: 1) RMQ; 2) SLQ; 3) fitness scores and 4) PQ. All four aspects of data collection are examined and an attempt is made to address the emerging and consistent threads. The ten subscales were used as foci for assessment in the RMQ and SLQ. Whereas the PQ, was examined according to the individual items contained within the questionnaire.

In the main, the data was analysed using the research questions as a guideline. In the first instance, the data from the 1993 and 1994 cohorts was used to ascertain the impact of the ESOESP over the academic year. The first research question guides this analysis, viz:

"Did the ESOESP favourably enhance the attitudes, values and behaviours of participants over the initial 12 months in terms of: social responsibility; personal relations; autonomy; health and physical aptitude; environmental sensitivity; academic and cultural achievement; school spirit; quality of teaching; interpersonal relationships; and appropriateness of curriculum?"

Secondly, the 1993 and 1994 data was used to investigate the differential gender outcomes associated with the study. The second research question guides this investigation, viz:

"Did the Timbertop experience produce differential gender outcomes in terms of: social responsibility; personal relations; autonomy; health and physical aptitude; environmental sensitivity; academic and cultural achievement; school spirit; quality of teaching; interpersonal relationships; and appropriateness of curriculum?"

Thirdly, the fitness data gathered on the 1993 and 1994 cohorts was used in an attempt to investigate the changes in general fitness. The third research question guided this analysis, viz:

"Did Timbertop improve the fitness levels of participants? .

Fourthly, the 1993 cohort data was used to examine the residual impact of the ESOESP. The fourth research question guided this investigation, viz:

"Was there a residual effect from the Timbertop experience in the 12 month follow-up data in respect to: social responsibility; personal relations; autonomy; health and physical aptitude; environmental sensitivity; academic and cultural achievement; school spirit; quality of teaching; interpersonal relationships; and appropriateness of curriculum?".

Lastly, in order to triangulate the data and further strengthen the research design, the perceptions of the 1993 parents were sought. The proceeding research question guides this examination, viz:

"Did the parents of students validate the self-report data of the participants?"

As discussed in Chapter 3, data was analysed using an A X B X (C X S) mixed model repeated measures analysis of variance using a MANOVA format where A represented time, B represented gender and C represented the subjects with time. Chapter 4 elaborated upon the fact that the 1993 cohort was the prime focus of the study. Data was also gathered on the 1994 cohort during their stay at the ESOESP but this was undertaken to ascertain if the same trends emerged as a result of the intervention.

7.1 RESULTS OVER THE 12 MONTH ESOESP DURATION

In order to ascertain whether the ESOESP had an impact upon participants over the academic year spent at Timbertop (that is pre-test[February], mid-test [June] and post-test [December]), a two-way repeated measures mixed model analysis of variance (MANOVA) was carried out on the self-report data contained in the RMQ and SLQ. This analysis involved the total sample viz; the 1993

and 1994 cohorts (n=409). A summary of the RMQ and SLQ results appears in Table 7.1 whilst a gender breakdown of the results is shown in Table 7.2. Furthermore, a detailed analysis of the dependent variables (or subscales) in the RMQ and SLQ follows in Section 7.1.1 and 7.1.2 respectively.

TABLE 7.1: SUMMARIZED RESULTS FOR THE RMQ AND SLQ OVER THE ESOESP DURATION

SUBSCALES	FEBRUARY		JUNE		DECEMBER	
	Mean	SD	Mean	SD	Mean	SD
Social Responsibility (c,d)	3.62	.41	3.65	.41	3.59	.44
Personal Relations (d)	3.50	.53	3.43	.56	3.45	.52
Academic & Cultural (a,c)	3.50	.52	3.46	.47	3.45	.47
Health & Physical Aptitude (c)	3.59	.49	3.59	.48	3.58	.45
Autonomy	3.81	.39	3.84	.37	3.81	.37
Environmental Sensitivity (b,c,d)	3.14	.63	3.08	.60	2.99	.63
Appropriateness of Curriculum (c)	3.66	.47	3.63	.47	3.67	.47
Quality of Teaching (b,c,d)	3.73	.55	3.66	.57	3.71	.54
School Spirit (b,c,d)	3.74	.54	3.65	.59	3.72	.53
Interpersonal Relationships (b)	3.66	.60	3.60	.65	3.62	.58

NB "a" Denotes subscales that were found to be statistically significant for Gender and Time (p<.05)

"b" Denotes subscales that were found to be statistically significant for Cohort and Time (p<.05)

"c" Denotes subscales that were found to be statistically significant for Gender and Cohort (p<.05)

"d" Denotes subscales that were found to be statistically significant for Main Effect (p<.05)

TABLE 7.2 - TIME BY GENDER BY COHORT RESULTS

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Social Responsibility	Total	3.62	.41	3.65	.41	3.59	.44
	1993 Male	3.55	.45	3.54	.45	3.47	.48
	1994 Male	3.58	.36	3.56	.39	3.53	.40
	1993 Female	3.77	.43	3.83	.34	3.80	.42
	1994 Female	3.61	.36	3.72	.33	3.63	.36
Personal Relations	Total	3.50	.53	3.43	.56	3.45	.52
	1993 Male	3.44	.59	3.34	.57	3.38	.57
	1994 Male	3.50	.44	3.40	.58	3.50	.43
	1993 Female	3.64	.57	3.56	.50	3.51	.55
	1994 Female	3.47	.47	3.46	.56	3.44	.48
Academic & Cultural Achievement	Total	3.50	.52	3.46	.47	3.45	.47
	1993 Male	3.47	.55	3.42	.50	3.47	.52
	1994 Male	3.45	.51	3.41	.43	3.41	.45
	1993 Female	3.65	.49	3.62	.44	3.61	.50
	1994 Female	3.41	.48	3.42	.48	3.26	.41
Health & Physical Aptitude	Total	3.59	.49	3.59	.48	3.58	.45
	1993 Male	3.58	.51	3.54	.55	3.49	.51
	1994 Male	3.57	.50	3.62	.45	3.66	.39
	1993 Female	3.68	.54	3.64	.50	3.64	.47
	1994 Female	3.49	.34	3.56	.38	3.50	.37
Autonomy	Total	3.81	.39	3.84	.37	3.81	.37
	1993 Male	3.86	.44	3.82	.41	3.76	.40
	1994 Male	3.77	.36	3.83	.38	3.85	.37
	1993 Female	3.87	.35	3.90	.33	3.88	.34
	1994 Female	3.71	.40	3.81	.33	3.73	.34
Environmental Sensitivity	Total	3.14	.63	3.08	.60	2.99	.63
	1993 Male	3.02	.63	3.00	.51	2.96	.61
	1994 Male	2.97	.52	2.83	.57	2.75	.50
	1993 Female	3.50	.65	3.47	.58	3.46	.57
	1994 Female	3.12	.56	3.07	.57	2.77	.58
Appropriateness of Curriculum	Total	3.66	.47	3.63	.47	3.67	.47
	1993 Male	3.61	.48	3.56	.51	3.62	.48
	1994 Male	3.60	.46	3.64	.40	3.66	.46
	1993 Female	3.86	.39	3.75	.43	3.77	.46
	1994 Female	3.48	.45	3.55	.49	3.59	.44
Quality of Teaching	Total	3.73	.55	3.66	.57	3.71	.54
	1993 Male	3.66	.59	3.58	.65	3.72	.57
	1994 Male	3.75	.43	3.70	.50	3.64	.52
	1993 Female	3.92	.58	3.74	.52	3.87	.50
	1994 Female	3.55	.52	3.61	.57	3.57	.51
School Spirit	Total	3.74	.54	3.65	.59	3.72	.53
	1993 Male	3.59	.59	3.44	.62	3.59	.59
	1994 Male	3.70	.38	3.66	.47	3.66	.47
	1993 Female	4.01	.54	3.85	.49	3.94	.46
	1994 Female	3.67	.52	3.70	.56	3.74	.50
Interpersonal Relationships	Total	3.66	.60	3.60	.65	3.62	.58
	1993 Male	3.53	.66	3.40	.75	3.40	.58
	1994 Male	3.55	.52	3.56	.58	3.58	.48
	1993 Female	3.90	.59	3.80	.63	3.82	.50
	1994 Female	3.73	.50	3.77	.49	3.82	.51

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p < .05$)

7.1.1 THE RMQ RESULTS OVER THE ESOESP DURATION

As outlined in Section 7.1, analysis and discussion now focuses on the results obtained in the separate instruments. In the first instance, the RMQ comprised of six subscales viz; social responsibility, personal relations, academic and cultural achievement, health and physical aptitude, autonomy and environmental sensitivity. Each subscale was examined independently in terms of:

- Time by Gender by Cohort
- Cohort by Time
- Gender by Cohort
- Gender by Time
- Main effect.

Table 7.3 displays the RMQ scores for Time by Cohort whilst Table 7.4 illustrates the RMQ scores for Gender by Time.

TABLE 7.3: RMQ RESULTS - COHORT BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Social Responsibility	Total	3.62	.41	3.65	.41	3.59	.44
	1993	3.65	.45	3.66	.43	3.61	.48
	1994	3.59	.36	3.63	.37	3.57	.38
Personal Relations	Total	3.50	.53	3.43	.56	3.45	.52
	1993	3.53	.59	3.44	.55	3.44	.57
	1994	3.48	.45	3.42	.57	3.48	.45
Academic & Cultural Achievement	Total	3.50	.52	3.46	.47	3.45	.47
	1993	3.54	.53	3.50	.47	3.52	.52
	1994	3.43	.50	3.42	.45	3.35	.44
Health & Physical Aptitude	Total	3.59	.49	3.59	.48	3.58	.45
	1993	3.63	.52	3.58	.52	3.56	.49
	1994	3.54	.45	3.59	.42	3.60	.39
Autonomy	Total	3.81	.39	3.84	.37	3.81	.37
	1993	3.87	.42	3.86	.38	3.82	.38
	1994	3.75	.37	3.82	.36	3.80	.36
Environmental Sensitivity*	Total	3.14	.63	3.08	.60	2.99	.63
	1993	3.23	.68	3.21	.58	3.18	.64
	1994	3.03	.54	2.92	.58	2.76	.53

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

TABLE 7.4: RMQ RESULTS - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Social Responsibility	Total	3.62	.41	3.65	.41	3.59	.44
	Male	3.56	.41	3.55	.42	3.50	.44
	Female	3.70	.41	3.78	.34	3.73	.40
Personal Relations	Total	3.50	.53	3.43	.56	3.45	.52
	Male	3.47	.53	3.37	.57	3.44	.52
	Female	3.56	.54	3.52	.52	3.48	.52
Academic & Cultural*	Total	3.50	.52	3.46	.47	3.45	.47
	Male	3.46	.53	3.42	.47	3.44	.49
	Female	3.55	.50	3.53	.46	3.46	.49
Health/Physical Aptitude	Total	3.59	.49	3.59	.48	3.58	.45
	Male	3.58	.51	3.57	.50	3.57	.46
	Female	3.60	.47	3.60	.45	3.59	.43
Autonomy	Total	3.81	.39	3.84	.37	3.81	.37
	Male	3.82	.41	3.83	.40	3.80	.39
	Female	3.80	.38	3.86	.33	3.82	.35
Environmental Sensitivity	Total	3.14	.63	3.08	.60	2.99	.63
	Male	3.00	.58	2.92	.54	2.86	.57
	Female	3.34	.64	3.30	.60	3.18	.67

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p < .05$)

7.1.1.1 SOCIAL RESPONSIBILITY

Analysis of social responsibility data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [$F(2,261)=.91$; $p > .05$]. Furthermore, no significant interaction between cohort and time was established [$F(2,261)=.22$; $p > .05$]. Mean social responsibility scores by cohort and time are shown in Table 7.5.

TABLE 7.5: MEAN SOCIAL RESPONSIBILITY SCORES - COHORT BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Social Responsibility	Total	3.62	.41	3.65	.41	3.59	.44
	1993	3.65	.45	3.66	.43	3.61	.48
	1994	3.59	.36	3.63	.37	3.57	.38

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p < .05$)

Although a significant interaction between gender and cohort was found to exist, [F(1,262)=4.62; p<.05] it was not seen as being of practical significance or confounding to the research questions of the study. In essence, the gender in each cohort responded differently, that is, the 1993 cohort responded differently to the 1994 cohort.

A major aspect of the study was the exploration of possible differential effects of gender but analysis failed to support a hypothesis in this regard as no significant interaction between gender and time was forthcoming [F(2,261)=2.90; p>.05]. Mean social responsibility scores by gender and time are shown in Table 7.6.

TABLE 7.6 MEAN SOCIAL RESPONSIBILITY SCORES - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Social Responsibility	Total	3.62	.41	3.65	.41	3.59	.44
	Male	3.56	.41	3.55	.42	3.50	.44
	Female	3.70	.41	3.78	.34	3.73	.40

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

A main effect for social responsibility was found to be significant [F(2,261)=4.31; p<.05]. Further analysis using a Scheffé post hoc test revealed significant difference to exist between the June mean and the December mean where there had been a decrement in social responsibility score.

7.1.1.2 PERSONAL RELATIONS

Analysis of data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [F(2,261)=.91; p>.05]. Furthermore, no significant interaction between cohort and time was established [F(2,262)=.44; p>.05]. Mean personal relations scores by cohort and time are shown in Table 7.7.

TABLE 7.7: MEAN PERSONAL RELATIONS SCORES - COHORT BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Personal Relations	Total	3.50	.53	3.43	.56	3.45	.52
	1993	3.53	.59	3.44	.55	3.44	.57
	1994	3.48	.45	3.42	.57	3.48	.45

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A non-significant interaction between gender and cohort was found to exist, [$F(1,263)=2.79$; $p>.05$].

Table 7.8 demonstrates the mean personal relations scores for gender by time. The analysis failed to support a differential gender hypothesis as no significant interaction between gender and time was established [$F(2,263)=2.79$; $p>.05$].

TABLE 7.8: PERSONAL RELATIONS SCORES - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Personal Relations	Total	3.50	.53	3.43	.56	3.45	.52
	Male	3.47	.53	3.37	.57	3.44	.52
	Female	3.56	.54	3.52	.52	3.48	.52

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A significant main effect for intervention was revealed [$F(2,262)=3.32$; $p<.05$] and the null hypothesis of no effect, rejected. Again, a Scheffé post hoc test was used to source the significant difference and it was found to exist between the mean scores for the February and June trials.

7.1.1.3 ACADEMIC AND CULTURAL ACHIEVEMENT

Analysis of data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [F(2,271)=.49; p>.05]. Furthermore, no significant interaction between cohort and time was established [F(2,271)=2.80; p>.05]. Mean academic and cultural achievement scores by cohort and time are shown in Table 7.9.

TABLE 7.9 MEAN ACADEMIC AND CULTURAL ACHIEVEMENT SCORES - COHORT BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Academic & Cultural Achievement	Total	3.50	.52	3.46	.47	3.45	.47
	1993	3.54	.53	3.50	.47	3.52	.52
	1994	3.43	.50	3.42	.45	3.35	.44

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

Although a significant interaction between gender and cohort was found to exist, [F(1,262)=4.62; p<.05] it was not seen as being of practical significance or confounding to the research questions of the study.

As implied earlier, an important aspect of the study was the exploration of possible differential effects of gender. Analysis supported a hypothesis in this regard as a significant interaction between gender and time was forthcoming [F(2,271)=3.1; p<.05]. Mean academic and cultural achievement scores by gender and time are shown in Table 7.10.

TABLE 7.10: MEAN ACADEMIC AND CULTURAL ACHIEVEMENT SCORES - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Academic & Cultural*	Total	3.50	.52	3.46	.47	3.45	.47
	Male	3.46	.53	3.42	.47	3.44	.49
	Female	3.55	.50	3.53	.46	3.46	.49

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

A main effect for academic and cultural achievement was found to be non-significant [F(2,271)=2.26; p>.05].

7.1.1.4 HEALTH AND PHYSICAL APTITUDE

Analysis of data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [F(2,265)=1.71; p>.05]. Moreover, no significant interaction between cohort and time was established [F(2,265)=2.82; p>.05]. Mean health and physical aptitude scores by cohort and time are shown in Table 7.11.

TABLE 7.11: MEAN HEALTH & PHYSICAL APTITUDE SCORES - COHORT BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Health & Physical Aptitude	Total	3.59	.49	3.59	.48	3.58	.45
	1993	3.63	.52	3.58	.52	3.56	.49
	1994	3.54	.45	3.59	.42	3.60	.39

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

Although a significant interaction between gender and cohort was found to exist, [F(1,266)=4.46; p<.05] it was not seen as being of practical significance or confounding to the research questions of the study.

Table 7.12 displays the mean health and physical aptitude scores for gender by time. The analysis failed to support a differential gender hypothesis as no significant interaction between gender and time was forthcoming [F(2,265)=.16; p>.05].

TABLE 7.12: MEAN HEALTH AND PHYSICAL APTITUDE SCORES - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Health & Physical Aptitude	Total	3.59	.49	3.59	.48	3.58	.45
	Male	3.58	.51	3.57	.50	3.57	.46
	Female	3.60	.47	3.60	.45	3.59	.43

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A main effect for health and physical aptitude was analysed and found to be non-significant [$F(2,262)=.14$; $p>.05$]. The null hypothesis of no effect was accepted.

7.1.1.5 AUTONOMY

Analysis of the autonomy data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [$F(2,280)=1.86$; $p>.05$]. Similarly, no significant interaction between cohort and time was established [$F(2,280)=2.81$; $p>.05$]. Mean autonomy scores by cohort and time are shown below in Table 7.13.

TABLE 7.13: MEAN AUTONOMY RESULTS - TIME BY COHORT

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Autonomy	Total	3.81	.39	3.84	.37	3.81	.37
	1993	3.87	.42	3.86	.38	3.82	.38
	1994	3.75	.37	3.82	.36	3.80	.36

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A non-significant interaction between gender and cohort was found to exist, [$F(1,281)=3.24$; $p>.05$].

Table 7.14 reveals the mean autonomy scores for gender by time. The analysis failed to support a differential gender hypothesis as no significant interaction between gender and time was forthcoming [$F(2,280)=1.12$; $p>.05$].

TABLE 7.14: MEAN AUTONOMY SCORES - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Autonomy	Total	3.81	.39	3.84	.37	3.81	.37
	Male	3.82	.41	3.83	.40	3.80	.39
	Female	3.80	.38	3.86	.33	3.82	.35

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A main effect for health and physical aptitude was analysed and found to be non-significant [$F(2,262)=.14$; $p>.05$]. The null hypothesis of no effect was accepted.

7.1.1.6 ENVIRONMENTAL SENSITIVITY

Analysis of environmental sensitivity data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [$F(2,283)=2.17$; $p>.05$]. However, a significant interaction between cohort and time was established [$F(2,283)=7.37$; $p<.05$]. Hence, the null hypothesis of no difference between cohorts was rejected in terms of the environmental sensitivity data. Mean environmental sensitivity scores by cohort and time are depicted in Table 7.15.

TABLE 7.15: MEAN ENVIRONMENTAL SENSITIVITY SCORES - COHORT BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Environmental Sensitivity*	Total	3.14	.63	3.08	.60	2.99	.63
	1993	3.23	.68	3.21	.58	3.18	.64
	1994	3.03	.54	2.92	.58	2.76	.53

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

Although a significant interaction between gender and cohort was found to exist, [F(1,284)=8.17; p<.05] it was not seen as being of practical significance or confounding to the research questions of the study.

The study sought to investigate the possible differential effects of gender. The MANOVA analysis failed to support the hypothesis in this regard as no significant interaction between gender and time was forthcoming [F(2,283)=1.50; p>.05]. The null hypothesis of no difference between means at each trial was accepted. Mean environmental sensitivity scores by gender and time are shown in Table 7.16

TABLE 7.16: MEAN ENVIRONMENTAL SENSITIVITY SCORES - GENDER BY TIME

SUBSCALES		FEBRUARY		JUNE		DECEMBER	
		Mean	SD	Mean	SD	Mean	SD
Environmental Sensitivity	Total	3.14	.63	3.08	.60	2.99	.63
	Male	3.00	.58	2.92	.54	2.86	.57
	Female	3.34	.64	3.30	.60	3.18	.67

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

A main effect for environmental sensitivity was found to be significant [F(2,283)=13.7; p<.05]. Further analysis using a Scheffé post hoc test revealed significant difference to exist between the June mean and the December mean where there had been a decrement in the environmental sensitivity score.

7.1.2 THE SLQ RESULTS OVER THE ESOESP DURATION

The four subscales contained in the SLQ were examined according to the information provided by the 1993 and 1994 cohorts. Each subscale was examined independently in terms of:

- Time by Gender by Cohort
- Cohort by Time
- Gender by Cohort
- Gender by Time
- Main effect.

The SLQ results for Cohort by Time and Gender by Time are given in Table 7.17 and Table 7.18 respectively.

Table 7.17: SLQ RESULTS - COHORT BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Appropriateness of Curriculum	Total	3.66	.47	3.63	.47	3.67	.47
	1993	3.72	.46	3.64	.49	3.69	.48
	1994	3.55	.46	3.61	.42	3.63	.45
Quality of Teaching*	Total	3.73	.55	3.66	.57	3.71	.54
	1993	3.78	.60	3.64	.60	3.78	.54
	1994	3.68	.53	3.67	.53	3.62	.51
School Spirit*	Total	3.74	.54	3.65	.59	3.72	.53
	1993	3.78	.60	3.62	.60	3.73	.56
	1994	3.69	.51	3.68	.51	3.69	.48
Interpersonal Relationships*	Total	3.66	.60	3.60	.65	3.62	.58
	1993	3.70	.73	3.58	.73	3.58	.58
	1994	3.61	.55	3.63	.55	3.67	.50

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

TABLE 7 18: SLQ RESULTS - GENDER BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Appropriateness of Curriculum	Total	3.66	.47	3.63	.47	3.67	.47
	Male	3.61	.47	3.59	.47	3.64	.47
	Female	3.73	.45	3.68	.46	3.71	.46
Quality of Teaching	Total	3.73	.55	3.66	.57	3.71	.54
	Male	3.70	.52	3.63	.59	3.68	.55
	Female	3.78	.59	3.69	.54	3.76	.52
School Spirit	Total	3.74	.54	3.65	.59	3.72	.53
	Male	3.64	.51	3.54	.56	3.62	.54
	Female	3.87	.55	3.79	.52	3.86	.48
Interpersonal Relationships	Total	3.66	.60	3.60	.65	3.62	.58
	Male	3.54	.60	3.48	.67	3.48	.54
	Female	3.83	.56	3.79	.56	3.82	.50

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.1.2.1 APPROPRIATENESS OF CURRICULUM

Analysis of data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [$F(2,246)=.76$; $p>.05$]. Furthermore, no significant interaction between cohort and time was established [$F(2,246)=2.96$; $p>.05$]. Mean appropriateness of curriculum scores by cohort and time are shown in Table 7.19.

TABLE 7.19: MEAN APPROPRIATENESS OF CURRICULUM SCORES - COHORT BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Appropriateness of Curriculum	Total	3.66	.47	3.63	.47	3.67	.47
	1993	3.72	.46	3.64	.49	3.68	.48
	1994	3.55	.46	3.61	.42	3.63	.45

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

Although a significant interaction between gender and cohort was found to exist, [F(1,247)=8.59; p<.05] it was not seen as being of practical significance or confounding to the research questions of the study.

Table 7.20 shows the mean appropriateness of curriculum scores for gender by time. The analysis failed to support a differential gender hypothesis as no significant interaction between gender and time was forthcoming [F(2,246)=.07; p>.05].

TABLE 7.20: MEAN APPROPRIATENESS OF CURRICULUM SCORES - GENDER BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Appropriateness of Curriculum	Total	3.66	.47	3.63	.47	3.67	.47
	Male	3.61	.47	3.59	.47	3.64	.47
	Female	3.73	.45	3.68	.46	3.71	.46

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

A main effect for appropriateness of curriculum was analysed and found to be non-significant [F(2,246)=.82; p>.05]. The null hypothesis of no effect for the trial was accepted.

7.1.2.2 QUALITY OF TEACHING

Analysis of quality of teaching data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [F(2,256)=2.17; p>.05]. However, a significant interaction between cohort and time was established [F(2,256)=6.90; p<.05]. In terms of the quality of teaching data, the null hypothesis of no difference between cohorts over time was rejected. The mean quality of teaching scores by cohort and time are provided in Table 7.21.

TABLE 7.21: MEAN QUALITY OF TEACHING SCORES - COHORT BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Quality of Teaching*	Total	3.73	.55	3.66	.57	3.71	.54
	1993	3.78	.60	3.64	.60	3.78	.54
	1994	3.68	.53	3.67	.53	3.62	.51

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

Although a significant interaction between gender and cohort was found to exist, [$F(1,257)=6.21$; $p<.05$] it was not seen as being of practical significance or confounding to the research questions of the study.

The study sought to investigate the possible differential effects of gender. The MANOVA failed to support the hypothesis in this regard as no significant interaction between gender and time was forthcoming [$F(2,256)=.01$; $p>.05$]. The null hypothesis of no difference between means at each trial was accepted. Mean quality of teaching scores by gender and time are shown in Table 7.22.

TABLE 7.22: MEAN QUALITY OF TEACHING SCORES - GENDER BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Quality of Teaching	Total	3.73	.55	3.66	.57	3.71	.54
	Male	3.70	.52	3.63	.59	3.68	.55
	Female	3.78	.59	3.69	.54	3.76	.52

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A main effect for quality of teaching was analysed and found to be significant [$F(2,256)=3.30$; $p<.05$]. Further analysis using a Scheffé post hoc test revealed significant difference to exist between the February mean and the June mean where there had been a decrement in the quality of teaching score.

7.1.2.3 SCHOOL SPIRIT

Analysis of school spirit data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [$F(2,268)=1.18$; $p>.05$]. However, a significant interaction existed between cohort and time [$F(2,268)=3.98$; $p<.05$]. In terms of quality of teaching data, the null hypothesis of no difference between cohorts was rejected. Mean quality of teaching scores by cohort and time are provided in Table 7.23.

TABLE 7.23: MEAN SCHOOL SPIRIT SCORES - COHORT BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
School Spirit*	Total	3.74	.54	3.65	.59	3.72	.53
	1993	3.78	.60	3.62	.60	3.73	.56
	1994	3.69	.51	3.68	.51	3.69	.48

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

Although a significant interaction between gender and cohort was found to exist, [$F(1,269)=10.13$; $p<.05$] it was not seen as being of practical significance or confounding to the research questions of the study.

The analysis of possible differential gender effects failed to support the hypothesis in this regard as no significant interaction between gender and time was forthcoming [$F(2,268)=.14$; $p>.05$]. The null hypothesis of no difference between means at each trial was accepted. Mean school spirit scores by gender and time are shown in Table 7.24.

TABLE 7.24: MEAN SCHOOL SPIRIT SCORES - GENDER BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
School Spirit	Total	3.74	.54	3.65	.59	3.72	.53
	Male	3.64	.51	3.54	.56	3.62	.54
	Female	3.87	.55	3.79	.52	3.86	.48

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A main effect for school spirit was analysed and found to be significant [$F(2,268)=4.78$; $p<.05$]. Further analysis using a Scheffé post hoc test revealed significant difference to exist between the February mean and the June mean where there had been a decrement in the school spirit score.

7.1.2.4. INTERPERSONAL RELATIONSHIPS

Analysis of interpersonal relationships data failed to demonstrate a significant three way interaction between the independent variables of the study viz; time, gender and cohort [$F(2,301)=.01$; $p>.05$]. However, a significant interaction existed between cohort and time [$F(2,301)=3.62$; $p<.05$]. The null hypothesis of no difference between cohorts over time was rejected. Mean interpersonal relationship scores by cohort and time are provided in Table 7.25 below.

TABLE 7.25: MEAN INTERPERSONAL RELATIONSHIP SCORES - COHORT BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Interpersonal Relationships*	Total	3.66	.60	3.60	.65	3.62	.58
	1993	3.70	.73	3.58	.73	3.58	.58
	1994	3.61	.55	3.63	.55	3.67	.50

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

A non-significant interaction between gender and cohort was found to exist for the interpersonal relationship data, [$F(1,302)=2.57$; $p>.05$].

Table 7.26 demonstrates the mean interpersonal relationship scores for gender by time. The analysis failed to support a differential gender hypothesis as no significant interaction between gender and time was forthcoming [$F(2,301)=.37$; $p>.05$].

TABLE 7.26: MEAN INTERPERSONAL RELATIONSHIP SCORES - GENDER BY TIME

		FEBRUARY		JUNE		DECEMBER	
	Cohort	Mean	SD	Mean	SD	Mean	SD
Interpersonal Relationships	Total	3.66	.60	3.60	.65	3.62	.58
	Male	3.54	.60	3.48	.67	3.48	.54
	Female	3.83	.56	3.79	.56	3.82	.50

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p < .05$)

A main effect for interpersonal relationships was analysed and found to be non-significant [$F(2,301) = .88$; $p > .05$]. The null hypothesis of no effect for the trial was accepted.

7.1.3 THE FITNESS DATA

Both the 1993 and 1994 cohorts undertook an identical fitness test during their ESOESP. This involved a timed cross country run around a set course. Pre-test scores were collected during the first week at the ESOESP whereas the post-test scores were obtained in the final week of the program. The run completion time is indicative of the students' general fitness and aerobic capacity. Table 7.27 and Table 7.28 display the 1993 and 1994 cohort's findings respectively.

TABLE 7.27 1993 COHORT'S RUN TIMES

	Females (n=63)		Males (n=86)	
	Mean min/sec	SD min/sec	Mean min/sec	SD min/sec
February	8.54	1.56	7.57	1.49
December	7.35*	1.02	6.49*	1.12

* $p < .001$

TABLE 7.28: 1994 COHORT'S RUN TIMES

	Females (n=66)		Males (n=87)	
	Mean min/sec	SD min/sec	Mean min/sec	SD min/sec
February	9.02	1.59	7.51	1.53
December	7.44*	.59	6.38*	1.06

* $p < .001$

Using the paired t - test to compare the mean completion time between the first and final run it can be shown that both cohorts achieved a very significant improvement (for 1993 Cohort, $t=5.88$, $p<0.001$; and for the 1994 Cohort, $t=10.30$, $p<0.001$).

Comment

While this does not necessarily indicate any fundamental change in lifestyle or that the improved performance is likely to continue beyond the stay at Timbertop, it does suggest a marked improvement in general fitness as a result of the ESOESP. To what extent this improvement is associated with other changes in health behaviour that might extend its potential benefit beyond the program itself remains to be determined. This in part, could be addressed by a standardized fitness test, for example the 20 metre shuttle run test. This could be implemented in Year 8 (just prior to entering Timbertop) and again in Year 10 to compare aerobic fitness levels against Australian norms. In this way, any appreciable gains in fitness levels when compared to national norms, could be attributed to the ESOESP.

7.1.4 SUMMARY OF ESOESP IMPACT IN QUANTITATIVE TERMS OVER THE 12 MONTH DURATION.

A summary of the findings obtained for the ten dependent variables occurs in Figure 7.1. Further to this, an abbreviated annotation of the results over the ESOESP duration is also provided.

FIGURE 7.1 SUMMARY OF RMQ AND SLQ RESULTS OVER THE ESOESP DURATION

SUBSCALE	SIGNIFICANT MAIN EFFECT	SIGNIFICANT GENDER DIFFERENCE
Social Responsibility	Yes Decline from June to December	No
Personal Relations	Yes Decline from February to June	No
Academic & Cultural Achievement	No	Yes Did not retain parallelism
Health & Physical Aptitude	No	No
Autonomy	No	No
Environmental Sensitivity	Yes Decline from June to December	No
Appropriateness of Curriculum	No	No
Quality of Teaching	Yes Decline from February to June	No
School Spirit	Yes Decline from February to June	No
Interpersonal Relationships	No	No

Over the 12 month duration, the quantitative self-report data for the 1993 and 1994 cohorts revealed the following:

- Only one subscale viz; Academic and Cultural Achievement had a significant gender difference. Mean scores for males and females began the year at 3.46 and 3.55 respectively, and then became more similar (or androgynous) as a result of the intervention (viz; 3.44 and 3.46 respectively). All nine other subscales retained their parallelism during the period of intervention.

- Combined mean scores for the 1993 and 1994 females remained consistently higher than their male counterparts in all subscales except Autonomy throughout the duration of the ESOESP.
- Generally speaking, the combined mean scores for Environmental Sensitivity, Interpersonal Relationships and School Spirit scores remained consistently higher for females throughout the duration of the ESOESP.
- The self-report data for both males and females across all subscales revealed that mean Autonomy scores remained highest throughout the ESOESP duration. In particular, the 1993 females reported consistently high scores for the testing period.
- For both groups, the lowest self-reported mean score across the duration of the ESOESP related to the construct of Environmental Sensitivity. It is interesting to note that the 1993 female cohort attained consistently high mean scores throughout the ESOESP duration in this subscale.
- An interesting trend emerged with the 1993 female cohort. The researcher was mindful of the fact that the 1993 cohort had been labeled as "one of those unruly years", yet the females were extremely positive about the experience. For every subscale, this group reported consistently high scores throughout the ESOESP duration. It was anticipated and hypothesised that the females would gain higher scores in the subscales of: Social Responsibility, Personal Relations, Environmental Sensitivity, Appropriateness of Curriculum, Quality of Teaching, School Spirit and Interpersonal Relationships. However, the researcher was somewhat mystified that the self-report data from the 1993 females was highest in areas which males are either traditionally or stereotypically stronger or superior viz: Autonomy and Health and Physical Aptitude. Could it be that this cohort was either atypically confident and positive about their experiences, or was it that they were totally misguided in their self-perceptions and innate judgements?. The

researcher strongly believes that the former is true. Given this stand, the 1993 female cohort has redefined the boundaries and expectations for their gender.

- The results were time independent - in other words, similar mean scores were obtained for both cohorts over the 12 month duration. Across the board, this is particularly true for Social Responsibility and Health and Physical Aptitude mean scores. Clearly, this reinforces the robustness of the RMQ and SLQ.
- The mid-test mean scores for the 1993 cohort deteriorated significantly in the following subscales: 1) Personal Relations; 2) Quality of Teaching; 3) School Spirit; and 4) Interpersonal Relationships. Notably however, mean post-test score for Quality of Teaching returned to a similar pre-test score at the completion of the ESOESP. Hence, the 1993 data for these four subscales followed a traditional "J" curve (Strauss, 1982) which can be attributed to high initial expectations.
- Significant gains in fitness levels were obtained for both males and females.
- In most instances there was minimal change within the subscales. There were only five subscales that revealed a significant main effect viz: Social Responsibility; Personal Relations; Environmental Sensitivity; Quality of Teaching; and School Spirit. Moreover, all five subscales that were statistically significant experienced a decline in scores. In what maybe conceived as paradoxical, the quantitative instruments have failed to mirror the qualitative findings. The qualitative results suggested an appreciable improvement in many of the subscales as a consequence of ESOESP participation, yet this trend was not accurately depicted in the quantitative assessment.
- At this juncture, it appears as if the RMQ and SLQ have primarily measured outcome rather than process. If this is the case, even though the reliability and validity of the instruments were arduously determined prior to the study, it is conceivable that the

instruments were too blunt. Given this stand, the discrimination of the instruments is questionable. An explanation for this apparent anomaly will be discussed in Chapter 8.

7.2 RMQ AND SLQ RESULTS OVER THE 12 MONTH FOLLOW-UP

The 1993 cohort was tracked longitudinally with an additional follow-up test 12 months after departure to examine the residual effects of the ESOESP upon participants. Table 7.29 provides the data from the RMQ and SLQ over two academic years. An analysis and discussion of each individual subscale follows.

TABLE 7.29: 1993 COHORT'S RMQ AND SLQ RESULTS PRE, MID, POST AND FOLLOW-UP

SUBSCALES	PRE TEST		MID TEST		POST TEST		FOLLOW UP	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Social Responsibility*	3.65	.45	3.66	.43	3.61	.48	3.51*	.51
Personal Relations	3.53	.59	3.44	.55	3.44	.57	3.46	.51
Academic & Cultural	3.54	.53	3.50	.47	3.52	.52	3.47	.50
Health & Physical Aptitude	3.63	.52	3.58	.52	3.56	.49	3.52	.54
Autonomy	3.87	.42	3.86	.38	3.82	.38	3.79	.48
Environmental Sensitivity	3.23	.68	3.21	.58	3.18	.64	3.16	.70
Appropriateness of Curriculum*	3.72	.46	3.64	.49	3.69	.48	3.56*	.51
Quality of Teaching*	3.78	.60	3.64	.60	3.78	.54	3.61*	.59
School Spirit*	3.78	.60	3.62	.60	3.73	.56	3.57*	.60
Interpersonal Relationships*	3.70	.73	3.58	.73	3.58	.58	3.58*	.62

NB * Denotes subscales that were found to be statistically significant at the 5% level (p<.05)

7.2.1 SOCIAL RESPONSIBILITY FOLLOW-UP RESULTS

Mean social responsibility scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a significant effect for the treatment $F(3,297)=6.24$; $p<.05$. The null hypothesis of no difference between means at each trial was rejected. Further analysis using a Scheffé post hoc test revealed significant difference to exist between the post-test mean and follow-up mean where there had been a decrement in the social responsibility score. Table 7.30 below conveys these findings.

TABLE 7.30: MEAN SOCIAL RESPONSIBILITY SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.65	.45	3.66	.43	3.61*	.48	3.51*	.51

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.2 PERSONAL RELATIONS FOLLOW-UP RESULTS

Mean personal relations scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a non-significant effect for the treatment $F(3,324)=1.21$; $p>.05$. The null hypothesis of no difference between means at each trial was accepted. The information is displayed below in Table 7.31.

TABLE 7.31: MEAN PERSONAL RELATIONS SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.53	.59	3.44	.55	3.44	.57	3.46	.51

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.3 ACADEMIC AND CULTURAL ACHIEVEMENT FOLLOW-UP RESULTS

Mean academic and cultural achievement scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a non-significant effect for the treatment $F(3,318)=1.50$; $p>.05$. The null hypothesis of no difference between means at each trial was accepted. Table 7.32 illustrates these findings.

TABLE 7.32: MEAN ACADEMIC & CULTURAL ACHIEVEMENT SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.54	.53	3.50	.47	3.52	.52	3.47	.50

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.4 HEALTH AND PHYSICAL APTITUDE FOLLOW-UP SCORES

Mean health and physical aptitude scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a non-significant effect for the treatment $F(3,318)=2.11$; $p>.05$. The null hypothesis of no difference between means at each trial was accepted. Table 7.33 reports these findings.

TABLE 7.33: MEAN HEALTH & PHYSICAL APTITUDE SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.63	.52	3.58	.52	3.56	.49	3.52	.54

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.5 AUTONOMY FOLLOW-UP RESULTS

Mean autonomy scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a non-significant effect for the treatment $F(3,321)=2.10$; $p>.05$. The null hypothesis of no difference between means at each trial was accepted. Table 7.34 conveys this information.

TABLE 7.34: MEAN AUTONOMY SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.87	.40	3.86	.38	3.82	.38	3.79	.48

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.6 ENVIRONMENTAL SENSITIVITY FOLLOW-UP RESULTS

Mean environmental sensitivity scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a non-significant effect for the treatment $F(3,339)=0.87$; $p>.05$. The null hypothesis of no difference between means at each trial was accepted. Below, Table 7.35 illustrates these findings.

TABLE 7.35: MEAN ENVIRONMENTAL SENSITIVITY SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.23	.68	3.21	.58	3.18	.64	3.16	.70

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.7 APPROPRIATENESS OF CURRICULUM FOLLOW-UP RESULTS

Mean appropriateness of curriculum scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a significant effect for the treatment $F(3,324)=4.92$; $p<.05$. The null hypothesis of no difference between means at each trial was rejected. The data provided in Table 7.36 shows that over the 12 month follow-up the decline in the mean appropriateness of curriculum score was statistically significant. Further analysis using a Scheffé post hoc test revealed difference to exist between the post-test mean score and the follow-up test mean score.

7.36: MEAN APPROPRIATENESS OF CURRICULUM SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.72	.46	3.64	.49	3.68*	.48	3.56*	.51

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.8 QUALITY OF TEACHING FOLLOW-UP RESULTS

Mean quality of teaching scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a significant effect for the treatment $F(3,306)=6.64$; $p<.05$. The null hypothesis of no difference between means at each trial was rejected. The data displayed below in Table 7.37 conveys these findings and it can be seen that over the 12 month follow-up the decline in the mean quality of teaching score was statistically significant. Further analysis using a Scheffé post hoc test revealed difference to exist between the post-test mean score and the follow-up test mean score.

TABLE 7.37: MEAN QUALITY OF TEACHING SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.78	.60	3.64	.60	3.78*	.54	3.61*	.59

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.9 SCHOOL SPIRIT FOLLOW-UP RESULTS

Mean school spirit scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a significant effect for the treatment $F(3,327)=6.87$; $p<.05$. The null hypothesis of no difference between means at each trial was rejected. Table 7.38 provides these findings and it can be seen that over the 12 month follow-up the decline in the mean school spirit score was statistically significant. Further analysis using a Scheffé post hoc test revealed difference to exist between the post-test mean score and the follow-up test mean score.

TABLE 7.38: MEAN SCHOOL SPIRIT SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.78	.60	3.62	.60	3.73*	.56	3.57*	.60

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.10 INTERPERSONAL RELATIONSHIPS FOLLOW-UP RESULTS

Mean interpersonal relationships scores for the total 1993 cohort across four trials were analysed using a one-way analysis of variance for repeated measures design. The analysis revealed a significant effect for the treatment $F(3,363)=2.58$; $p<.05$. The null hypothesis of no difference between means at each trial was rejected. The data displayed in Table 7.39 reveals these findings and it can be seen that over the 12 month follow-up the sustained decline in mean interpersonal relationships scores were statistically significant. Further analysis using a Scheffé post hoc test revealed difference to exist between the pre-test mean score and the mid-test mean score.

TABLE 7.39: MEAN INTERPERSONAL RELATIONSHIPS SCORES AFTER FOLLOW-UP

	FEB (Pre-test)		JUNE (Mid-test)		DEC (Post-test)		DEC (Follow-up)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1993	3.70*	.73	3.58*	.73	3.58	.58	3.58	.62

NB * Denotes subscales that were found to be statistically significant at the 5% level ($p<.05$)

7.2.11 SUMMARY OF THE RMQ AND SLQ RESULTS OVER THE 12 MONTH FOLLOW-UP

- The mean Personal Relations follow-up score increased slightly one year after departure which is suggestive of a consistent residual impact. However the mean mid, post and follow-up scores were significantly lower than the mean pre-test score. This in part could be attributed to high initial expectations of participants and yet again, the traditional "J" curve re-emerges (Strauss, 1992).
- The mean Interpersonal Relationships follow-up score remained unchanged 12 months after departure which is indicative of a positive residual impact. As mentioned above, the mean mid, post and follow-up scores were significantly lower than the mean pre-test score. Yet again, this trend could be attributed to over inflated initial expectations of participants at the commencement of the ESOESP.
- The mean scores of four subscales viz; Health and Physical Aptitude, Academic and Cultural Achievement, Environmental Sensitivity and Autonomy decreased slightly (but not significantly) over the period of the longitudinal study.
- As for the four other subscales viz: Social Responsibility, Appropriateness of Curriculum, Quality of Teaching and School Spirit, they all experienced a significant decline in the mean scores over the follow-up period. The most marked and statistically significant reversion was in the subscales Quality of Teaching and School Spirit. It is interesting to note that the post-test mean scores for both these subscales returned to their pre-test scores after plummeting at the mid-test period. However, at the follow-up test, these mean scores had reverted to the disappointing mid-test scores.
- Similar to the trend depicted over the ESOESP duration, the highest self-reported mean score at the follow-up related to the construct of Autonomy whilst the lowest self-reported

mean score across the duration of the ESOESP related to the construct of Environmental Sensitivity.

- Yet again, the quantitative instruments have failed to mirror the qualitative findings. For example, the qualitative results suggested that the Academic and Cultural Achievement subscale would decline whilst at the ESOESP. However, this assumption was not substantiated in any of the quantitative data obtained at various testing points.

These issues will be revisited and expanded upon in the following chapter.

7.3 THE PARENTS' PERCEPTIONS

As indicated in Chapter 4, a parent questionnaire (PQ) was mailed to all parents of the 1993 cohort (n=228) along with a reply paid envelop in August 1994 to assess the long term or residual impact of the ESOESP on their child. The PQ was completed by 124 parents thereby achieving a response rate of 55%. The parents from the 1993 cohort provided invaluable insights into the immediate and residual impact of Timbertop upon their child. The PQ data reported in Table 7.40 suggests that parents found the academic and cultural aspects of the program the most displeasing aspect of the year. As far as providing an opportunity for students to develop an interest in art and music, many parents (38.5%) felt that the ESOESP did very little in this regard. Along the same train of thought, 28.1% of parents indicated that the program produced no noticeable change in their child in so far as being able to develop an interest in a variety of hobbies. In accord with the sentiments expressed by the self-report data of the students, 26.4% of parents conveyed that the ESOESP did very little to enhance their child's school grades.

TABLE 7.40: CHANGES IN STUDENTS AS PERCEIVED BY PARENTS

Characteristic of student development	Strong and consistent change	Marked and generally sustained change	Slight and inconsistent change	No noticeable change at all	Mean rating*
	(%)	(%)	(%)	(%)	
1 to become self-reliant	26.2	56.6	16.4	.8	3.08
2 to feel good about himself/herself	24.8	48.8	16.5	9.9	2.89
3 to expand his/her knowledge of the world	25.6	43.8	28.1	2.5	2.92
4 to get on well with his/her teachers	18	37.7	28.7	15.6	2.58
5 to develop an understanding of other cultures	19	41.3	27.3	12.4	2.67
6 to be tolerant of other people and their opinions	31.1	40.2	23.8	4.9	2.96
7 to prepare for life after leaving school	23.1	34.7	32.2	9.9	2.71
8 to talk to others about his/her feelings	13.7	37.1	33.1	16.1	2.48
9 to know how to enjoy himself/herself	21.7	39.2	28.3	10.8	2.72
10 to organise himself/herself to get things done	26	33.3	30.1	10.6	2.75
11 to get good results in his/her studies	8.3	37.2	28.1	26.4	2.27
12 to make friends	19.5	44.7	20.3	15.4	2.68
13 to show regard for other people's happiness	24.6	41.0	23.8	10.7	2.80
14 to develop an interest in different kinds of art and music	9.0	20.5	32.0	38.5	2.00
15 to co-operate with others in getting things done	31.1	35.2	28.7	4.9	2.93
16 to be liked by others his/her own age	19.3	39.5	22.7	18.5	2.6
17 to understand the problems of people worse off than himself/herself	22.3	33.9	29.8	14.0	2.65
18 to solve his/her own problems	25.2	47.9	22.7	4.2	2.94
19 to develop his/her abilities at sport	23.6	26	34.1	16.3	2.57
20 to be confident in himself/herself	28.5	48.8	17.9	4.9	3.01
21 to be recognised as a leader	21.1	31.7	28.5	18.7	2.55
22 to show care for the environment	35	39	21.1	4.9	3.04
23 to be accepted as part of a group	26.7	42.5	18.3	12.5	2.83
24 to develop interesting hobbies	14.9	16.5	40.5	28.1	2.18
25 to stay physically healthy	37.7	36.1	16.4	9.8	3.02
26 to be fair in his/her dealings with others	25.4	37.7	26.2	10.7	2.78
27 to gain the respect of his/her teachers	22.1	36.1	24.6	17.2	2.63
28 to be able to compete with others	20.3	32.5	26.8	20.3	2.53
29 to explain clearly what he/she is thinking	17.2	40.2	25.4	17.2	2.57
30 to stay on good terms with the family	34.2	29.2	23.3	13.3	2.84

* Rating scale from 1 (no noticeable change) to 4 (strong and consistent change).

Number of respondents = 124

% = Percentage of respondents indicating change

However, from the parents' perspective, the most consistent and strongest acquisitions derived from the program were changes in terms of: an ability to stay physically healthy (37.7%); a care for the environment (35%); being able to stay on good terms with the family (34.2%); being able to co-operate with others to get things done (31.1%); and a tolerance of others and their opinions (31.1%).

Alternatively, the data can be viewed from another perspective. The PQ had a four-point rating scale from 1 (no noticeable change) 2 (slight and inconsistent change) 3 (marked and generally sustained change) to 4 (strong and consistent change). When the two columns ("*a strong and consistent change*" and "*marked and generally sustained change*") are added together some interesting results surface. Collectively, the eight most prevalent changes depicted by parents were as follows:

1. 82.8% revealed that their child had made appreciable gains in terms of self-reliance.
2. 77.3% said that their child was noticeably or very much more confident in themself.
3. 74% of parents noticed either a marked or definite change in their child's care for the environment.
4. 73.8% mentioned their child's new found ability to stay physically healthy
5. 73.6% indicated that their child changed noticeably and now felt good about themself
6. 71.3% of children were either very much or noticeably more tolerant of other people and their opinions as far as their parents were concerned.
7. 71.3% were perceived to change in terms of their ability to solve problems.
8. 69.4% mentioned that their child expanded their knowledge of the world as a result of the ESOESP.

As indicated earlier, the PQ had a four-point rating scale (1=no noticeable change, 2=slight and inconsistent change, 3=marked and generally sustained change, and 4=strong and consistent change). The mean ratings obtained from the parents also consolidates the findings mentioned above. They perceived that the top five attributes gained from the program were:

1. Self-reliance (mean rating 3.08);
2. Enhanced environmental awareness (mean rating 3.04);
3. Maintenance of a physically healthy lifestyle (mean rating 3.02);
4. Confidence (mean rating 3.01); and
5. Tolerance of other people and their opinions (2.96).

In summation, the quantitative data from the PQ consistently makes reference to similar attributes as the most marked changes within their children. For the most part, these included 1) autonomy and self-reliance; 2) environmental sensitivity; 3) health and physical aptitude; 4) interpersonal relationships; and 5) social responsibility.

With regard to the parents' satisfaction of the overall experience at Timbertop, the data conveyed in Table 7.41 indicated that they wholeheartedly endorse the ESOESP. Collectively, the large majority (89.4%) were either satisfied (25.2%) or very satisfied (64.2%) with the experiences provided by Timbertop. A minority of parents (10.6%) were slightly dissatisfied with the ESOESP whilst no parent (0%) indicated a total dissatisfaction with the school. Similarly, the mean rating for the program was extremely high (3.54) and clearly suggests that parents strongly endorse the program.

TABLE 7.41: PARENTS' SATISFACTION RATING OF TIMBERTOP

	VERY SATISFIED	SATISFIED	SLIGHTLY DISSATIS- FIED	NOT AT ALL SATISFIED	Mean rating *
	(%)	(%)	(%)	(%)	
How satisfied are you with the overall experience at Timbertop?	64.2	25.2	10.6	0	3.54

* Number of respondents = 123
 Rating scale from 1 (not at all satisfied) to 4 (very satisfied).
 % = Percentage of respondents

Quite clearly, the PQ was considered to be a robust source of data collection. Undoubtedly, the parents' contributions significantly enhanced the breadth and depth of the study. They provided valuable information which was used in the triangulation of the data. Nevertheless, there were problems with the structure of the PQ. The most significant difficulty was encountered in trying to measure the level of student achievement for all the subscales. The most perplexing task was to establish a reliable reference point for initial achievement against which to compare subsequent measures, so that the difference could be taken at face value as an indication of the change in achievement over time. Future studies could consider surveying the parents before their child enters the ESOESP thereby establishing a reliable reference point from which to measure attitudinal and behavioural change.

In conclusion, Chapter 7 has raised some perplexing findings. Notwithstanding this, there has also been some significant and encouraging results which will be further examined in Chapter 8 where the qualitative and quantitative results are discussed at length.

Chapter 8

DISCUSSION AND ANALYSIS OF GENERAL ISSUES

Within this chapter, an analysis of the general issues and trends will be dealt with according to the sources of data collection outlined in the research design (refer to Figure 3.1). In short, the data conveyed in Chapters 5, 6 and 7 is collapsed into a workable format. Collectively, the data in this longitudinal study has found somewhat conflicting and divergent results. Briefly, the most striking feature associated with the findings, is the fact that the trends in the qualitative data are not fully supported statistically with the quantitative data. For whatever inextricable reason, the former source of data collection was overwhelmingly supportive of the ESOESP whilst the latter only partially replicated these trends.

The qualitative and quantitative results have been reported in this Chapter using the research methodologies as a basis. To assist simplicity, each data source is summarised outlining the general trends which emerged. Wherever possible, the triangulation of the research findings, viz; student data, parent data, teacher data, fitness data and personal observation have been used as the cornerstones of discussion.

The chapter concludes with an examination of the main points which have emanated from the study. Lastly, the author puts forward a conceptual model which attempts to draw together the multi-faceted nature of research in this field.

8.1 QUALITATIVE DATA

In qualitative terms, the ESOESP participant data was derived from 1) personal interview, 2) log book analysis and time line charts, 3) parent data, 3) teacher input and 4) personal observation. The findings which arose from each methodology are discussed separately.

8.1.1 PERSONAL INTERVIEWS

Undoubtedly, the personal interviews were a valuable adjunct to the self-report questionnaires. The interview questions not only attempted to focus on perceived development of the factors articulated in the RMQ and SLQ, but also attempted to elicit responses concerning the processes involved in the ESOESP.

In keeping with the trends demonstrated in previously implemented pilot studies, students generally saw the ESOESP as being beneficial and indicated they had changed as a result of involvement and exposure. Unquestionably, from inner pain from great things emerged. Comments relating to self-actualisation, social growth, greater tolerance and understanding of others, increased levels of self-responsibility and maturity, and gains in self-reliance and autonomy were prevalent. When probed concerning the reason for these changes students provided a diverse set of answers relating to the intimate and personal nature of the school, their involvement in the unique outdoor program - especially the hikes, and the pastoral approach taken by the teachers. The camaraderie associated with the unit life, the interpersonal relationships emanating from the school life along with the physical demands of hiking and running were continually emphasised as positive aspects of the ESOESP. Clearly the general perception of change was one of positive personal growth within varied perceptions of the factors which facilitated such growth. This is clearly articulated in the following response:

Student 5 I'm grown up - I know who I am now.....it is weird, this place makes you think about everything more. Timbertop has a strange "magical" power that you don't realise at the start - you hate it but then you look back on it and it is unreal like running up mountains. I've enjoyed the boarding - in some respects the freedom was taken away but it was given back in another way - you feel really safe here. It has had a huge impact on me - I'm more "together" now. It has been one of the best years of my life. It is an experience that everyone should go through. Different, very different. You have to stick at it until the end - it is important that you have to experience it. It is best to come here with no expectations - but it is unreal - unreal friends - big achievements. I've got so many regrets - I'd do it all so differently if I did it again. You have to get used to this place before you can enjoy it. (Female)

Generally students indicated that Timbertop provided opportunities that they would not have received at the schools' main campus. As would be expected, specific comments about bushcraft and the outdoor environment were recurrent. Again however, responses gave clear indications of perceptions of the ESOESP providing opportunities for self-reliance, inner strength, purpose in life and social development which may not have been available within conventional mainstream education. Some comments which typified these thoughts include:

Student 3 Full of fun activities and new experiences that you can't get anywhere else. You learn to appreciate nature when you are in the surrounding area. It helps you to live with others and be independent in your own little world up in the hills. (Female)

Student 12 It is a holistic approach to school, fitness, life, work and so on. It teaches a lot of initially immature people many "laws of life" and it gives teenagers the chance of independence and challenge. It is a place where you have to fix your own mistakes and there is no-one running after you to pick up the pieces. It was the best year of my life. It has taught me so much that I will use throughout my life. I've made life long friends in my unit. I had a chance to be one with the environment and live in a community basically made up of people my own age. (Female)

In strict academic terms the students did generally feel that there was a decline in the academic rigour at Timbertop when compared with the main campus. To this end, several students commented on the lack of academic emphasis and the inferior quality of study time at Timbertop. This is in keeping with similar findings by Breitenstein and Ewert (1990:17) who advocate that "intellectual or cognitive benefits are perhaps the least obvious of the values of outdoor recreation".

For instance, the hardships (in academic terms) endured by students are conveyed in the following comment:

Student 2 Concentrating on school work was hard for me because there was so many other things going on in the school. (Female)

The students accepted the ESOESP but were clear about the need for a review of the academic approach at the school. Interestingly, females appeared to voice their disapproval of this issue more often than males.

However, the researcher is mindful and supportive of the academic "trade-off" associated with ESOESP's. Quite clearly, the school curriculum is geared first and foremost towards "living-skills". Given this stance, students are prepared for life experiences rather than one final academic school exam. This is poignantly shown in:

Student 1 There are many benefits throughout the year - you learn to live by yourself without others, and a place where it is totally different to a normal school - like the runs and hikes. The routine is different. Later in life you will cope better, you accept others for what they are - because you are forced to live with them. A worthwhile year and I advise others to send their children here. (Male)

For the most part however, the students were appreciative of the unique curriculum on offer at the ESOESP. In the main, students were satisfied with the quality of teaching. Although comments were made that there was no difference in the teaching skill of Timbertop teachers compared to those at the main campus, they recognized and very much appreciated the pastoral care offered by the teachers at Timbertop staff. The pastoral care was perceived as being superior to that offered by the staff at the main school. This issue is reiterated in:

Student 5 The best thing is how close the teachers who are the unit leaders and kids become during the time here. (Female)

Student 2 The teachers do everything with you, there is equality. (Female)

One of the major deficiencies in the ESOESP appeared to be associated with lack of privacy. Although unit life was often mentioned as a strength and a positive aspect, it quite clearly had a negative side. The inability of students to find solitude and a personal space was often articulated. When the need arose, students suggested it was almost impossible to find time and a location for personal introspection. An example of the adversity encountered is conveyed in:

- Student 8

It is so claustrophobic - there is no freedom. I'm a person who likes to have time to myself. (Female)
- Student 2

I know I can cope in trying circumstances.....but I got extremely tired and I suppose I'd like one day off a week just to rest and relax. Sometimes I found it all too suffocating though. (Female)

Another criticism offered by students related to the frequency of physical ailments. For example, several girls eluded to the fact that dysmenorrhoea and amenorrhoea were cause for concern. They attributed their menstrual problems to the harsh and relentless nature of the physical program. On the same train of thought, students also mentioned knee problems which were directly correlated to the physical trauma experienced during running and hiking. This aspect is typified in the following comments:

- Student 3

I would only recommend this place to capable students - not fragile ones because their body wouldn't stand all of the physical activity. (Female)
- Student 5

I have knee problems when running. People think I am faking it just to get out of the runs - but I'd much rather be doing them than being stuck in here. I had to go home because I got sick but when I was home I realised how much I missed this place. I even had an argument with my doctor because I wanted to come back and he wouldn't let me because I wasn't well enough. (Female)

Although the researcher does not feel that the physical nature of the program is overly intense, these points do need to be re-examined in light of the information obtained from the students.

In broad terms, general comments were overwhelmingly positive about the experience. Most students indicated they would definitely recommend the experience to their peers despite problems of homesickness, adjustment, and isolation. Invariably, the perceived benefits from the total program clearly outweighed the deficits. This is disclosed in:

Student 3 It gives you the most amazing experiences. It is hard on you but you always forget the bad things and remember the fun things. It is remote and extremely enjoyable and challenging. Timbertop was the most spectacular year of my life, I've gained confidence, friendships and unforgettable memories. (Female)

Even one student who was perceived by the ESOESP teachers and researcher to being totally negative about ESOESP, begrudgingly volunteered that:

Student 4 It has been worthwhile because I can say to myself that I finished one of the hardest things I've done in my life so far.....when I am 25 I will probably look back and be proud I was here and survived. (Male).

In summation, the personal interviews which were discussed at length in Chapters 5 and 6, surfaced some intriguing findings. Moreover, the 1993 and 1994 cohorts clearly showed similar trends throughout the duration of the ESOESP.

8.1.2 TIME LINE CHARTS AND LOG BOOK ANALYSIS

The time line charts and log book analysis proved to be a significant component in the triangulation process. The most noteworthy feature being the fact that the information conveyed in the graphs validated the general trends which surfaced in the personal interviews. In particular, data revealed in the time line charts provided concurrent findings to those disclosed in the personal interviews. For instance, there was a parallelism in the "down" times articulated in the interviews (that is returning after holidays to commence term 2 and term 3) and those graphed on the time line charts.

The time line graphs also mirrored other findings for example, over the winter months students gradually become more accepting of the ESOESP. The graphs showed a slow improvement in ratings through August and September. This coincides with winter skiing which is said to be the highlight of the experience thus far.

By December, most students were staunch supporters of their sojourn to the bush. Students rate the final few weeks at the ESOESP in glowing terms. The students who rated the ESOESP poorly in their time line graphs have either realised how much they had wasted their year and felt deflated as a consequence, or they failed to achieve anything worthwhile from the ESOESP and were thankful that the year had culminated. It must be stressed that this was the case with only a small minority of students.

In summation, the time line charts and log book analysis confirm the validity of the responses given in the personal interviews. The 1993 and 1994 cohorts exhibited similar trends and it can be concluded that the qualitative findings were consistent within each cohort.

8.1.3 PARENT INPUT

As indicated in earlier chapters, The PQ was mailed to the parents of the 1993 cohort roughly nine months after their child had departed from the ESOESP. The PQ contained an open-ended question which invited parents to make additional comments about their perceptions of the Timbertop experience. From the parents' standpoint, the ESOESP was instrumental in enhancing qualities such as tenacity and inner strength along with an enormous sense of personal accomplishment and achievement. The following comments are enlightening in this regard:

Parent 217. My son emerged from what he saw as a very difficult year (physically and emotionally) with a great sense of achievement and good self-esteem. He

himself, places enormous importance on the year as a crucial stage in his maturing process.

Parent 8. One point I would like to make is that this experience will go down as the most exciting school year ever spent. The emphasis for our child (female) was on life skills - getting on with others, nature and learning to cope with decision making and survival skills (both physical and emotional).

Parent 38. An environment which pushed them (my two children) to achieve far beyond what they believed to be their capabilities. I wish I had been given this opportunity.

Furthermore, parents indicated that the ESOESP fostered social and personal growth. In particular, frequent reference was made to improvements in areas such as self actualisation and self confidence.

Parent 64. Our child benefited enormously from the experience. She has had peer group problems all through school, but has always been supported at home. Last year she had to stand alone and find her own place in the unit - and she did (many tears and lots of letters). A very valuable experience.

Parent 60. Timbertop was a very positive experience for both my children. It taught them a great deal about themselves and they were both far more mature for the experience. For my son, (1993) in particular, it taught him that it was not necessary to be seen as "cool" by his peers and has enabled him to develop his own personality and be himself. He is no longer drawn to the "in" crowd, but has begun to make real, valuable friendships.

There was also general agreement amongst parents that the ESOESP cultivated people skills and social responsibility. An example of this can be documented in:

Parent 81. The Timbertop year was excellent for our son - he learnt to take responsibility on many levels that would not have occurred so quickly. It was an important rite-of-passage moving from childhood to young adulthood. I think there could be more ritual to mark it.

However, in terms of interpersonal relationships and peer relations, there was not universal agreement between parents. For instance, some parents strongly opposed the non-interventional methods adopted by the ESOESP staff. Moreover, it was suggested that alternative arrangements should be made when a unit is clearly dysfunctional. This recommendation is also shared by the author. These detrimental aspects are voiced in:

- Parent 199. Our daughters' unit NEVER got it together because of a few strong personalities. She is a kind and sensitive child who had to endure 12 months with these same girls. I would like to see units changed when it is so obvious they are not working.
- Parent 30. We feel that the inflexibility in recognising that it is possible that a unit may not be capable of "getting it all together" is a problem. Our son's unit did not work and he was disillusioned and disappointed in the year. The staff were aware of the difficulties and apparently were unable to change or alleviate the situation.

It is important to acknowledge that some parents indicated that the experience was scarifying and detrimental in terms of social and personal growth, for instance:

- Parent 138. Our son has not talked very much at all about Timbertop, but we suspect that it was a very difficult and possibly confusing year for him. There were personality conflicts, both with staff and some in his unit.
- Parent 51. Still too much emphasis on material wealth of individual students which leads to "power and value" problems in units. A dog-eat-dog attitude prevails rather than "sharing". The promotion of the Timbertop experience is far different to the actual experience - we felt it actually "hardened" many of the students rather than promoting a more caring and Christian way of life. However, there were many advantages that will, hopefully, eventually outweigh these problems.

Lastly, there was general agreement between parents that the ESOESP's curriculum was unique and impactful. Most were appreciative of the broad curriculum on offer at the ESOESP and stated that the attainment of life skills and people skills were the hallmark of the program. This is exemplified in:

- Parent 26. My daughter was already independent, intelligent and successful before attending Timbertop. What she lacked was the ability to be part of a functioning group and physical as opposed to intellectual. Timbertop did for her what no other experience could have done. It made her be part of a powerful group and be able to enjoy her strengths. She became an athlete - which blew me away! She began to communicate powerfully and she realised others respected her. She was already organised, a good problem solver, environmentally aware etc, Timbertop simply confirmed all those talents. She says herself that it was the best year of her life. I agree.
- Parent 171. My son loved his year at Timbertop and benefited greatly. He matured mentally and physically and has developed a zest for life and a genuine love for the mountains and the places he explored on the hikes and runs. I am thoroughly pleased with the impact the year at Timbertop had on my son. His comment was "I could do it again Mum" - this was just after he had completed.

- Parent 124. She tells me that it has been the most significant year of her life. Year 10 is an anti-climax. The whole family was involved with Timbertop - a new kind of communication with letters and parcels. Radically different and wonderful year for all of us - tough (very tough), but exhilarating and very worthwhile.

However, just as some students indicated that the academic and cultural aspects of the ESOESP were cause for concern, there were also some parents who shared similar viewpoints. It becomes blatantly clear that for some, there was a academic trade-off associated with the ESOESP experience, for instance:

- Parent 92. My son very much enjoyed the unit life at Timbertop, however we feel that some aspects of academic work suffered (eg. foreign languages and music). Much time has been devoted by Year 10 subject teachers to bring the students to the required standards in these areas.
- Parent 192. The Timbertop year was truly a wonderful and unforgettable experience. There was such an emphasis on outdoor activities that I did feel my daughters' classroom studies did suffer. I also feel so much pressure was put on the child, the day is so programmed that she found it hard to unwind in the holidays and took time to settle in Year 10 the following year.

Notwithstanding these minor criticisms, the majority of parents were supportive and positive of the ESOESP in terms of the qualitative findings. Their comments were an invaluable source of data collection and validated many of the trends articulated by students during their personal interviews. In closing, the researcher was particularly impressed by one parent who typed a one-and-a-half page letter outlining the specific benefits of the program. The letter read:

- Parent 182. Our son thoroughly enjoyed his year at Timbertop. As parents, the changes we noticed in him were many.

At times we look at him, see and hear from others what he does and we are in awe. That year gave him great self-confidence, but it goes beyond "self-confidence". He has a great sense of self-worth and a belief in his ideas. This is coupled with a tolerance for others; a willingness to listen to all points of view and then, not to be swayed from what he believes to be right. This might make him sound like a "pain" but he isn't.

He is at ease with his peers and with adults. That brashness that is bravado in adolescents has gone and has been replaced with quiet humility. He seems to be at peace with himself - as if he doesn't have to prove himself to anyone. I think that is what is called "having perspective"..... He has always set high standards for himself in all areas of school life. At Timbertop the challenge was for him

to maintain those standards (which he did) and gained academic and outdoor distinctions - as well as a distinction for slushing!

He has learnt that life isn't black or white and to be tolerant of others and of his own failings. He has learnt to relax and see the funny side of the situation - and, most importantly of all, he has learnt to laugh at himself.

It might sound a contradiction, but he is an individual who is also a team player. Timbertop taught him the necessity of thinking of others and working together whilst encouraging the students to have a say and to sort out their problems openly..... I think this is indicative of the ethos which this year at Timbertop tries to engender. It doesn't suit all students but for our son, it was a year of great growth personally and great success.

8.1.4 TEACHER INPUT

From a qualitative perspective, teacher input was derived from two sources, viz: 1) the Master of Timbertop and 2) the teachers at the school. Their responses provided the researcher with insights into the behaviours and traits of certain students which may not necessarily be visible during personal observation phase.

In the first instance the Master commented about gender differences within the 1993 cohort. His comments were extremely astute and accurate. For example, he stated that the females would have been higher in the subscales of social responsibility, interpersonal relationships, health and physical aptitude and environmental sensitivity. Furthermore, he argued that the 1993 females were "...a positive year of girls who tried hard throughout". His comments show strong parallels with the qualitative and quantitative data.

The other teachers provided comments on the 24 students who were involved in the personal interview phase. Quite clearly, they re-affirmed many of the trends which were already emerging to the researcher during her personal observations. These will be discussed in the following section.

8.1.5 PERSONAL OBSERVATION

The most striking feature associated with the personal observation phase was the emotional roller coaster ride attached to the ESOESP. As the academic year unfolded, the students experienced a kaleidoscope of emotions. Early in the year, most were bewildered about the intensity of the program. Some questioned their inner fortitude to endure one year of this "nightmarish" existence. The large majority of females appeared to handle the transition into their new environment more amicably than their male counterparts.

Mid-year was considered to be a "down" time. There were many perceived hardships evident in their comments. The researcher noted that the inner pain appeared to be instrumental in fostering self-responsibility, fitness, self-discipline and autonomy within students.

By December, students had undergone a metamorphosis. Many are staunch supporters of the ESOESP and are deeply appreciative of their year-long involvement. The school spirit and ethos have escalated beyond comprehension. Although many are keen to return home, their faces beam with pride and accomplishment.

Throughout the year whilst having dialogue with the researcher, the teachers also provided general comments surrounding the misdemeanours of the 1993 cohort. Anecdotal evidence gleaned from the teachers suggested that this cohort was rebellious, recalcitrant, and resistant. Although the researcher agreed with the point that some of the males were unruly, it was felt that the majority of females were overwhelmingly positive about the experience. This was also echoed in the quantitative components of the study where the 1993 females gained extremely high mean scores throughout the duration of the ESOESP.

8.1.6 QUALITATIVE GENDER DIFFERENCES OVER THE ESOESP DURATION

As highlighted in Chapter 5 and 6, the females were more vociferous and positive about environmental sensitivity, school spirit and interpersonal relationships. This aspect was also mirrored in the quantitative data which is discussed in detail in the following section. Quite clearly, females tended to verbalise the innate changes which had occurred to their behaviours, values and attitudes as a result of the ESOESP. This reinforces findings found elsewhere, for instance Bowen (1996) and Heaven (1994) who maintained that males possessed inferior communication skills and had difficulty expressing emotions. Further to this, the females appeared to focus on their interpersonal skills as a "means" of coping with the ESOESP and were able to vent their frustrations and anxieties in a healthy manner. Similar findings by Jordan (1992) corroborate with these results and suggest that females adopt supportive and caring roles in order to help others to achieve their task goals.

Pipher (1995) astutely argues that girls' forte lie in relationship-based cooperative learning environments and this aspect was evident in the research findings in this study. Similarly, the results also collaborate with the views espoused by Mitten, et al (1997) who articulated that females expend great energy in the quest for building healthy interpersonal relationships.

However, the findings of the personal interview component of this study, refute the position espoused by Gilligan (1993) who maintained that females are not capable of thinking analytically, being physically skilled or making decisions. In particular, the 1993 females challenged these gender stereotypes. For instance, those qualities which are considered the stronghold of males, such as independence and being physically gifted, were nullified by the responses of the females during the personal interview component of this study.

These findings are also mirrored in a study conducted by Miranda and Yerkes (cited by Henderson, 1992) who proffered that women in outdoor education have a freedom from the gender-imposed roles. Given this stance, the ESOESP appears to foster a certain degree of androgyny within participants. If this assumption is correct, then the views put forward by Pipher (1995) and Cadzow (1996) which articulated the need for the nurturance of androgynous individuals in order to handle the adversity and hardships in contemporary society, are also reinforced by this study.

Further to this, the parents also noted differential gender outcomes. In particular, this was conveyed in:

- Parent 39. We are very happy with Geelong Grammar. Our older daughter had a very fulfilling but different experience two years earlier because the challenges are more novel for the girls.

- Parent 182. As a general observation, girls tended to adjust more quickly than the boys to this type of challenge.

Undeniably, a handful of males in the 1993 cohort were unruly and recalcitrant. This resulted in several suspensions and expulsions throughout the year. However, the researcher partially disagrees with the teachers' comments about the 1993 cohort. In general, the researcher found the 1993 cohort to be compliant, amicable and positive about the ESOESP. As far as the author is concerned, the males and females in the 1993 and 1994 cohort were very similar. The most marked difference was that the 1993 females were very well adjusted and the most supportive of the ESOESP.

8.2 QUANTITATIVE DATA

In terms of the quantitative findings, although the results provided support for the existing anecdotal evidence, the findings were far from unequivocal. The three methods of data collection viz: 1) student self-report data, 2) parent input, and 3) fitness data are summarised independently.

8.2.1 STUDENT DATA

Some intriguing findings did surface from the RMQ and SLQ. In particular, the following aspects were highlighted in this study:

8.2.1.1 RMQ AND SLQ RESULTS OVER THE ESOESP DURATION

Over the 12 month duration, the quantitative self-report data for the 1993 and 1994 cohorts revealed the following:

- There were only five subscales that revealed a significant main effect viz: Social Responsibility; Personal Relations; Environmental Sensitivity; Quality of Teaching; and School Spirit. Moreover, these subscales experienced a decline in scores.
- The self-report data for both males and females across all subscales revealed that mean Autonomy scores remained highest throughout the ESOESP duration. In particular, the 1993 females reported consistently high scores for the testing period.

- For both groups, the lowest self-reported mean score across the duration of the ESOESP related to the construct of Environmental Sensitivity. Yet again, the 1993 females reported consistently high scores for the testing period.
- The mid-test mean scores for the 1993 cohort deteriorated significantly in the following subscales: 1) Personal Relations; 2) Quality of Teaching; 3) School Spirit; and 4) Interpersonal Relationships. Notably however, mean post-test score for Quality of Teaching returned to a similar pre-test score at the completion of the ESOESP. Hence, the 1993 data for these four subscales followed a traditional "J" curve which can be attributed to high initial expectations.
- The results were time independent - in other words, similar mean scores were obtained for both cohorts over the 12 month duration. Across the board, this is particularly true for Social Responsibility and Health and Physical Aptitude mean scores. Clearly, this reinforces the robustness of the RMQ and SLQ.

8.2.1.2 QUANTITATIVE GENDER DIFFERENCES OVER THE ESOESP DURATION

- Only one subscale viz; Academic and Cultural Achievement had a significant gender difference. All other subscales retained their parallelism during the period of intervention.
- Combined mean scores for the 1993 and 1994 females remained consistently higher in all subscales except Autonomy throughout the duration of the ESOESP.

- Generally speaking mean Environmental Sensitivity, Interpersonal Relationships and School Spirit scores remained consistently higher for females throughout the duration of the ESOESP. This mirrors trends which were found in the qualitative data.
- An interesting trend emerged with the 1993 female cohort. The females were extremely positive about the experience and for every subscale, this group reported consistently high scores throughout the ESOESP duration. The 1993 females were highest in areas which males are either traditionally or stereotypically stronger or superior viz: Autonomy and Health and Physical Aptitude. Could it be that this cohort was either atypically confident and positive about their experiences, or was it that they were totally misguided in their self-perceptions and innate judgements?. The researcher strongly believes that the former is true. Given this stand, the 1993 female cohort has redefined the boundaries and expectations for their gender.

8.2.1.3 FITNESS DATA

As mentioned in Chapter 7, the only comparative measure of change in physical fitness is the completion time for a set cross country running course which all students attempt at both the beginning and the end of their ESOESP. The run is not strictly competitive; all are encouraged to complete the course if they can, and to improve on their previous time. In these circumstances the run may be regarded as a 'normal' activity and the completion time therefore as a reasonable indication of each student's general fitness and aerobic capacity. The results contained in Table 7.27 clearly indicated that significant gains in fitness levels were obtained for both males and females. This source of data collection was considered to be a valuable adjunct to the total evaluation package.

Irrefutably, improved fitness was a byproduct emanating from participation in the ESOESP. These findings corroborate with similar studies for instance Wright (1983) who also reported positive fitness benefits for juvenile delinquents following participation in an Outward Bound program.

8.2.1.4 RESIDUAL IMPACT OF THE ESOESP

The RMQ and SLQ were re-administered 12-months after departure from the ESOESP. The follow-up data revealed:

- The mean Personal Relations follow-up score increased slightly one year after departure which is suggestive of a consistent residual impact. However the mean mid, post and follow-up scores were significantly lower than the mean pre-test score. This in part could be attributed to high initial expectations of participants and yet again, the traditional "J" curve re-emerges.
- The mean Interpersonal Relationships follow-up score remained unchanged 12 months after departure which is indicative of a positive residual impact. As mentioned above, the mean mid, post and follow-up scores were significantly lower than the mean pre-test score. Yet again, this trend could be attributed to over inflated initial expectations of participants at the commencement of the ESOESP.
- The mean scores of four subscales viz; Health and Physical Aptitude, Academic and Cultural Achievement, Environmental Sensitivity and Autonomy decreased slightly (but not significantly) over the period of the longitudinal study.

- As for the four other subscales viz: Social Responsibility, Appropriateness of Curriculum, Quality of Teaching and School Spirit, experienced a significant decline in the mean scores over the follow-up period. The most marked and statistically significant reversion was in the subscales Quality of Teaching and School Spirit. It is interesting to note that the post-test mean scores for both these subscales returned to their pre-test scores after plummeting at the mid-test period. However, at the follow-up test, these mean scores had reverted to the disappointing mid-test scores. In part, the decline from pre-test to mid-test could be explained because of the high, positive views that the students had the beginning of the year. In other words, all the "myths" and "legends" associated with Timbertop are for the most part, based on students reflections on the experience.

As seen in the follow-up interviews and the parents' perceptions, most people paint the place in glowing colours. This aspect makes students very eager to embark on the ESOESP journey at the beginning of the year. Their over zealous expectations do not align with the stark reality of the place. It stands to reason therefore, that the mid-test scores are reflective of the students over inflated initial expectations (pre-test scores) matched against their "deflated" perceptions of the ESOESP (mid-test scores).

- Similar to the trend depicted over the ESOESP duration, the highest self-reported mean score at the follow-up related to the construct of Autonomy whilst the lowest self-reported mean score across the duration of the ESOESP related to the construct of Environmental Sensitivity.

The findings from this study re-affirm the anecdotal evidence provided by past associates of Timbertop viz: Montgomery and Darling (1967) who espoused that the lasting impact of the

ESOESP seemed to suggest a disappointing reversion to former attitudes and behaviour among students when they return to their regular school environment

8.2.1.5 PARENT INPUT

From a quantitative perspective, the PQ contained 30 items which were designed to reflect how much they thought their child had changed in relation to each characteristic as a result of their experience at the ESOESP. The results which were presented in Table 7.40, and as indicated by students themselves show a general improvement, but to varying degrees, across all characteristics.

They perceived that the top five attributes gained from the program were: 1) self-reliance (mean rating 3.08); 2) enhanced environmental awareness (mean rating 3.04); 3) maintenance of a physically healthy lifestyle (mean rating 3.02); 4) confidence (mean rating 3.01); and 5) tolerance of other people and their opinions (2.96).

With regard to the parents' satisfaction of the overall experience at Timbertop, the data conveyed in Table 7.41 indicated a wholehearted endorsement of the ESOESP. Collectively, the large majority (89.4%) were either satisfied (25.2%) or very satisfied (64.2%) with the experiences provided by Timbertop. A minority of parents (10.6%) were slightly dissatisfied with the ESOESP whilst no parent (0%) indicated a total dissatisfaction with the school. Similarly, the mean rating for the program was extremely high (3.54) and clearly suggests that parents were strong advocates of the program.

8.3 DISCUSSION OF MAIN POINTS

Inarguably, the ESOESP was a beneficial experience for the majority of students. From a qualitative perspective in particular, participants indicated that their dormant strengths and abilities had been cultivated as a direct consequence of their involvement in the ESOESP, for instance:

Student 14 I found out much more about myself - I can do things that I thought I never
 could. Now it is behind you, it hasn't been as difficult as you expected it to be.
 (Male)

The five main recurring themes in this study relate to: 1) personal and social growth; 2) the importance of shared experiences and self-disclosure; 3) appropriateness of curriculum; 4) increased levels of autonomy; and) 5 nature as a cathartic agent. These above-mentioned points will be dealt with individually.

8.3.1. PERSONAL AND SOCIAL GROWTH

It appears that the ESOESP taught the students new ways of interacting with one another. As a natural corollary, their interpersonal skills flourished. The qualitative data in particular revealed that the school climate was instrumental in their attitudinal and behavioural change. Most articulated that the school gave them a sense of community, belonging, purpose and connectedness. This was seen to be conducive for social and personal growth.

Appreciable gains were also made in terms of social responsibility. This can be translated into "response-ability" - or the ability to observe and respond to the needs of others in a suitable fashion. The primary challenges for the students arose out of the need for them to elicit responsible, co-operative and harmonious behaviours. As a consequence, students acquired

increased levels of allocentricism. This is in keeping with the findings made by Heath (1995:167) when he postulated that experiential education programs resulted in:

...the growth away from self-centeredness and narcissism to self-objectification, and the capacity emphatically to take other divergent points of view toward issues and toward one's self.....he becomes a more tolerant accepting person as he more deeply understands how others feel about the issue that may be the source of difficulty.

In particular, this study has reinforced the notion that females are more concerned about social responsibility. The findings concur with Lerner (1989:197) when she states that "women have a long legacy for assuming responsibility for other people's feelings and for caring for others at the expense of the self".

The intense bonding and camaraderie was evident amongst most students and many believed that "we were like one huge happy family". The newly forged friendships were highly regarded and the group had formed a powerful matrix. The hiking expeditions were perceived as a major source of strengthening personal relationships and long lasting friendships. This mirrors similar findings by Horwood (1987:52) who espouses that:

...any trip brings together a small group of people who can plan intensely and then live together in close quarters under occasionally trying circumstances. Shallow acquaintance is replaced by intimacy and respect as unexpected weaknesses and resources appear in each person.

As discussed in Chapter 2, other studies (for instance Ewert, 1989; Jones, 1989 and Potter, 1992) have shown the richness of the interpersonal characteristics which emanate from programs which are experiential in nature. In particular, the findings of this study corroborate with those of Potter (1992:93-94) who maintains that:

....additionally, many students admit surprise at how close they feel to their peers during and after a wilderness experience.....the comfort level between people was accelerated. a new social reality was transformed into that of intense human collaboration. This new setting actively promoted and

encouraged interpersonal interaction....the new social reality would not support alienation. A new social standard was set and encouraged: togetherness, openness, trust and respect.

According to Peck (1987:55) humans have an innate desire for inter-relationships as "we are inevitably social creatures who desperately need each another not merely for sustenance, not merely for company, but for any meaning in our lives whatsoever". Groups are at the very core of the outdoor education process, and so when viewed in the light of Peck's sentiments it can be seen that personal and social growth are somewhat inevitable.

The research findings have lent support to similar studies which have found that males tend to be poor communicators and lack conflict resolution skills (Bowen, 1996). Furthermore, they de-emphasise affection and have difficulty expressing emotions (Heaven, 1994). The females in this study were more vociferous and willing to articulate their inner most thoughts. This was in keeping with other studies that have found that girls form friendships on the basis of verbal communication about themselves and are more likely to self-disclose in a mutually intimate and understanding friendship (Heaven, 1994).

Interestingly, our social structure and survival is predicated upon our ability to function effectively within the group context. This notion is reiterated upon by Johnson and Johnson (1991:5) when they state that:

As the effectiveness of our groups go, so goes the quality of our life. In business, education, government, social work, churches, the military, and in all aspects of our society there is great interest in improving the productivity of groups.

Indeed, when viewed in light of the above statement, the ESOESP has been a potent agent. Moreover it has been a formidable catalyst in the attitudinal and behavioural change of participants. In many respects, the ESOESP can be seen as contributing to the betterment of

society by instilling a social consciousness within participants. Furthermore, Gass and Gillis (1994:273-274) purport that "one of the greatest needs in our society is the production of functional community members(outdoor adventure activities) promote the development of self concept, self responsibility and functional change". The findings of this study firmly support this belief.

8.3.2 SHARED EXPERIENCES AND SELF-DISCLOSURE

The intense, shared experience by one and all alike (whether they be staff or pupils) was seen to be instrumental in fostering group cohesion and bonding. A caring, supportive and empathetic community quickly emerged. Invariably, the students made comments about the teachers being "real". Within this context, ESOESP's subject students and teachers to a kaleidoscope of emotions, for example, the excitement of climbing their first mountain and taking in the beauty of the view; the fear that accompanies their hike group when they find they are lost (or geographically embarrassed); the awe and peace that surrounds a spectacular sunset - all of these can enrich the quality of learning and make the experiences become embedded in their lasting memories. Given this scenario, there appears to be a heightened sense of connection between the teacher and student.

In an interesting aside, there are marked differences in the way male and female students perceive their teacher and school. This is conveyed by Heaven (1994:99) when he claims:

...boys were found to be less optimistic and to have slightly higher negative expectations about school than girls. Boys, for instance, were more likely than girls to lower their expectations about school in order to avoid disappointment. Boys were also more likely to expect teachers to dislike them.

These findings were partially supported in this study, as females were generally more optimistic about the ESOESP in terms of school spirit and interpersonal relationships.

The researcher is of the opinion that one of the reasons that Timbertop "works" is because both students and teachers are vulnerable. According to Peck (1987:58):

We cannot really be ourselves until we are able to share freely the things we most have in common: our weaknesses, our incompetence, our imperfection, our inadequacy....this is the kind of individualism that makes real community possible.

Furthermore, in Chapter 5 and 6 it was seen that students made mention of the fact that their vulnerabilities and self-disclosure within the unit had a profound impact on them. In particular, the adversity and hardship caused individuals to affiliate. The study reinforces the findings espoused by Potter (1992:95) who believes that "appropriate self-disclosure allows individuals to see through other's masks to a truer identity - their true self These disclosures often include the expression of fears, expectations, highs, lows and appreciation of peers".

Quite clearly, from inner pain came great things, for example:

Student 15 Instead of going home after the final bell, we learnt in other ways around the school. You learnt how to start a fire in the rain and you learnt to push through pain. You were always learning something new. I enjoyed the Timbertop experience as it is a great achievement. I can look back and say "I did it". At times, it seemed impossible, but this is where great mateship occurred. Now, my mates that I have made there are still great friends. It was a great year to pull yourself into gear, to get focused on what you want to do with yourself. This made you strong and you could then go from strength to strength. (Male)

It is interesting to note that whenever emotions are incorporated into learning, it makes the experience indelible, enriching and meaningful. This finding is elaborated upon by Knapp (1992:5) when he conveys that:

...cognitive learning never takes place in the absence of emotions (it) facilitates the brain's ability to store and retrieve information. Such emotions often persist long after the learning experience has ended.

Without question, the ESOESP provided meaningful and lasting experiences. This was attributed to the fact that the "shared experiences" incorporated the full gamut of emotions. Consequently, high levels of self-disclosure were inevitable as a result of the intervention.

8.3.3. APPROPRIATENESS OF CURRICULUM

The appropriateness of the curriculum can be viewed in several ways. Firstly, most students articulated the importance of being recognized and acknowledged within the school community. This was in keeping with findings by Horwood (1987:51) who contends that students "felt that they were known as individual persons, and by name, to all staff and to most students". In part, this was attributed to the unity and smallness of the campus. This aspect engendered a caring, intimate and supportive environment. Moreover, Kajchowski (cited by Kraft and Kielsmeier, 1986) purports that smaller schools encourage integration and improved interpersonal relations.

The infrastructure of the school also contributed to the warm ambience. Notably, only having one school year on campus (that is Year 9) was beneficial because there was no negative influences from older peer groups. Some of the author's personal observations showed that students were hesitant about moving out of this school into the next stage of their educational process. Their reluctance was fueled by their belief in the school's "special" atmosphere and ambience.

Secondly, there are pedagogical implications surrounding the appropriateness of curriculum. The amount and largely, the degree to which we learn is contingent upon not only our internal mechanisms but also our social environment. In concert with this notion, Knapp (1992:6) posits that:

all education can be enhanced when specific information is part of the context of meaningful experience. Outdoor education teaches in "context". It deals with specific facts, concepts, skills, attitudes and values in the context of first hand experience.

In this respect, ESOESP's teach in context. Students quickly become aware of the consequences of their actions or inactions. For example, failing to adequately prepare a route plan has far reaching ramifications, and so too does the consequences of overlooking the importance of food rationing on a five-day hike. Without doubt, the curriculum at the ESOESP is holistic and teaches in context. This is depicted in the following comments:

Student 1 Timbertop was an excellent experience that I will remember forever. It has made me realize that I shouldn't take everything for granted. Timbertop is a place where you get to know yourself and try to strengthen the weaknesses in your character. Timbertop was a totally worthwhile experience. (Male)

Student 20 A life experience, I found real happiness around the friends up there. I had the best time in term four. My hike group never fought - that was one of the things I also learned "to negotiate instead of arguing" and if we disagreed (which was rarely) we just agreed to disagree. I learnt all about leadership and commonsense. I also learnt the value of teamwork as well as improving my mental capabilities, coping skills and survival skills. (Female)

Thirdly, it was clearly evident from the responses such as those given above, that the school curriculum at the ESOESP enhanced the students' Internal Locus of Control - or in other words, the self perceived degree of control one has over his/her destiny. Rotter (1966:38) contends that "....student's belief in his or her control over their own destiny was more important to achievement than any other school factor". Self concept and locus of control are important cognitions that regulate many types of behaviours. By providing students with tasks that challenge their existing beliefs and attitudes, they change cognitive structures to accommodate and incorporate new information. This aspect is disclosed in comments such as:

Student 9 Timbertop was a great learning and growing up experience. I started out unfit, unpopular and relied very heavily on my parents. After three terms, I could see a change in the way I did things and how they were accepted. It improved my self-confidence which in turn, helped the way I was accepted. (Female)

Within this context, Mortlock (1987:55) advocates that the "most important journey is the journey inwards". Students frequently mentioned that the ESOESP had been advantageous in this regard, for instance:

- | | |
|------------|--|
| Student 9 | I became very independent and responsible. My confidence improved greatly. I can handle situations differently and it is easier for me to give my opinion. I feel more mature and able to handle difficulties on my own. (Female) |
| Student 12 | It has taught me the value of hard work. Pain, anger and frustration ie. getting lost whilst hiking and then getting yourself out of these situations. I'm more tolerant generally as a person and it has showed me not to rely on other people or adults. (Female) |
| Student 15 | I think that it has changed me because it has opened up part of myself that I didn't know. It showed me that I had willpower and determination and before this place, I didn't know that it existed. It taught me how to motivate myself and others, how to push for higher goals and how to organise myself. (Male) |

The appropriateness of the ESOESP curriculum was also reinforced by the parents. Moreover, Mortlock (1987:60) goes so far as to ascribe that outdoor activities "should be made available to all young people as part of their growing up".

8.3.4. AUTONOMY

Leading on from the key issues mentioned in the earlier section, most students articulated their belief that the ESOESP had fostered increased levels of independence, self-reliance and autonomy. A poignant example is shown in:

- | | |
|-----------|---|
| Student 9 | Timbertop is all about growing up and learning to think for yourself. You find yourself growing more confident, independent and healthy without having adults hanging over your shoulder the whole time. The teachers treat you like adults, other schools treat you like children - like this year back at Corio. (Female) |
|-----------|---|

The findings also reinforce similar research undertaken by Harter (1990). She argues that with increasing age, autonomy concurrently rises and also suggests that personal happiness and life satisfaction are closely aligned with an adolescents' self-concept.

As stated earlier, combined mean scores for females remained consistently higher in all dependent variables except for Autonomy for the duration of the ESOESP. Clearly, this indicates that the females in this study possessed positive self-concepts. This finding corroborates with Koepke (1973) cited by Neill (1997a:189) who found that females participating in an Outward Bound course had:

higher ideal self-concepts than males, even though females' actual self-concepts were similar to males'. This may, in part, be due to a self-selection bias. In other words, it may be that only females with particularly high ideal self-concepts are motivated to participate in outdoor education programs.

It is significant to note that the self-selection bias may have complicated the research findings. Some may argue that ESOESP's would only attract students who had high self-efficacy ratings - and therefore, the females at Timbertop may not be a suitable "sample" for generalisations to be made into the broader community. Conversely however, all Year 9 students were involved and the selection process was attending Geelong Grammar School, not merely attending Timbertop. Similarly, the personal interviews and the parents input reaffirmed the notion that many students were not there because of personal choice. In fact many students pleaded and begged with their parents to take them out of the ESOESP. Given this viewpoint, perhaps the self-efficacy ratings of the students weren't as high as some of the sceptics may suggest. If that is the case, the females in this case study have redefined the gender stereotypes and boundaries.

Although the minority, several students alluded to the effects of school rules upon their ideologies of independence and leadership qualities. They expressed the need for more reasonable restraints rather than the imposition of "jail-like" sentence. Moreover, they felt stifled and inhibited by the rules and regulations. These beliefs are mirrored in statements such as:

- | | |
|------------|---|
| Student 14 | The time restrictions are hard - you know, having to fit all of our jobs and homework into one day, but I suppose if we make it easy for ourselves, then we won't gain anything. (Male) |
| Student 20 | The discipline of this place is really quite punishing. (Male) |
| Student 7 | It is a complicated life here - no free time. I'm having trouble coping with parts of the discipline - but then I got a letter from mum, and it all seemed worthwhile. (Male) |
| Student 10 | We are busy all the time - we don't even get a 47 second fart break. (Male) |

In some ways, independence and interdependence may seem disparate goals. How can an individual exhibit traits associated with autonomy and independence, whilst simultaneously exhibiting traits which enhance group cohesion and social responsibility? In a sense, the two are mutually exclusive and therefore, a paradox emerges.

8.3.5. NATURE AS A CATHARTIC AGENT

Spending large periods of time in a remote and pristine setting, such as that witnessed at Timbertop, is somewhat cathartic and therapeutic. It was argued in Chapter 2, that the outdoor environment works as a prophylaxis for the stress encountered during daily routines. Moreover, emotional well-being is enhanced by recreation in the outdoors. This point is illustrated by Cohen (1992:61) when he states that:

Studies show that on average, Americans spend over 95% of their lives indoors.....when connected to nature and un-threatened, our inner child feels good. It inherently enjoys nature's responsible wholesomeness and peace.....This vicious cycle is the core of our problems. Sadly, the deteriorating state of the natural world and humanity reflects this disorder.

To this end, students continually made reference to the benefits derived from the ESOESP in this regard. As such, the curriculum gave students both purpose and direction in life, for instance:

- | | |
|------------|--|
| Student 30 | It is an experience that you will remember for the rest of your life! It expands both your mind and body and although its tough some time it has great rewards. (Male) |
|------------|--|

- Student 25 I guess the motto for this place is "Live it, learn from it and pass it on".
(Female)
- Student 24 I have really enjoyed this year. It is really special to me. I have really learnt a lot about myself and my peers. (Female)

There are enormous personal and social benefits derived from an individual understanding where they belong in relation to the total schema of life. Henderson (cited by Jones, 1989:25) attests that "detachment from the natural world leads to a confusion of place, alienation, and a sense of loss for the wonders of living". In a insidious sense, the students became more connected with nature and experienced spiritual growth. To this end, Cohen (1992:58) hypothesises that:

Our unsolvable problems result from excessively disconnecting our natural senses from their sustenance in the natural world that exists in ourselves, others an the environment....the missing emotional fulfillment which signals connectedness and well-being.

The author upholds the belief that spiritual growth was a major contributing factor to the beneficial nature of the ESOESP. Although a definition of "spirituality " warrants another thesis in itself, basically it refers to greater self-actualisation, purpose and connectedness in life (Donatelle and Davis, 1996). Students graduated with appreciable gains in spiritual growth. This echoes similar sentiments by researchers in the field, for instance Henderson (1996) who suggested that people are seeking spiritual inclusion and self-actualisation which is inspired by the pristine and majestic qualities of nature. Along a similar train of thought, Schumacher (cited by Kraft [Kraft and Sakofs, 1985:1]), who was a forefather of the experiential education movement, stated:

When the available spiritual is not filled by some higher motivations then it will necessarily be filled by something lower- by the small, mean, calculating attitude of life.

Further, Jones (1989:24) reiterates this aspect when he hypothesised that "humans are free and happy in their natural, primitive state, however they lose their natural freedom and happiness when they take on the chains of civilisation".

Throughout life we are entangled within the quest for seeking meaning and purpose in our life experiences. Reflection enhances this quest (Knapp; 1992:5). Furthermore, the solo experiences provided by the ESOESP's curriculum are viewed as beneficial to this process. During solo, students have time for introspection and reflection. Interestingly, Peck (1987:66) claims that "Self examination is the key to insight, which is the key to wisdom.... Plato put it most bluntly: 'the life which is unexamined is not worth living'".

Reflection has the ability to magnify the growth process and is instrumental in the change process. This notion is echoed by Potter (1992:94) when he emphasises:

Thinking about and discussing feelings, relationships and the accomplishments of one's self and the group enriches, deepens and broadens the outdoor experience. It enhances the awareness of the experiences and facilitates its transformation into everyday life.....Unfortunately, reflection is often initially difficult for many people. Today's lifestyles seldom encourage us to slow down and invite contemplation. Relaxation in our everyday lives is too often sought through passive entertainment; the television is an excellent example of a convenient passive time filler in addition to acting as a temporary escape from reality. Our reliance on modern technology is shifting our societal focus from a physically active, socially reflective society to one that demands a tremendous amount of external, passive stimulation for convenience. This 'spectator' society is losing its social and communication skills with others as with the self. The potency of education through the out-of-doors is its severance from modern conveniences a distancing from everyday life, a shift in modern values.

8.3.6 THE INSTRUMENTATION AND LIMITATIONS

During the piloting phase, the RMQ and SLQ demonstrated acceptable sensitivities to address the main evaluation questions of this study. Specifically, it was felt that the instruments would allow the researcher to determine more effectively what characteristics are affected by ESOESP,

to what degree, and with what residual impact upon the students. However, the reliability of the data obtained from the instruments is questionable given the fact that there are inconsistencies within the qualitative and quantitative findings. The latter has failed to accurately discriminate in terms of self-report changes in personal attitudes, values and behaviours of participants.

Quite clearly, like all developmental work in this field, the present RMQ and SLQ instruments will no doubt undergo further change before they reach a more refined level. For the purposes of this study however, they provided a workable basis for investigating possible effects, and possible weaknesses, in ESOESP's. Some suggested reasons as to why the disparity existed between the qualitative and quantitative results include:

- The "anonymity" of responses associated with pen-and-paper tests gives participants the licence to provide inaccurate and misleading responses. For example, it is "cool" to bag the school, or teachers when you can do it behind the safety of a piece a paper. Given this stand, the validity of self-report questionnaires could be questionable.
- As outlined in Chapter 2, this in part could be exacerbated by the fact that when investigating adolescence, the researcher must be mindful that "this is a study of contrasts, change, experimentation and growth" (Rice, 1996:8). How does the researcher know if they are examining the "true" self or the "false" self? In particular, the author argues that the emergence of the false self is more prevalent in pencil-and-paper tests due to the anonymity of responses and the response bias (ie I will answer the way I would like my peers to see me). Some of these limitations were also articulated by parents when they astutely stated:

Parent 124. Sometimes hard to separate Timbertop-induced changes from growing up and maturity changes.

Parent 190. The Year 9 is a year in which children develop and change enormously (ask any teacher - it is one of the, if not the most interesting/difficult years) where children change a great deal.

- Lastly, it is conceivable that the instrumentation (in particular the RMQ and SLQ) were too blunt. However, in defence of the RMQ and SLQ, the effects of the "myths" and "legends" which the newly enrolled students bring with them to the ESOESP may lead to spurious results being obtained. In particular, the new intake have heard wonderful anecdotal evidence from past students (especially as the past students exit on a euphoric high at the end of the ESOESP). As such, the new intake commence the year with over inflated expectations. In reality, the commencement of the year is brutal and bleak. The newly enrolled students quickly reassess the situation, and the mid year scores reflect this down turn in assessment.

Therefore, these over inflated pre-expectations (depicted in the high pre-test scores) can lead to a phenomenon labeled as a "U" or "J" curve (a deterioration in the mid-test scores). This finding has also been replicated by Strauss (1982) who reviewed material showing that some young children, boosted by enrichment early- childhood education, lost ground in middle childhood, only to gain again later. If this is the case, then it is conceivable that the self-report questionnaires (RMQ and SLQ) may have received unjustifiable criticism.

These issues will be carried to further magnitude during the recommendations outlined in Chapter 9.

8.4 TOWARDS A MODEL FOR FUTURE RESEARCH IN ESOESP'S

The main issue to arise within this study is the fact that it has reinforced the notion that research into outdoor education is ambiguous, convoluted and ubiquitous. For the majority of participants, the ESOESP has been a vehicle for promoting social and personal growth. Albeit however, the researcher is cognizant of the fact that not all participants were aroused by the intervention. This is substantiated by Wurdinger (1995) who states that by partaking in an Outdoor Education course does not automatically mean that participants will undergo personal and social transformation.

The rationale as to why or why not these inconsistencies occur is open to conjecture. Unashamedly however, research in the outdoor education arena is fraught with difficulty and indeed is a highly complex area to research. This in part is due to the multi-faceted nature of research in general, and outdoor education specifically. If you consider a tree as a metaphor for the impact of the intervention, a whole new picture emerges. As seen in the ESOESP Tree depicted in Figure 8.1, this study exclusively examined the impact of the intervention on participants through ten dependent variables. These ten dependent variables are portrayed as the foliage of the tree. In many respects these are the "overt" or tangible issues associated with research in ESOESP's. However, there are many other "covert" or intangible factors which were not taken into consideration - or for that matter - factored into the research equation. Figure 8.1 illustrates that the "covert" factors occurring beneath the soil, provide sustenance and nurturance for the ESOESP experience. For instance, some of these issues include:

1. The facilitator or teacher involved in the ESOESP intervention.
2. The timing of the intervention.
3. The physical elements encountered during their stay.
4. The setting of the ESOESP experience.

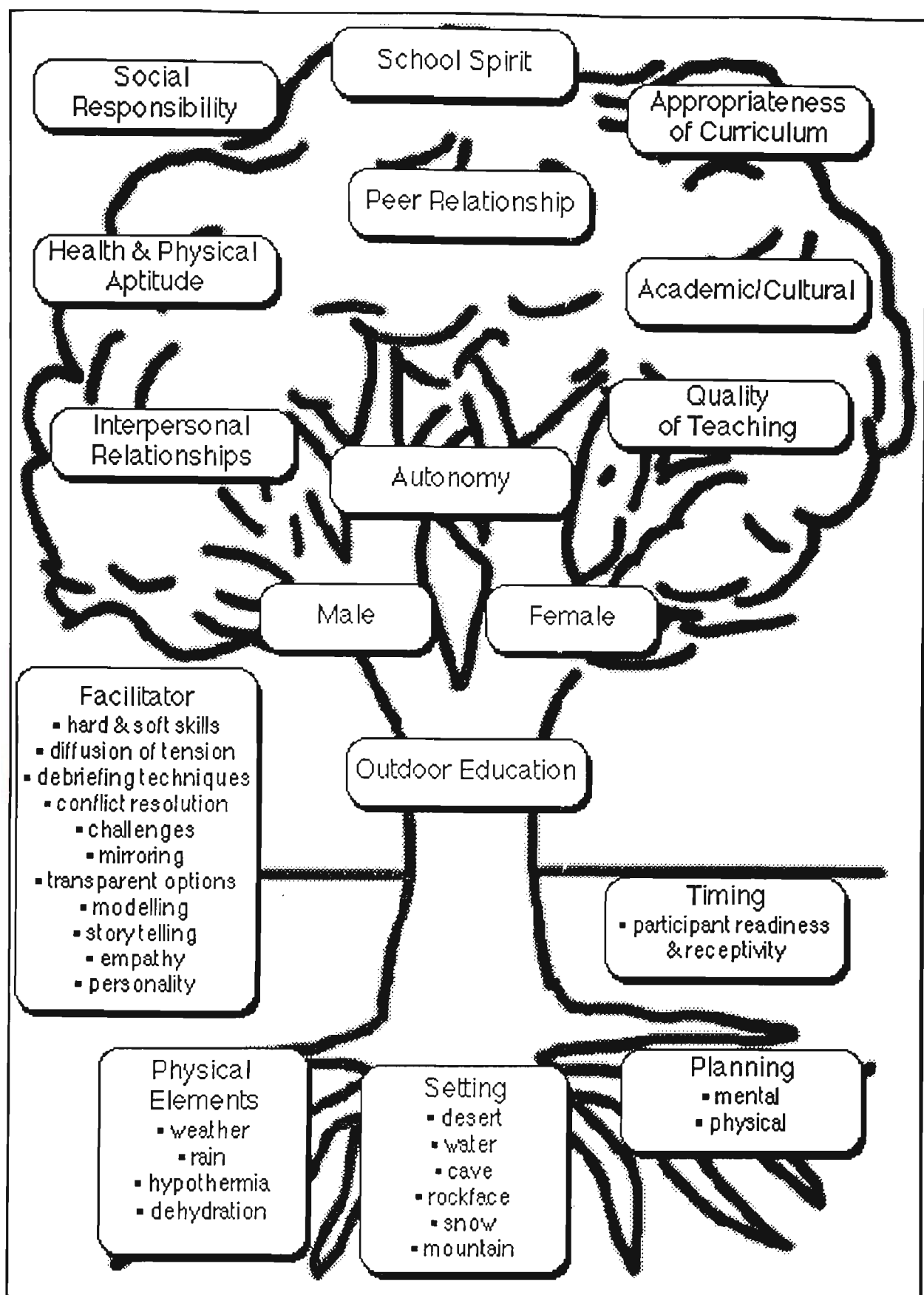


Figure 8.1: The ESOESP Tree (adapted from Priest 1986)

These four aspects will be briefly discussed.

8.4.1 TEACHER OR FACILITATOR INFLUENCE

The impact of the facilitator or teacher upon the ESOESP experience is significant. Some parents corroborated with this statement when they articulated that:

Parent 189. The whole concept depends entirely upon the relationship between pupil and surrogate parent - ie. the house master/mistress. In the case of my son the relationship was catastrophic.

The relationship between teacher expectations and student performance was discussed in Chapter 2. Rice (1996:378) cogently argues that "consistent with the self-fulfilling prophecy hypothesis, teachers' expectations predicted changes in student achievement". These results were also mirrored by Jussin and Eccles (1992) who found a strong correlation between teacher expectations and achievement results.

Pupils are particularly concerned with teacher-student relationships. To this end, Poole and Goodnow (1990:14) are of the opinion that teacher-student relationships "played an important role in equipping youth with a sense of personal efficacy, and a self-concept vital for the smooth transition to adulthood".

This study did not examine (to any great extent) the impact of the teacher or facilitator on the overall experience. For instance, the debriefing techniques used by teachers will undoubtedly impact on the participants' reflective abilities and in turn, influence the outcomes achieved. In short, different teachers will influence students in a varying array of ways. These differences were only superficially addressed in the study and did not form part of the research questions.

8.4.2 TIMING OF THE INTERVENTION

Were the students psychologically, maturationally, physically or emotionally "ready" for the intervention? Likewise, what life-events happened during the period of the study which may have adversely or positively influenced the outcomes? One parent echoed these thoughts when they stated:

Parent 192. During his Timbertop year my son experienced a separation between his parents and nearly lost his father in a car accident. Both were very difficult for him - he faced both problems well - with good results at the end of the year. Timbertop has a lot to do with this end result.

These "extraneous variables" were not monitored during the study, but quite clearly would have had a significant impact on the results obtained.

8.4.3 PHYSICAL ELEMENTS

This refers to aspects such as drought, storms, heat and wind for example, over which we have no control. In particular, the 1993 cohort experienced lack of snow during the winter months and this impacted upon the skiing program at the ESOESP. This may or may not have influenced the effects of the intervention on students - but yet again, was not factored into the research equation.

8.4.4 THE SETTING

As indicated earlier, the intervention centred around a 12-month sojourn to the Australian bush. Would the same results be obtained if the students embarked on a 12-month round the world yatching trip? Or 12-months in the desert? Or for that matter, 12-months in a prison camp?

The four variables outlined in Figure 8.1 obviously impact on the overall experience, but due to practicality and time restraints were not analysed during this study. Given the complexities associated with researching the "covert" variables occurring within the ESOESP tree, it is recommended that future studies consider this model. This is discussed further in Chapter 9.

Chapter 9

RECOMMENDATIONS AND CONCLUSIONS

The major thrust of this thesis has been to examine the impact of an ESOESP upon adolescent participants. More specifically, the intent of the research was to investigate whether the ESOESP had: 1) an immediate impact on adolescent participants; 2) differential gender outcomes; 3) an impact on fitness levels; and 4) a residual effect.

Collectively, the results in this longitudinal study have been far from unequivocal. However, in the main the results have provided support for the existing anecdotal evidence which suggest that intrinsic and extrinsic benefits accrue from involvement in ESOESP's. Further to this, it found that the results were time independent, or in other words, the qualitative data and the quantitative data acquired similar results and trends.

However, sceptical interpretation and generalisation is demanded of this study primarily due to the fact that it is a quasi-experimental design within a field setting where subjects were repeatedly surveyed at separate data points for anything up to two academic years. The research design attempted to minimise the threats to reliability and validity however the researcher is mindful of problems inherent within longitudinal studies. Furthermore, the unique characteristics of Timbertop make generalisations to the wider population very difficult. The author acknowledges these limitations when making generalisations of the findings to a wider population or setting.

The following points need to be reiterated:

- The large sample size is one favourable aspect of the study.
- Self-report data of participants was strengthened in terms of external validation by the parent and teacher input.
- With increasing numbers of variables Type I and Type II errors have been shown to increase exponentially (Haase and Ellis, 1987) some results can be expected to show significance when in fact they may not be significant.

9.1 RECOMMENDATIONS FOR FUTURE RESEARCH

When viewed in its entirety, the study has provided a significant and valuable contribution to data on outdoor education. However as is the case for all developmental work, future recommendations can be extracted from results and used as a reference point for subsequent research. These recommendations will be subdivided into two components viz: 1) recommendations for the future research in school based outdoor education programs; and 2) recommendations for the ESOESP under investigation (ie Timbertop).

9.1.1 RECOMMENDATIONS FOR FUTURE RESEARCH IN SCHOOL BASED OUTDOOR EDUCATION PROGRAMS

In the case of making generalisations and recommendations for future research in school based outdoor education programs, the following points warrant attention:

- **RETAIN THE QUALITATIVE METHODOLOGIES**

The qualitative methodologies used were a major strength of the study. The personal interviews, parent input, teacher perceptions, personal observations and time line charts and log book analysis clearly enriched the final product. The study has clearly identified that the qualitative methodologies were a valid and reliable source of data collection. It is recommended that these be an integral component of the research design in future studies involving school based outdoor education programs.

- **TIMING OF QUANTITATIVE ASSESSMENT**

For the self-report data, the most disturbing trend to emerge over the ESOESP duration was the traditional "J" curve obtained in many of the subscales. It is suggested that this trend emerged because the students had over-inflated expectations or preconceived ideas of either themselves or of the ESOESP at the commencement of the year. In particular, the first data collection had a constant theme of high expectation based on the stories and myths that had been inculcated from previous cohorts prior to their entry into the ESOESP.

More importantly, the findings of the study have unearthed the need to get baseline data on participants prior to their entry into the outdoor education program. One option is that the self-report instruments should be administered two months before the outdoor education program commences. Perhaps, this would enable the researcher to gauge whether the pre-test scores obtained at the commencement of the intervention were either accurate or over-inflated. The author feels that in the context of this study, the latter was true. The euphoria and anticipation associated with the initial entry into the outdoor education program could be confounding the results of the study. Utilizing the extra data point should enable a clearer picture to emerge.

Secondly, if parent input forms part of the research design, then the instruments need to be administered prior to the students entering the intervention. Likewise, if parents are included in the longitudinal component of the study, then it is recommended that the PQ be re-administered to parents roughly nine months after completing the outdoor education program. However, caution needs to be heeded as parents could also possess the same "myths and legends" about the ESOESP as their child. This could have been obtained through the school magazine which sings praise for Timbertop, or previous children/siblings having gone through the ESOESP. However, the researcher must be mindful of these limitations when structuring their research design. The extra data point for the PQ should enable the researcher to attain a reliable reference point upon which accurate comparison can be gauged.

• **FURTHER REFINEMENT OF THE INSTRUMENTATION**

Firstly, the PQ was perceived by the researcher to be a worthy inclusion in the research design. Further to this, the PQ provided valid and reliable data which also enriched the final product. Secondly, the most glaring problem was associated with the self-report instrumentation viz; RMQ and SLQ. Although the robustness of the two instruments was proven, they may have shown themselves to be too blunt. Primarily, they have assessed *outcome* rather than *process* and this is acknowledged as a weakness of the study.

This in part may be addressed by re-wording the questionnaires as advocated by the work of Susan Harter (1990). She maintains that more accurate and honest responses are obtained in self-report data if the instruments are worded in specific ways. For instance, instead of Question 1 in the RMQ being presented as:

	Always	Mostly	Sometimes	Occasionally	Never
"I am concerned about the way we treat the environment"	5	4	3	2	1

Harter believes it should be re-worded in the following fashion:

Some people abuse the environment, others go to great efforts to preserve and protect it. Where do you fit on the continuum?

Abuse the environment • • • • • • Protect the environment

Harter advocates that rephrasing questionnaires in this manner enables respondents to answer in a more honest manner. In essence, the researcher is providing respondents with a reference point upon which they can internalize their answer.

• **ONGOING QUESTIONNAIRE DEVELOPMENT**

Given the multi-faceted nature of research into outdoor education (outlined in Figure 8.1) future researchers need to develop questionnaires which explore in greater depth the psychosocial and spiritual dimensions of school based outdoor education programs. In particular, future studies in school based outdoor education programs could examine the impact of 1) the teacher/facilitator; 2) the setting; 3) the timing of the intervention; 4) the participant's "readiness" for the intervention and 5) the physical elements encountered. If these aspects are "teased-out" the researcher may be able to obtain a more accurate picture of the impact of the intervention.

Future research could embark on the quest to find a questionnaire which assesses the spiritual growth of participants. This challenge is a tall order, but nonetheless, the author upholds the belief that the spiritual dimension has been largely untapped in not only this study, but the

broader field of outdoor education. It is conceivable that this dimension could hold the key to unlocking or unravelling many of the mysteries and unanswered questions which currently remain.

• **UNFLAGGING COMMITMENT TO RESEARCH IN THE FIELD**

Notwithstanding some of the difficulties encountered in the study, measurement and evaluation should be an integral part of any school based outdoor education program. It is difficult, if not impossible to justify, improve or modify programs without some form of evaluative technique. Inarguably, all forms of outdoor education programs should be evaluated continually, both formally and informally.

The advancement and continuation of the field is contingent upon accountability within an ever increasing competitive school environment. In many respects, this study has attempted to improve the professionalism and viability of the field. Full scale evaluation models incorporating both qualitative and quantitative methodologies should be an underlying component of the outdoor education field.

9.1.2 RECOMMENDATIONS FOR TIMBERTOP

Several recommendations can be drawn from the study and offered to Timbertop for consideration. At the outset however, it must be stated that the following comments are based on the research outcomes and are offered as a way forward to improve Geelong Grammar School's ESOESP. These include:

- **AN EXTRA DATA POINT PRIOR TO THE COMMENCEMENT OF TIMBERTOP**

As briefly discussed in the earlier section, the findings of the study have possibly unearthed the need to get baseline data on the students prior to their entry into Timbertop. For example, the RMQ and SLQ could be administered at the conclusion of Year 8. This would enable researchers to gauge whether the pre-test scores obtained at the commencement of the ESOESP were either accurate or over-inflated. The author feels that in the context of this study, the latter was true. The euphoria and heightened anticipation associated with the initial entry into the ESOESP could be confounding the results of the study.

- **LENGTHEN THE LONGITUDINAL COMPONENT OF THE STUDY**

The longitudinal nature of this study was an important inclusion. The baseline data obtained on the 1993 and 1994 Timbertop cohort could be incorporated into a ten year follow-up on participants. In other words, in the year 2003 and 2004, researchers could attempt to track the 1993 and 1994 Timbertop participants (via the Geelong Grammar School records). Both quantitative and qualitative methodologies should be included in the longitudinal study. Just what is the impact of the ESOESP ten years after departure? Is it like red wine in a bottle - and it gets better with age? An interesting perspective could be obtained from a study of this nature, which would not only enrich the outdoor education research pool, but would also provide a landmark study.

• MEDICAL TESTING OF PARTICIPANTS

Given the fact that both parents and students mentioned medical concerns emanating from the program, for instance knee injuries and menstrual problems, further investigation is warranted. Examples of the physical problems encountered at the ESOESP include:

- | | |
|-------------|---|
| Parent 61. | My only criticism is that the degree of physical activity is perhaps, too much for 14-15 year olds who are growing rapidly. Damage to the knee (chondromalacia patellae) appears to be a reasonably common problem. |
| Parent 1. | Eventually my daughter suffered leg and foot injuries which hampered participation in running and hiking. |
| Parent 173. | The program has not changed and the children are a year younger, thus putting more stress and strain on their bodies eg. knees and ankles problems, and this is not helping their mental approach to activities. |
| Parent 19 | The amount of running required is not good for those not built to run and she sustained a number of injuries which spoiled some of the hiking and precluded her from the marathon at the end |

However, it must be stipulated that the researcher did not feel that the ESOESP was overly intense on the participants' bodies, in fact, quite the opposite could be said. Perhaps the problems emerged because modern youth are more sedentary and physically "softer" than the earlier cohorts that commenced the program.

Nonetheless, it is recommended that Timbertop investigate the possibility of 1) employing further medical support above and beyond the existing nurses on site; or 2) constructing a weights room or small gymnasium at the ESOESP. With the assistance of the physical education teachers on site, personal fitness regimes could be prescribed for those students who are experiencing physical difficulties, thereby enabling the injured students to strengthen bodies.

• REMEDIAL ACTION FOR DYSFUNCTIONAL UNITS

It is part of the enduring Timbertop philosophy, that the students' units are never changed - no matter how dysfunctional the unit may be. It is considered to be "character building" for students to sort out their problems within the unit. However, this conflict can have far reaching repercussions and adverse effects upon participants especially when the source of angst is not resolved successfully. For instance:

- Parent 199. Our daughters' unit NEVER got it together because of a few strong personalities. She is a kind and sensitive child who had to endure 12 months with these same girls. I would like to see units changed when it is so obvious they are not working.
- Parent 30. We feel that the inflexibility in recognising that it is possible that a unit may not be capable of "getting it all together" is a problem. Our son's unit did not work and he was disillusioned and disappointed in the year. The staff were aware of the difficulties and apparently were unable to change or alleviate the situation.
- Parent 86. I feel strongly that the units should not remained fixed ie. if a unit is not working well after say 6-8 weeks, then there should be changes made. My son's year was marred by some of the members of his unit's inability to learn to do their jobs and cooperate. Timbertop is too rigid - times are changing.
- Parent 112. He was in a particularly antisocial group of children in the unit - some of whom were in serious trouble. This tainted his experience as although my son is well behaved and positive, he was exposed to some pretty negative behaviour at very close range. It could therefore have been much better. Overall he did benefit.
- Parent 1. She began well but much unpleasantness in her unit. Undermined her self-confidence. Became a loner and was extremely demoralised after being extremely cheerful.

Without question, some parents strongly opposed the non-interventional methods employed by the staff and suggested that compensations should be made if the impact of unit life is detrimentally effecting their childs' personal and social development. The author concurs with these comments and recommends that this issue be re-evaluated in light of the findings of the study.

• **TEACHER SELECTION**

In the previous section, a strong barrage of comments were made about the inflexibility or inability of staff in attempting to solve the interpersonal problems evident within units. Both parents and students believe the teacher is the single most important factor associated with the success of the ESOESP. Furthermore, the significant role which the teacher plays in the impact (both positive and negative) of the ESOESP was illustrated in Figure 8.1. In many respects the Timbertop teacher becomes a surrogate parent for the students. Given the enormity and complexity of this role, it is vitally important that the teachers undergo some form of quality assurance or be subjected to performance indicators. It is imperative that the ESOESP teachers have the welfare of the students at heart and possess empathy and personal commitment for those in their charge. Given the fact that parents and students articulated that some of the teachers were remiss in this area, it is suggested that the school monitor their impact more closely. Examples of the discontent are shown in:

- | | |
|-------------|---|
| Parent 189. | The whole concept depends entirely upon the relationship between pupil and surrogate parent - ie. the house master/mistress. In the case of my son the relationship was catastrophic. |
| Parent 138. | Our son has not talked very much at all about Timbertop, but we suspect that it was a very difficult and possibly confusing year for him. There were personality conflicts, both with staff and some in his unit. |
| Student 22 | I found some of the teachers very hard to live with (eg. Mr XXX) as he used power badly and was psycho. (Male) |

• **ACADEMIC TRADE-OFF**

A constant and recurring theme expressed by both parents and students alike was that they would like to see a better balance between academic pursuit and outdoor education. Although both parties were appreciative of the broad curriculum on offer, some indicated that their

academic achievements suffered as a direct consequence of the ESOESP. This thoughts are echoed in:

- Parent 92. My son very much enjoyed the unit life at Timbertop, however we feel that some aspects of academic work suffered (eg. foreign languages and music). Much time has been devoted by Year 10 subject teachers to bring the students to the required standards in these areas.
- Parent 192. The Timbertop year was truly a wonderful and unforgettable experience. There was such an emphasis on outdoor activities that I did feel my daughters' classroom studies did suffer. I also feel so much pressure was put on the child, the day is so programmed that she found it hard to unwind in the holidays and took time to settle in Year 10 the following year.
- Student 2 Concentrating on school work was hard for me because there was so many other things going on in the school. (Female)
- Student 30 Another thing that I found difficult was keeping up with the academic side of things when there was so much general work to complete. There is much more emphasis on the physical work program at Timbertop. All this is important because it can stunt a student's academic achievement. (Male)

However, the researcher is mindful that these comments must not be taken out of context. Quite clearly the ESOESP is geared towards providing participants with "living skills" rather than the ability to pass one final academic exam at the completion of Year 12. Although Timbertop makes a concerted effort to maintain the academic rigour of the school, the year is primarily devoted towards finding a happy medium between "mind" and "body". This may be at the expense of providing a wide range of subject choices, for instance there is not five languages on offer at the school, but this is a reflection on small school numbers (ie roughly 200 students) as opposed to large numbers at the main school which can support a wide cross section of subject choices. Similarly, the teachers at Timbertop must possess a love of the "bush" in the first instance to be attracted to teaching at the ESOESP. This may (or may not) influence the quality of teaching on offer. In the final analysis however, although the findings were ambiguous in this subscale, the researcher is supportive of the current curriculum and feels that parents and students need to accept this minor limitation when they enrol at the school.

- **TEMPERING THE PARTICIPANTS INITIAL HIGH EXPECTATIONS**

Perhaps the preconceived "myths and legends" that the newly enrolled students bring with them to the ESOESP, need to be tempered in some way. In other words, Timbertop may like to explore various ways in which the students could be made cognizant of the hardships they will incur during the early adjustment period. Although the author is mindful that the Timbertop master gives a "pep" talk at the beginning of the year, it may be appropriate to investigate other ways of imparting the message. For instance, at the end of week two - when the reality hits home, students could be given an exercise such as writing a five page letter entitled "My Letter To Next Year's Group". In this letter, they could outline the kaleidoscope of emotions they have been through and be brutally honest about the frustrations and anxieties they are experiencing. This letter can be read by the next cohort either at the end of Year 8, or upon arrival at Timbertop. Other alternatives may also be explored - for example - reading an extract from a log book from the previous year, video taping their responses throughout the year, or whatever method is deemed appropriate.

- **DIFFERENTIAL GENDER OUTCOMES**

An interesting trend to emerge throughout the study, was the fact that females obtained higher mean scores for all subscales except autonomy. This was particularly true for the 1993 females which were shown to be an exceptional cohort. Furthermore, this challenges past myths which suggested that outdoor education was better suited to male needs. The findings also challenge the notion that females achieve better results because they had lower initial scores (for instance Neill, 1997a). As can be clearly depicted in the results, females *consistently* achieved higher mean scores throughout the ESOESP duration.

It is recommended that Timbertop continue to study the differential gender outcomes at their ESOESP as the findings have challenged the traditional female stereotype and past research findings.

9.2 IMPLICATIONS FOR FUTURE DEVELOPMENT OF ESOESP'S

As repeatedly stated throughout the fabric of this thesis, the field of outdoor education has long suffered from a credibility crisis. To address this anomaly, we must begin to fully evaluate the impact of such programs on their participants in both qualitative and quantitative terms. It becomes blatantly clear as we head into the next millennium, that the educational climate signals cut-backs and contraction. Further to this, the imperatives of the political and economic climate within Australia clearly dictate that full scale evaluation models must be incorporated into ESOESP's. If we fail to do this, then outdoor education will become a marginalised subject in the school curriculum.

The instrumentation used in the study, viz: RMQ, SLQ and PQ were trialled and developed to address the main evaluation questions in ESOESP's. With further revision, the RMQ, SLQ and PQ should now make it possible to collect reliable comparative data on long term changes in personal values and self-reported behaviour. Ostensibly, they allow the field to determine more effectively what characteristics are affected by participation in an ESOESP, to what degree, and with what residual impact on the students at Timbertop. Hopefully this thesis may increase the collective commitment of those involved in this paradigm to conduct and publish research in an attempt to strengthen the *raison d'être* of ESOESP's.

9.3 CONCLUDING COMMENTS

If the outdoor education movement is to maintain its current momentum it will need to have a more substantial and reliable basis of evidence than presently exists from which to establish more specific and realistic objectives, and to develop further the range of activities best suited to the needs of participants at different educational levels and in different locations and circumstances. It was to this end that the research efforts have been directed.

In the main, this study has found supportive data for the inclusion of ESOESP's into the school curriculum. Quite clearly they offer a holistic education and if Horwood (1987:88) is correct in his assumption that "the basic premise that secondary education constitutes our culture's rite of passage to adulthood demands that a school deliberately and successfully promote sturdy self-reliance in it's pupils" then the ESOESP under investigation has undoubtedly fulfilled this objective.

The large sample size and the longitudinal nature of the study have proven to be a major strength of the research and has resulted in insights that could not have been obtained had the study been of short duration. Even though the process was time consuming and at times, extremely frustrating, in the final analysis the efforts were justified. Furthermore, it is hoped that future research can be partially modelled on the methodologies adopted in this study. Once the recommendations listed earlier in the chapter have been taken into consideration, and the limitations of the study addressed, researchers have a workable basis on which to model future research endeavours in this field.

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APPENDICES

WHAT I REALLY WANT TO BE

This questionnaire is part of a study which aims to determine how you feel about yourself in general and about your interactions with others. It asks what you want most to achieve in life, and what you could simply take as it comes. **Remember that no-one can be successful at everything. We must all make our own priorities in life - please try to indicate yours as clearly and honestly as you can.**

Please indicate your response to each of the following statements by circling the appropriate number to show how strongly you feel about the statement as it relates to you.

First a note to explain the responses.

If you indicate this:

It really means:

5. Of the utmost importance
- This is one of your highest priorities in life; something you simply have to succeed at no matter what it takes.
4. Very important
- This is a matter of real concern to you; something you think about often and try very hard to achieve.
3. Quite important
- This is something you would like to achieve and are prepared to put some real effort into, provided that it does not interfere too much with other priorities.
2. Not very important
- This is something you might think about from time to time as a good thing to achieve, provided that it does not require any special effort.
1. Not important at all
- This is a matter you don't really care about - you might achieve it anyway, and be happy to succeed, but would not be concerned if you didn't.

Please keep this in mind as you read and respond to the statements below.

As something I would like to achieve in my life the following is:

	Of the utmost importance to me	Very important to me	Quite important to me	Not very important to me	Not important to me at all
1. Getting good results in my studies	5	4	3	2	1
2. Making friends	5	4	3	2	1
3. Making other peoples' lives happier	5	4	3	2	1
4. Being self-reliant	5	4	3	2	1
5. Cooperating with others to get things done	5	4	3	2	1
6. Being liked by others my own age	5	4	3	2	1
7. Understanding the problems of people worse off than myself	5	4	3	2	1
8. Solving my own problems	5	4	3	2	1
9. Being good at sport	5	4	3	2	1
10. Competing with others	5	4	3	2	1
11. Being fair in my dealings with others	5	4	3	2	1

As something I would like
to achieve in my life the
following is:

	Of the utmost importance to me	Very important to me	Quite important to me	Not very important to me	Not important to me
12. Being physically healthy	5	4	3	2	1
13. Being accepted as part of a group	5	4	3	2	1
14. Caring for the environment	5	4	3	2	1
15. Being confident in myself	5	4	3	2	1
16. Having an interest in different kinds of art and music	5	4	3	2	1
17. Expanding my knowledge of the world	5	4	3	2	1
18. Understanding other cultures	5	4	3	2	1
19. Being tolerant of other people and their opinions	5	4	3	2	1
20. Preparing for life after I leave school	5	4	3	2	1
21. Being satisfied with my work	5	4	3	2	1
22. Playing social sport or games for enjoyment	5	4	3	2	1
23. Being a respected member of the community	5	4	3	2	1
24. Setting a good example in my behaviour for others	5	4	3	2	1
25. Helping to make life better for the next generation	5	4	3	2	1
26. Being able to express my ideas in creative ways	5	4	3	2	1
27. Keeping fit through regular exercise	5	4	3	2	1
28. Making my own decisions	5	4	3	2	1
29. Being financially independent	5	4	3	2	1
30. Playing a significant role in community affairs	5	4	3	2	1
31. Always learning from my experience	5	4	3	2	1
32. Being free to follow my own interests	5	4	3	2	1
33. Making a real contribution to knowledge or culture	5	4	3	2	1
34. Being able to mix easily with other people	5	4	3	2	1
35. Having a good reputation among friends	5	4	3	2	1
36. Living	5	4	3	2	1

WHAT I REALLY AM

Now that you have indicated which things are really important to you in life and which things don't matter so much, we'd like to know how well you think you have succeeded up to now in achieving each of them - no matter how important they are, or how much you really care about them.

Please indicate your response to each of the following statements by circling the appropriate number to show which level most closely reflects your own achievement as you see it now.

Up to now I would rate my achievement of the following as:

	Very High	Fairly High	Moderate	Rather Limited	Very Limited
1. Having an interest in different kinds of art and music.	5	4	3	2	1
2. Feeling good about myself.	5	4	3	2	1
3. Expanding my knowledge of the world.	5	4	3	2	1
4. Getting on well with my teachers.	5	4	3	2	1
5. Understanding other cultures.	5	4	3	2	1
6. Being tolerant of other people and their opinions.	5	4	3	2	1
7. Preparing for life after I leave school.	5	4	3	2	1
8. Talking about my feelings to others.	5	4	3	2	1
9. Having a good time.	5	4	3	2	1
10. Organising myself to get things done.	5	4	3	2	1
11. Getting good results in my studies.	5	4	3	2	1
12. Making friends.	5	4	3	2	1
13. Making other peoples' lives happier.	5	4	3	2	1
14. Being self-reliant.	5	4	3	2	1
15. Cooperating with others to get things done.	5	4	3	2	1
16. Being liked by others my own age.	5	4	3	2	1

Up achievement of the following as:	Very High	Fairly High	Moderate	Rather Limited	Very Limited
17. Understanding the problems of people worse off than myself.	5	4	3	2	1
18. Solving my own problems.	5	4	3	2	1
19. Being good at sport.	5	4	3	2	1
20. Being confident in myself.	5	4	3	2	1
21. Being recognised as a leader.	5	4	3	2	1
22. Caring for the environment.	5	4	3	2	1
23. Being accepted as part of a group.	5	4	3	2	1
24. Having interesting hobbies.	5	4	3	2	1
25. Being physically healthy.	5	4	3	2	1
26. Being fair in my dealings with others.	5	4	3	2	1
27. Being respected by my teachers.	5	4	3	2	1
28. Competing with others.	5	4	3	2	1
29. Explaining clearly to others what I think.	5	4	3	2	1
30. Being on good terms with my family.	5	4	3	2	1

AND FINALLY So that we can match your responses above to other related questionnaires we need to know the following details:

Name: _____ Date of birth: _____/_____
 (Month) (Year)

This information will be used only by the research group, and only for the purpose indicated. No individual student will be identified in any publication or report of this study.

Thank you for your participation

REAL ME QUESTIONNAIRE (RMQ)

Name: _____Date of Birth: ____/____/____
DayMonthYear

School: _____Please tick Male ☐ Female ☐

Directions:

This is a chance to look at yourself. It is not a test and everyone will have different answers. **PLEASE DO NOT TALK ABOUT YOUR ANSWERS WITH ANYONE ELSE.** We want you to be as honest as you can whilst responding to the statements. These statements describe things you **might** or **might not** do.

Circle your response to each of the following statements in terms of how often the statement applies to you. Your responses could be:

5. Always.....100% of the time
4. Mostly.....Roughly 70 - 80% of the time
3. SometimesAbout 50% of the time
2. Seldom.....Around 20 - 30% of the time
1. Never.....None of the time

For example, Kim is a student who is answering the statement below. She enjoys going swimming but doesn't like to go camping at all. Kim will record her response in the following manner:

	Always	Mostly	Sometimes	Seldom	Never
1. I like to go swimming	5	4	3	2	1
2. I like to to go camping	5	4	3	2	1

THE REAL ME

		Always	Mostly	Sometimes	Seldom	Never
1.	I am concerned about the way we treat the environment	5	4	3	2	1
2.	If there is a chance to avoid outdoor activities, I take it	5	4	3	2	1
3.	When I make a promise, I keep it	5	4	3	2	1
4.	When difficult situations arise I prefer others to take the lead	5	4	3	2	1
5.	I find it easy to pick up new games skills	5	4	3	2	1
6.	Other students are friendly towards me	5	4	3	2	1
7.	I tend to act first and think of the consequences later	5	4	3	2	1
8.	When I go out in the bush, I take special care not to harm any plants or animals	5	4	3	2	1
9.	I am happy to take on any physical challenge	5	4	3	2	1
10.	In world events I try to understand all sides of the story	5	4	3	2	1
11.	When I buy things I look for products with less wrapping	5	4	3	2	1
12.	I try to learn from my experience of life	5	4	3	2	1
13.	I make a real effort to lead a healthy lifestyle	5	4	3	2	1
14.	Other people seem to think highly of me	5	4	3	2	1
15.	When people have problems I try to help them	5	4	3	2	1
16.	I get bored with talk about the environment	5	4	3	2	1
17.	I like exploring new ideas	5	4	3	2	1
18.	I like to solve my own problems	5	4	3	2	1
19.	When there is trouble I try to deal with it rather than escape	5	4	3	2	1
20.	I enjoy studying	5	4	3	2	1
21.	People can count on me to do the right thing	5	4	3	2	1
22.	I try to make other peoples' lives happier	5	4	3	2	1
23.	I am tolerant of other people and their opinions	5	4	3	2	1
24.	I am unpopular with other students	5	4	3	2	1
25.	I am happy to take responsibility for my own actions	5	4	3	2	1

THE REAL ME

		Always	Mostly	Sometimes	Seldom	Never
26.	Before I act I consider how it will affect the environment	5	4	3	2	1
27.	I think about how the things I do will affect other people	5	4	3	2	1
28.	I seem to get good results at school	5	4	3	2	1
29.	If I could avoid doing exercise I would	5	4	3	2	1
30.	I have difficulty coping with outdoor activities	5	4	3	2	1
31.	I find myself wishing I were different	5	4	3	2	1
32.	I listen patiently to people who disagree with me	5	4	3	2	1
33.	Other people seem to accept me as I am	5	4	3	2	1
34.	I try to set a good example in my behaviour for others	5	4	3	2	1
35.	I make a real effort to learn more about the world	5	4	3	2	1
36.	I try to keep control of myself in difficult situations	5	4	3	2	1
37.	When I hear about environmental problems, I try to find out the full story	5	4	3	2	1
38.	I go out of my way to clean up the school grounds	5	4	3	2	1
39.	I am confident in my abilities to cope with life	5	4	3	2	1
40.	I avoid taking risks with my health	5	4	3	2	1
41.	I tend to follow my own interests	5	4	3	2	1
42.	I am fair in my dealings with others	5	4	3	2	1
43.	I find hiking and bushwalking easy to do	5	4	3	2	1
44.	I enjoy being involved in community activities	5	4	3	2	1
45.	I tend to be left out of things	5	4	3	2	1
46.	I like to live for the present and let future generations look after themselves	5	4	3	2	1
47.	I enjoy the company of others	5	4	3	2	1
48.	I take the trouble to recycle bottles and cans wherever possible	5	4	3	2	1
49.	I do my best to avoid unnecessary waste	5	4	3	2	1
50.	I try hard to do well in my studies	5	4	3	2	1

THE REAL ME

		Always	Mostly	Sometimes	Seldom	Never
51.	I get bored with school subjects	5	4	3	2	1
52.	I like reading novels and other books for personal interest	5	4	3	2	1
53.	I tend to put my own needs before those of other people	5	4	3	2	1
54.	I am capable of organizing myself	5	4	3	2	1
55.	I am one of the last to be chosen for group activities	5	4	3	2	1
56.	I find it easy to make friends	5	4	3	2	1
57.	I enjoy outdoor activities	5	4	3	2	1
58.	I spend time following up things mentioned in class	5	4	3	2	1
59.	I enjoy learning about other cultures	5	4	3	2	1
60.	My work is recognized in the school community	5	4	3	2	1
61.	I try to improve my health and fitness	5	4	3	2	1
62.	When I leave a room I remember to turn off the lights	5	4	3	2	1
63.	I like to make my own decisions	5	4	3	2	1
64.	I have arguments with other students	5	4	3	2	1
65.	I am quite happy to work on my own	5	4	3	2	1

SCHOOL LIFE QUESTIONNAIRE (SLQ)

Name/I.D. No: _____ Date of Birth: ____/____/____
Day Month Year

School: _____ Please tick Male ☐ Female ☐

Directions:

This is a chance to look at yourself. It is not a test and everyone will have different answers. PLEASE DO NOT TALK ABOUT YOUR ANSWERS WITH ANYONE ELSE. We want you to be as honest as you can whilst responding to the statements. These statements describe things you might or might not do.

Circle your response to each of the following statements in terms of how often the statement applies to you. Your responses could be:

- | | |
|--------------|------------------------------|
| 5. Always | 100% of the time |
| 4. Mostly | Roughly 70 - 80% of the time |
| 3. Sometimes | About 50% of the time |
| 2. Seldom | Around 20 - 30% of the time |
| 1. Never | None of the time |

For example, Tim is a student who is answering the statements below. He enjoys P.E. lessons at school but doesn't like Health lessons. Tim will record his responses in the following manner:

	Always	Mostly	Sometimes	Seldom	Never
1. I like P.E. lessons	5	④	3	2	1
2. I like Health lessons	5	4	3	2	①

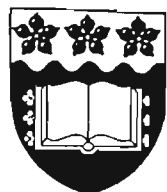
* * * * *

Please circle your responses to the following statements:

THIS SCHOOL IS A PLACE WHERE:

	Always	Mostly	Sometimes	Seldom	Never
1. Teachers treat me fairly	5	4	3	2	1
2. I feel proud to be a student	5	4	3	2	1
3. The things we learn are relevant to life in general	5	4	3	2	1
4. I get a great deal of satisfaction from my experiences	5	4	3	2	1
5. Students are taught to think for themselves	5	4	3	2	1
6. I feel uncomfortable and restless	5	4	3	2	1
7. I like to mix with other students	5	4	3	2	1

8.	Students are able to develop their skills in a range of subject areas	5	4	3	2	1
9.	Teachers and students work well together	5	4	3	2	1
10.	I get enjoyment out of learning	5	4	3	2	1
11.	I get a chance to take the lead in group activities	5	4	3	2	1
12.	The teachers are willing to help when I need it	5	4	3	2	1
13.	The unit/dormitory life gets me down	5	4	3	2	1
14.	I get a chance to do work that really interests me	5	4	3	2	1
15.	Students try to help each other in difficult situations	5	4	3	2	1
16.	I get to know the teachers as real people	5	4	3	2	1
17.	We have an opportunity to study a wide range of subject areas	5	4	3	2	1
18.	I feel free to say what I really think	5	4	3	2	1
19.	Students have a chance to explore their own interests in creative arts	5	4	3	2	1
20.	Teachers make an effort to understand me	5	4	3	2	1
21.	Students are encouraged to be responsible for what they do	5	4	3	2	1
22.	Everyone does their share of work for the school community	5	4	3	2	1
23.	Mathematics has a low priority in the total school curriculum	5	4	3	2	1
24.	Students learn how to cope with life	5	4	3	2	1
25.	Students work together as a team	5	4	3	2	1
26.	The rules and regulations are applied in a reasonable way	5	4	3	2	1
27.	Outdoor activities seem to be more important than academic studies	5	4	3	2	1
28.	Students are expected to work hard at their studies	5	4	3	2	1
29.	Science has a low priority in the total school curriculum	5	4	3	2	1
30.	Teachers try to make the work interesting	5	4	3	2	1
31.	I really feel interested to learn	5	4	3	2	1



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23rd August, 1994

Mr John Lyons
 4 Bridge Mills Waterside
 Knaresborough
 HG5 8DF
 NORTH YO

Dear Mr Lyons,

The University of Wollongong is attempting to assess the impact of the outdoor education experience upon your son/daughter. Whilst attending Timbertop last year, all students in the 1993 intake were given a questionnaire at the beginning, middle and end their sojourn to the bush. As such, your child has now become part of a longitudinal study in which the University is attempting to monitor the effects of Timbertop on participants' personal and social development.

To fully complete this task, the study now moves into its second phase viz: assessing **parents' perceptions** of change in their child's attitudes and behaviours which have been directly attributable to the Timbertop experience. In research terms, this second phase is considered vital in reaffirming many of the changes which have already been pinpointed throughout this study. Please respond to the items on the questionnaire as honestly as possible. If you wish to add further comments at the end of the questionnaire, please feel free to do so. A self-addressed envelop is also enclosed to assist with your efficacious response.

All information is strictly confidential. The code which appears at the top of the questionnaire is merely for follow-up procedures and cross referencing. Personal information obtained from questionnaires such as this, will never be used in isolation. If you have any further questions, please do not hesitate to contact me at the above address or telephone number.

I look forward to a reply at your earliest possible convenience.

Yours faithfully

Tonia Gray

TIMBERTOP PARENT QUESTIONNAIRE

This questionnaire aims to determine how you, as a parent, feel about your child's stay at Timbertop. It asks you if you have noticed any changes in their demeanour, character, interests and study habits following the experience.

Please consider each of the statements below and indicate your response by circling the appropriate number to show if you have noticed any changes in your child.

		Very much - a definite strong and consistent change	Noticeably - a marked and generally sustained change	Slightly - minor changes and not consistent	Not at all - no noticeable change
	<i>To what extent did the period at Timbertop help your child:</i>				
1	to become self-reliant	4	3	2	1
2	to feel good about himself/herself	4	3	2	1
3	to expand his/her knowledge of the world	4	3	2	1
4	to get on well with her/her teachers	4	3	2	1
5	to develop an understanding of other cultures	4	3	2	1
6	to be tolerant of other people and their opinions	4	3	2	1
7	to prepare for life after leaving school	4	3	2	1
8	to talk to others about his/her feelings	4	3	2	1
9	to know how to enjoy himself/herself	4	3	2	1
10	to organise himself/herself to get things done	4	3	2	1
11	to get good results in his/her studies	4	3	2	1
12	to make friends	4	3	2	1
13	to show regard for other people's happiness	4	3	2	1
14	to develop an interest in different kinds of art and music	4	3	2	1
15	to co-operate with others in getting things done	4	3	2	1
16	to be liked by others his/her own age	4	3	2	1
17	to understand the problems of people worse off than himself/herself	4	3	2	1
18	to solve his/her own problems	4	3	2	1
19	to develop his/her abilities at sport	4	3	2	1

		Very much - a definite strong and consistent change	Noticeably - a marked and generally sustained change	Slightly - minor changes and not consistent	Not at all - no noticeable change
<i>To what extent did the period at Timbertop help your child:</i>					
20	to be confident in himself/herself	4	3	2	1
21	to be recognised as a leader	4	3	2	1
22	to show care for the environment	4	3	2	1
23	to be accepted as part of a group	4	3	2	1
24	to develop interesting hobbies	4	3	2	1
25	to stay physically healthy	4	3	2	1
26	to be fair in his/her dealings with others	4	3	2	1
27	to gain the respect of his/her teachers	4	3	2	1
28	to be able to compete with others	4	3	2	1
29	to explain clearly what he/she is thinking	4	3	2	1
30	to stay on good terms with the family	4	3	2	1

How satisfied are you with the overall experience at Timbertop?

VERY
SATISFIED
☐

SATISFIED
☐

SLIGHTLY
DISSATISFIED
☐

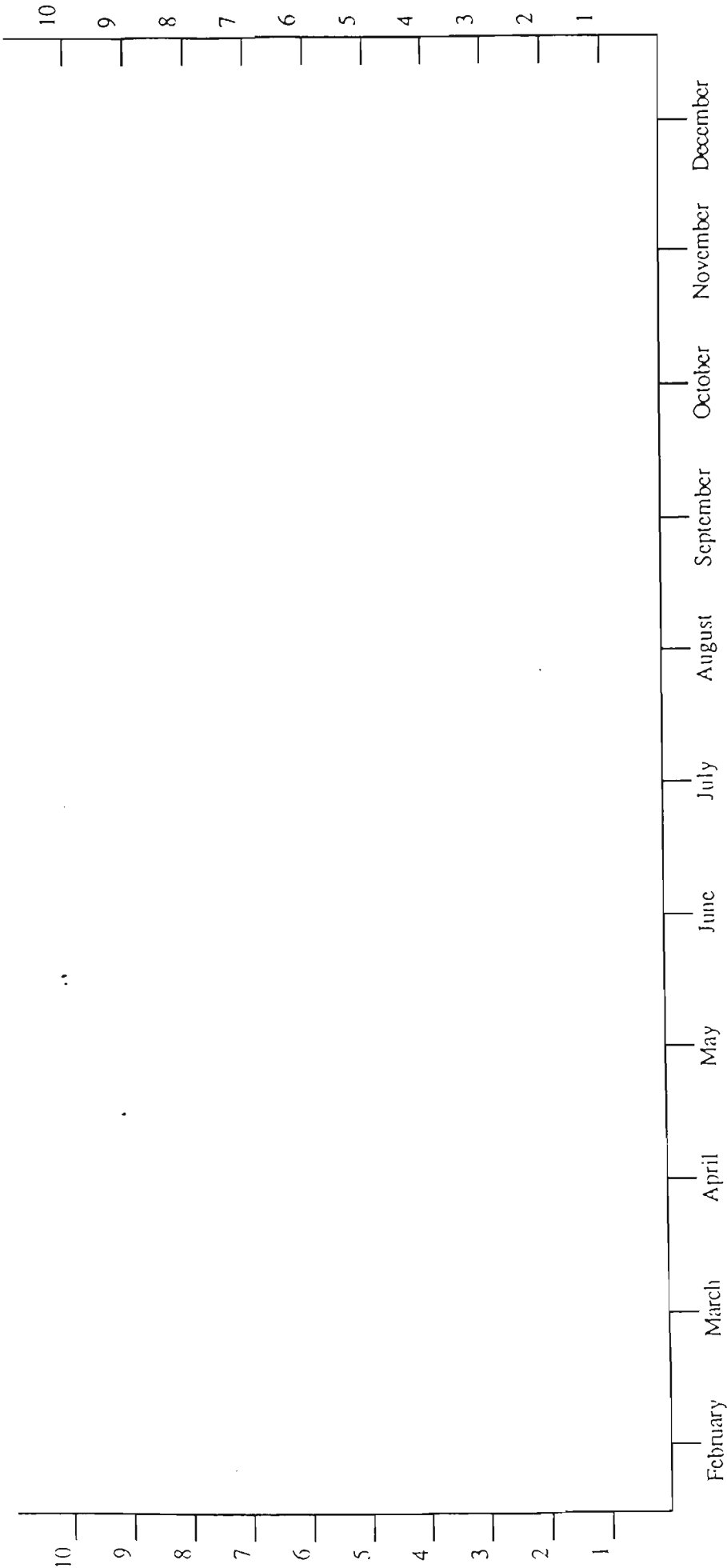
NOT AT ALL
SATISFIED
☐

Are there any comments you would like to make about your child's experience at Timbertop?

1. Based on your time so far at the school, what do you think will be the main benefits of these experiences for you?
2. Do you think it will really change your life in later years? How? What makes you think that?
3. What do you think are likely to be the most difficult things for you to deal with here at the school? What makes these so difficult?

4. What are the main differences between this school and the main campus? are these differences important? Why?
5. So far, has it been a worthwhile experience for you? Would you recommend it for other people? How would you make it better for other students?
6. Do you know of any other student/s who haven't gotten much benefit from the school?
7. Are there any other things you want to say about the school?

CHARTING YOUR YEAR AT TIMBERTOP



(continued)

{ You're Not } But I'm Back! After Ninety-Nine Darling Hot days

(2006年)

1. **Challenging**
[You can't] get that much better / Saving that days

SL/JD
28 APR 93

LEGEND: 0 Orienteering
Unit Mike
Unit Solo

Timbertop Physical Education
Programme - 1993

DAILY ROUTINES - TERM 2

MORNINGS

Days 1 to 4 (Sat to Tue)	Day 5 (Wed)
<p>6.30 am Slushies to Kitchen</p> <p>7.00 am Unit assembly outside Dining Hall for breakfast</p> <p>Start cleaning Unit after breakfast (except Slushies)</p> <p>8.00 am Outward mail closes</p> <p>8.00 am Unit inspection</p> <p>8.30-9.10 am Chapel</p> <p>Period 1</p> <p>9.10-9.50 am Period 2</p> <p>9.50-10.30 am Period 3</p> <p>10.30 am Recess</p> <p>10.50-11.30 am Period 4</p> <p>11.30-12.10 pm Period 5</p> <p>Slushies leave class</p> <p>12 noon Assemble for lunch</p> <p>12.25 pm After lunch: Essential jobs</p> <p>1.30 pm Staff meeting</p>	<p>6.25 am Slushies to Kitchen</p> <p>7.00 am Unit assembly outside Dining Hall for breakfast</p> <p>Start cleaning Unit after breakfast</p> <p>8.00 am Outward mail closes</p> <p>8.00 am Unit inspection</p> <p>8.30-9.10 am Chapel</p> <p>Period 1</p> <p>9.10-9.50 am Period 2</p> <p>9.50-10.30 am Period 3</p> <p>10.30 am Recess</p> <p>10.50-11.30 am Period 4</p> <p>11.30-12.10 pm Period 5</p> <p>Slushies leave class</p> <p>12 noon Assemble for lunch</p> <p>12.25 pm After lunch: Essential jobs</p> <p>1.30 pm Staff meeting</p>

Day 6 (Thurs)

Day 7 (Fri)

Special outdoors activities
routines

AFTERNOONS

Day 1 (Sat)	Day 2 (Sun)
<p>Period 5</p> <p>1.15-1.55 pm Period 6</p> <p>2.00-2.40 pm Period 7</p> <p>2.40-3.00 pm Recess</p> <p>3.00-3.40 pm Period 8</p> <p>3.45-4.25 pm Essential jobs</p> <p>4.30 pm Slushies to Kitchen</p>	<p>1.15-1.55 pm Period 5</p> <p>2.00-2.40 pm Period 6</p> <p>2.50 pm Essential and Long Jobs</p> <p>3.00 pm Slushies Crossie</p> <p>4.30 pm Crossie</p> <p>5.05 pm Slushies to Kitchen</p>

Day 3 (Mon)

Day 4 (Tue)

As for Day 2 (above)

Day 5 (Wed)

Day 6 (Thurs)

Special outdoors activities
routines

Day 7 (Fri)

Special outdoors activities
routines

EVENINGS

Days 1 to 4	Days 5 to 7
<p>5.40 pm Assemble for evening meal. From end of meal to 6.45 pm - Detention in Room 3.</p> <p>6.30 pm Mail and newspapers issued by MOD to Uls at Mail Verandah.</p> <p>6.40 pm All students in own Units</p> <p>7.00 pm First Prep</p> <p>7.00-8.00 pm Support available at Kitchen factory (Uls only to collect)</p> <p>8.00 pm Support, shower and change for bed</p> <p>8.00 pm Second Prep</p> <p>8.40-9.15 pm All Unit and personal tasks completed. Uls to check Unit jobs.</p> <p>9.15-9.25 pm Quiet conversation</p> <p>9.30-9.45 pm Silence</p> <p>9.45 pm</p>	<p>Assemble for evening meal.</p> <p>6.40 pm Make up for evening meal.</p> <p>6.45 pm Make up for evening meal.</p> <p>6.50 pm Make up for evening meal.</p> <p>6.55 pm Make up for evening meal.</p> <p>7.00 pm Make up for evening meal.</p> <p>7.05 pm Make up for evening meal.</p> <p>7.10 pm Make up for evening meal.</p> <p>7.15 pm Make up for evening meal.</p> <p>7.20 pm Make up for evening meal.</p> <p>7.25 pm Make up for evening meal.</p> <p>7.30 pm Make up for evening meal.</p> <p>7.35 pm Make up for evening meal.</p> <p>7.40 pm Make up for evening meal.</p> <p>7.45 pm Make up for evening meal.</p> <p>7.50 pm Make up for evening meal.</p> <p>7.55 pm Make up for evening meal.</p> <p>8.00 pm Make up for evening meal.</p> <p>8.05 pm Make up for evening meal.</p> <p>8.10 pm Make up for evening meal.</p> <p>8.15 pm Make up for evening meal.</p> <p>8.20 pm Make up for evening meal.</p> <p>8.25 pm Make up for evening meal.</p> <p>8.30 pm Make up for evening meal.</p> <p>8.35 pm Make up for evening meal.</p> <p>8.40 pm Make up for evening meal.</p> <p>8.45 pm Make up for evening meal.</p> <p>8.50 pm Make up for evening meal.</p> <p>8.55 pm Make up for evening meal.</p> <p>9.00 pm Make up for evening meal.</p> <p>9.05 pm Make up for evening meal.</p> <p>9.10 pm Make up for evening meal.</p> <p>9.15 pm Make up for evening meal.</p> <p>9.20 pm Make up for evening meal.</p> <p>9.25 pm Make up for evening meal.</p> <p>9.30 pm Make up for evening meal.</p> <p>9.35 pm Make up for evening meal.</p> <p>9.40 pm Make up for evening meal.</p> <p>9.45 pm Make up for evening meal.</p> <p>9.50 pm Make up for evening meal.</p> <p>9.55 pm Make up for evening meal.</p> <p>10.00 pm Make up for evening meal.</p> <p>10.05 pm Make up for evening meal.</p> <p>10.10 pm Make up for evening meal.</p> <p>10.15 pm Make up for evening meal.</p> <p>10.20 pm Make up for evening meal.</p> <p>10.25 pm Make up for evening meal.</p> <p>10.30 pm Make up for evening meal.</p> <p>10.35 pm Make up for evening meal.</p> <p>10.40 pm Make up for evening meal.</p> <p>10.45 pm Make up for evening meal.</p> <p>10.50 pm Make up for evening meal.</p> <p>10.55 pm Make up for evening meal.</p> <p>11.00 pm Make up for evening meal.</p>

Term 1	Term 2	Term 3	Term 4
1 ORIENTATION - 100M RUN TEST	VOLLEYBALL	ATHLETICS-SPRINTING	BASKETBALL
2 AQUATICS	VOLLEYBALL	ATHLETICS-HURDLING	BASKETBALL
3 AQUATICS	EUROPEAN HANDBALL	ATHLETICS-SPRINTING	CRICKET-MODIFIED
4 AQUATICS	EUROPEAN HANDBALL	ATHLETICS-LONG JUMP	BALL SKILLS-SOCCER
5 FITNESS TEST	NETBALL	ATHLETICS-TRIPLE JUMP	T-BALL
6 BADMINTON	RUSH HOCKEY	ATHLETICS-SHOT PUT	SOFTBALL
7 BADMINTON	MODIFIED LACROSSE	ATHLETICS-DISCUS	SOFTBALL
8 DANCE-SOCIAL	DANCE BALLROOM	ATHLETICS-JAVELIN	FITNESS TEST
9 DANCE-SOCIAL	DANCE BALLROOM	SELECTED GAMES	AQUATICS
10 ORIENTEERING	SELECTED GAMES	SELECTED GAMES	AQUATICS
11 ORIENTEERING	1. LANTIER SPORTS DAY	1. ST. JOHN THE BAPTIST BION MAN EVENTS	1. TUG OF WAR
12 ORIENTEERING	2. TIMBERTOP SPORTS DAY	2. TIMBERTOP SPORTS DAY	2. ORIENTEERING (MT. STRUBBIN)
13 ORIENTEERING	3. ORIENTEERING	3. TABLE TENNIS	3. BASKETBALL
14 ORIENTEERING	4. VOLLEYBALL		
15 ORIENTEERING			
16 ORIENTEERING			
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TIMBERTOP 1994
SCHOOL PROGRAMME

TERM 1

	Sat/Day 1	Sun/Day 2	Mon/Day 3	Tue/Day 4	Wed/Day 5	Thu/Day 6	Fri/Day 7
JANUARY	15	16	17	18	19	20	(D.E.C.A. 21 Driving Course for Staff)
	22 (D.E.C.A. Course)	23 (D.E.C.A. Course)	24 (D.E.C.A. Course) Assists. in Res.	25 (W'ness 1st Aid Course for Staff)	26 (W.F.A. Course)	27 (W.F.A. Course) All Staff in Res.	28 9.00 a.m. Chapel 9.30 a.m. Staff Mtg 1.30 Round Robins
FEBRUARY	29 (Staff Orientation) 3.00 p.m. U.M. Mtg	30	31 New Pupils Arrive by 2.30 p.m.	1 Pupils ex-G.G.S. Arrive by 4.30 p.m.	2 Orientation Programme for Pupils	3	4 Up T'top Hike
	5 Classes begin	6 Wood Collect	7 Swimming Comp.	8 Swimming Comp.	9 D.E.A. Mtg Wood Coll.	10 Unit Campout (depart 10 a.m.)	11
	12 DH Comm Mtg 9.40 a.m.	13 N 7.15 p.m. U.M. Mtg	14 OH&S Mtg 9.40 a.m.	15 Shrove Tuesday Mini- Olympics	16 Ash Wednesday	17 Buttercup Hike	18
	19 A	20 K	21 I	22	23	24 Eagles Peaks Bike	25
MARCH	26 C	27 Per. Ass. OO	28 L	1 D OO	2	3 Buller Stirling Hike	4
	(Day 6) 5 Cleanup & Three Day Hike Prep.	6 Visiting Day 8 am-6 pm	7 7.15 p.m. Staff Mtg	(Day 1) 8 OO	9	10 No. 3 Hike	11
	12 F OO	13 M	14	15 H O	16	17 Bluff Hike	18
	19 G	Interim 20 Reports J	21	22	23	24 Three Day Hike	25 Palm Sunday
	26	27 Maundy Thursday	28 Good Friday	Cleanup 29 Up T'top Run Easter Eve Vigil and Baptism	30 Pupils depart from 8.00 a.m.		

Legend: O Orienteering

M Darling Hut

SL/jp
18 Jan 94

TIMBERTOP 1994

TERM 2 PROGRAMME

	Sat	Sun	Mon	Tues	Wed	Thurs	Fri
APRIL	16	17	18	19	20	21	22
		GGG Staff Conference	GGG Staff Conference Corio	GGG Staff Conference Pupils arrive by 6.00 p.m.	Wood collect	Unit Campout & Wood Collect depart 10.00 a.m.	
	23	24	25	26	27	28	29
	N Unit				CS/Camp/Axe split/Hut		
					M Unit		
MAY	30	1	2	3	4	5	6
	A Unit				CS/Camp/Axe Split/Hut		
		B Unit			H Unit		
	7	8	9	10	11	12	13
	C Unit				CS/Camp/Axe Split/Hut		
	N.E. OGGs Reunion at T'top				D Unit		
					TT Ad. Comm Mtg	Heads of Schools at Timbertop	
	14	15	16	17	18	19	20
	F Unit				CS/Camp/Axe Split/Hut		
		G Unit			I Unit		
		64 TT Reunion					
	21	22	23	24	25	26	27
	J Unit				CS/Camp/Axe Split/Hut		
		K Unit			L Unit		
JUNE	28	(Day 6)	(Day 2)	(Day 3)	(Day 4)	(Day 7)	(Day 5)
		Visiting Day 8.00 a.m.- 6.00 p.m.	30 M N	31 C D	1	2 Pilgrimage & Excursion to Beechworth	3 Sunday Inspection
	4	5	6	7	8	9	10
						Examinations	
		7.15 p.m. UM Mtg	7.15 p.m. Staff Mtg				
	11	12	13	14	15	a.m. 16	a.m. 17
	Year Group Parents Dinner in Geelong				A B H Instr. Concert	Unit Imprvts 1.30 Reports Orienteering	Sunday Insp Competition H of S Corio
	18	19	20	21	22	23	24
	J K L	F G I			Unit Skits	Long Spur Run End of Term Chapel Service	Pupils depart from 8.00 a.m.
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7

Legend:

O Orienteering

J Unit

Unit Hike

A

Solo

SCHOOL ROGRAMME

TERM 3, 1994

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
JULY	18 9.00 a.m. Staff Mtg	19 Staff Mtg Pupils return by 6.00 p.m.	Day 2 20	Day 5 21 Wood coll. 7.00 p.m. Ski Vis.	Day 3 22 SKI DAY	23 XC Ski Champs. GOLD W/END Depart at	24 AT FRY'S 9.00 a.m.
	25	26 N	27 SKI DAY	28 B	29	30 p.m. Staff Brief AIDS Week	31 Morning Chapel Hobbies p.m. AIDS film Star Cinema
AUG	1 AIDS Awareness Week Commences	2 K	3 SKI DAY	4 D	5	6 TT Staff Mtg Short	7 Hike/Camp AIDS Service
	8	9 L	10 SKI DAY	11 C	12	13	14 Morning Chapel Hobbies Conf. Rehearsals
	15 Servers Rehearsals Per. Ass. Due	16 Servers Rehearsals	17 H Confirmation Rehearsals	18 Girls VISSA SKI DAY	19 Boys VISSA Major Cleanup Disp./School Counc. @ TT	20 Confirmation	21 Weekend Pupils return by 6.00 p.m.
	22	23 F	24 SKI DAY	25 J	26	27	28 Hobbies St John the Baptist Fest. 7.10 p.m.
SEPT	29 Glam. Yr 8 visit o/n 7.15 p.m. UM Meeting	30 M 7.15 p.m. Staff Meeting	31 SKI DAY	1 A	2	3 TT Staff Mtg Sho	4 Hike/Camp
	5	6 G	7 SKI DAY	8 I	9	10 Unit Science Magic Show	11 Improvements
	12 Per. Ass Due	13	14 SKI DAY	15 End of Term Run Cleanup Bush Dance	16 Pupils depart from 8.00 a.m.	17 ^^^^^^^^^^^^	18 ^^^^^^^^^^^^
	DAY 4	DAY 1	DAY 6	DAY 2	DAY 3	DAY 5	DAY 7

Legend:

F

Unit Ski Tour

SL/jp
24/6/94

TIMBERTOP 1994
SCHOOL PROGRAMME
TERM 4

	SAT	SUN	MON	TUE	WED	THU	FRI
OCTOBER	1	2	3	4 Pupils return by 6.00 p.m.	5 (Day 3) Staff photo	6 School/Unit (camp	7 Campout o'night) Wood collect
	8 F	9 C	10 B	11 D	12 3 Day/6 Day Interviews	13 Mystery	14 Hike
	15 G	16 L	17 A 1.15 p.m. OHS Comm. Mtg	18 K 2.45 p.m. DH Comm. Mtg	19 1.30 p.m. T'op Adv. Comm. Mtg	20 Choice Hike 1	21
	22 N	23 Highton I 7.15 p.m. UM Mtg	24 students visit M 7.15 p.m. Staff Mtg	25 H	26	27 Enviro. Science	28 Hike
NOVEMBER	29 J (Mansfield	30 Periodical Assessments Due Mountain	31 (Day 4) Country	1 (Day 3) M.M.C.F. Fun Run Festival)	2	3 Choice Hike 2	4
	5	6	7	8 Doctor visits	9	10 Orient. Hike on	11 Mt Stirling
	12	13 (Day 3)	14 (Day 2)	15 p.m. Pack for Three Day Hike	16	17 Three Day	18 Hike
DECEMBER	19	20	21	22	23	24 Examinations	25 p.m. Pack for Six Day Hike
	26 Quest	27	28 Six Day Hike	29 Reports to UMs	30	1	2
	3 Rest Day for pupils Reporting Sessions from 1.30 p.m.	4 Alternative 7.15 p.m. UM Mtg	5 Classes Time table	6 Carols and Prize-giving	7 Jobs	8 The Marathon End of Term Chapel Service	9 Pupils depart from 8.00 a.m.
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7

MLG/jp
14-Sep-94

Legend: G Canoe Trip

Follow-Up Interview Questions

1. What were the main benefits of your outdoor education experience?
2. Do you think it has changed your life in any way? If so, how?
3. What were the most difficult things for you at the outdoor education experience ?
4. Why is this outdoor education experience different to any other school?
5. Was the outdoor education experience worthwhile? Why/why not?
6. Write a one paragraph summary of your outdoor education experience.

BACKGROUND INFORMATION

We need for our own records to have a little information about yourself and your background. This information is strictly confidential and not available to anyone other than the research team.

1. Name of your current school _____
2. What was the last primary school you attended? _____
3. In what town/suburbs do you live? _____
4. What languages are spoken by your parents at home?

☐ English

☐ Other _____

If there are languages other than English, please name them _____

5. Please describe your father's present or last main occupation.

6. Please describe your mother's present or last occupation.

7. What is the highest level of education completed by your mother or father?

	Mother	Father
• Primary School only	<input type="checkbox"/>	<input type="checkbox"/>
• Some Secondary Schooling but not completed	<input type="checkbox"/>	<input type="checkbox"/>
• Completed Secondary School	<input type="checkbox"/>	<input type="checkbox"/>
• Technical or Business Certificate	<input type="checkbox"/>	<input type="checkbox"/>
• University of College Degree or Diploma	<input type="checkbox"/>	<input type="checkbox"/>

8. How many brothers and sisters do you have? _____

9. Have you ever lived away from home for a year or more?

☐ Yes ☐ No