

**'Raising Achievement' in Secondary Schools?:
A Study of Outdoor Experiential Learning**

Elizabeth Mary Christie

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I, Elizabeth Mary Christie, declare that I have composed this thesis myself and that this work is my own. I further declare that it has not been submitted for any other degree or professional qualification.

ABSTRACT

In 1997 the Education Department of North Lanarkshire Council launched a multi-faceted Raising Achievement initiative aimed at increasing the potential of all primary and secondary school students. This programme, one of the first of its kind to be introduced in secondary schools in Britain, was specifically intended to help raise achievement levels in 14–16 year old students through their participation in a five-day residential Outward Bound course. Every year since 1997, over a period of 15 weeks from October to February, around 25 % of fourth year students in North Lanarkshire have been selected to take part in the programme.

The evaluation of the programme demanded a combination of quantitative and qualitative methods. A 'Life Effectiveness Questionnaire' (LEQ) (Neill, 1997) was administered to all 14-16 year old students in six mainstream secondary schools. The LEQ was administered on three occasions (one month before, one month after and three months after the conclusion of the Outward Bound programme). This procedure was followed during two years of the programme and involved over 800 pupils. Group interviews were conducted with a sample of students who had attended Outward Bound (n=53). The 5-14 National Curriculum Guidelines (LTS, 2000a) concept of 'dispositions' provided a broad overall framework for analysis. This also made it possible to relate the findings to both the experiential outdoor approach and the mainstream approach to education.

Firstly the study concluded that the programme delivered by Outward Bound Scotland, as part of the overall Aiming Higher initiative, provides an opportunity for personal and social development, consistent with the concept of the dispositions. Secondly, the overall outdoor experiential learning process from pre- to post-course work appears to support positive development in this case. Finally, the results of the quantitative study showed no significant difference between the two groups in terms of their LEQ scores. However, interviews with those who participated in the programme pointed to positive overall effects in terms of the students' perception of their social and academic skills. The students believed that these qualities have given them the ability to perform better in certain academic areas.

This study demonstrates that there is a link between an outdoor experiential approach to education and the rationale behind the structure and balance of the dispositions concept. This suggests that there may be a place for an outdoor experiential approach to learning within the current context of the 5-14 National Guidelines.

In conclusion the study suggests that the Aiming Higher with Outward Bound programme is one way in which outdoor experiential learning can, in practice, successfully compliment the current education system in Scotland. Therefore this approach could provide a further learning opportunity for all students by building upon the existing good practice within the Scottish education system.

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When I began this research some four years ago, one piece of advice stuck in my mind, ‘whatever else enjoy it’. Sometimes this was easier said than done.

During the course of the research I have married my partner, David, we have started a family (our son Drew is now three and a half years old), we began to renovate an old cottage, and I took on some extra research work. So the advice, ‘whatever else enjoy it’, was called into question on a number of occasions.

On reflection the experience has been enjoyable, not least because of the support given to me by my family, friends, supervisors and others in the same boat.

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Chapter One

INTRODUCTION

The beginning

On a Tuesday morning in late January a group of students prepared to climb Jacob's Ladder¹. It had rained the day before and the weather had left the rungs of the ladder slippery and cold. David², Laura and Michael had volunteered to go first and so they were preparing by climbing into their harnesses, and checking their safety ropes.

These students all came from different schools within North Lanarkshire and had not met until the afternoon of the previous day.

Laura began to climb in the middle with Michael and David on either side of her; she found it difficult to keep up with them as they manoeuvred easily up the first two rungs. Michael raced on ahead reaching the sixth rung (there are nine rungs) before realising that David was beginning to struggle below him, Laura was still on the third rung. At this point Michael stopped climbing and offered support to David who in turn offered support to Laura. Michael even climbed down to reach David and both of them gave advice and encouragement to Laura. The activity ended with all three students reaching the final rung having all helped and supported one another throughout. It is doubtful whether Laura could have climbed that high by herself.

Having observed this on the first field trip to Outward Bound it appeared that these students were being given a unique opportunity to learn in a truly experiential way

¹ Jacob's Ladder is a large structure of poles hung at set distances to resemble a giant ladder, it is very difficult to climb and students generally need the help and support of others to do so.

² Pseudonyms have been used throughout this study to protect the students' identities.

and in doing so they might be able to gain an insight into their own development both personally and socially. From their subsequent interviews it seems that during that morning alone David, Laura and Michael learnt a valuable lesson about themselves and their relationship with others.

They describe that morning in their own words:

Everybody thought oh Jacob's Ladder she is just too small she will never get up it, but there were three of us and I went up with two other guys and em they just helped me up and I got to like the top of it and one of the teachers said "oh that is it she is done now" and the guys were like " 'mon we'll get you up again" and I went up to the top so I did.
(Laura, personal interview, March, 1999)

It shows you how like everybody is good at something else, cause like somebody because they are tall or because you need to be small. Everybody is good at something. (David, personal interview, March, 1999)

You learn to work wi' brand new people that you just dinnae know anything about, you work wi' them straight away or else you wouldnae hae a good time.
(Michael, personal interview, March, 1999)

These comments and my belief that something positive and worthwhile may be happening to those students involved in this programme and others like it provided the desire and inspiration to begin, continue and complete this research project.

How the research began

Much of the debate about education in the last twenty years has been about whether schools are getting better or getting worse. This, however, is an irrelevant question. The real issue is whether current provision is good enough for the challenges now facing us as a society.
(Hopkins, 2001: 179)

These lines called the Author to question how well the current education system in Scotland would fare in Hopkins' version of the new educational debate: is current provision good enough for the challenge now facing us as a society?

In March 2002 the Scottish Executive and the Education, Culture and Sport Committee of the Scottish Parliament launched a National Debate on Education. This encouraged local and national discussion amongst those people who were interested in the future of school education in Scotland. The response to the debate is being analysed by a research team at the University of Edinburgh, led by Professor Pamela Munn. Although the final report is planned for publication early 2003, a summary report of the initial analysis has been produced (Munn, 2002c). The report provides an interesting account of the state of primary and secondary education in Scotland today. It is presented in two parts detailing the ‘parents, pupils and teacher’s responses and the organisational responses’ respectively. In summary, it suggests that there is overall support for the general structure and system of comprehensive schools as they provide a good standard of education. There is also pride in the quality and standard of the teaching force. However, the main concerns of teachers, parents and pupils focused on increasing the flexibility of the curriculum so that “notions of educating the whole child and responding to individual needs” can become acceptable (Munn, 2002a: 9). A major source of complaint from organisational responses focused on aspects such as, “teaching methods”, “the parity between academic and vocational skills”, “values education”, “citizenship” and “personal and social skills” (Munn, 2002b: 2). These findings reflected the Minister for Education and Young People’s description of the current education system in Scotland, which she believes to be “delivering a high quality of education for many young people”, yet she warns that “there is always room for improvement” (Jamieson, 2002: 2).

Following Hopkins' version of the new educational debate he suggests that the case for the adequacy of current provision should also consider whether current educational provision is "good enough for the challenge now facing us as a society" (Hopkins, 2001: 179). By this Hopkins, refers to the changes within the social context, which he believes reinforce the need for schools to change:

...if schools are able to respond to the changing educational needs of students and society, then they stand some chance of accommodating the pressures of social change. (Hopkins, 2001: 179)

Hopkins' view highlights the link between education and society. Over the last twenty years this has become an increasingly important issue, so much so that education has to be able to reflect the way in which society has progressed and is continually progressing (Jamieson, 2002). Maybe now at the beginning of the 21st Century it is time to consider ways in which we can ensure that current provision is not just good enough but the best that it can be. It seems to be the view noted above that although the Scottish education system is good enough there is still room for improvement. In light of the interim findings from the National Debate on Scottish Education I would suggest that broadening and developing the concept of teaching and learning both within and out-with the classroom could inform the current curriculum. Higgins states that:

if we work on the assumption that the purpose of education is to allow students to develop fully and become well balanced adults who take an active responsible role in society and the greater outside world, we have to allow them at some point to experience that world. (Higgins, 1997: 13)

This quote was taken from Higgins' papers on the case for education out of doors. Higgins and Loynes (1997: 7) describe this issue as "whether a modern, primarily intellectual form of education is adequate for proper development of the individual, or

whether some direct form of educational experience which encourages awareness of self, others and the environment is more appropriate". This would provide a variety of learning opportunities for students that could encourage both personal and social development as well as academic achievement. An outdoor experiential approach to learning could provide *one way* in which the current educational system could contribute towards a more balanced curriculum. This study investigates the effectiveness of such an approach to mainstream secondary education through the use of a case study.

Raising Achievement Strategy- North Lanarkshire Council

This study focuses on one Scottish Local Authority that has developed a "less orthodox approach" to education (North Lanarkshire Council, 1998a: 1). North Lanarkshire Council's (NLC) Education Department developed a district-wide initiative called "Raising Achievement". This initiative incorporates a mixture of experiential learning methods to provide both primary and secondary school students with opportunities for personal and social development and was created primarily to combat the widespread socio-economic deprivation that is prevalent in all communities in North Lanarkshire. The Education Department believes that this level of deprivation has had a detrimental effect on the aspirations of its young people (NLC, 1998a: 1) and so they have focused on "the need to break the cycle of low self-esteem and limited aspirations in order to combat this negative effect" (NLC, 1998a: 1). Each part of the overall strategy, for example, Easter schools, peer tutoring, mentoring schemes, music clubs and Aiming Higher with Outward Bound, although designed for different age groups, have all addressed the causal factors of underachievement (as identified by NLC) such as low self-confidence or limited social skills.

Aiming Higher with Outward Bound - North Lanarkshire Council

This study examines one facet of the Raising Achievement strategy, the Aiming Higher with Outward Bound programme. Approximately 1,000 students are selected from almost 4,000 students of the same age within the 26 mainstream secondary schools in the district. The selected students are given the opportunity to participate in a five-day residential Outward Bound course. The course is aimed at 14-16 year old secondary school students, and takes place at the Loch Eil Outward Bound centre, near Fort William. The programme began in 1997 and the evaluation started the following year. North Lanarkshire Council's Education Department has worked with Outward Bound Scotland to deliver the 15 week-long programme from October to February each year. Their roles have been as the provider of the overall programme and the specific outdoor and residential experience, respectively. This study presents the full evaluation of the programme and examines links to the current 5-14 National Guidelines for the curriculum (Learning and Teaching Scotland, (LTS), 2000a). In relation to the broader educational context in which this study sits, the case study evaluation provided an opportunity to consider how this type of experiential approach to education might complement the current education system within Scotland.

North Lanarkshire Council selected Outward Bound as the provider of the outdoor experience; this issue is discussed further in Chapter Four. It must be noted that many other "providers" exist within public, private and voluntary sectors. In fact North Lanarkshire Council have their own outdoor centre at Kilbowie which students use in primary and secondary school. However, they were not selected as the providers of this programme. The wider field of outdoor experiential learning should

not be understood as represented solely by Outward Bound in this case, nor should they be considered as the only providers of it.

The study overview

The overall study fell naturally into two sections. The first of which provided the theoretical background behind this type of approach to education, both in terms of the Aiming Higher programme and outdoor experiential learning.

The theoretical section presents the findings of the literature review, which explores the way in which an outdoor experiential approach to education has developed. This includes an examination of the work of relevant educational philosophers and theorists such as Dewey, Montessori, Friere and Gardner, whose work is cited within the Raising Achievement literature produced by North Lanarkshire Council. The role of outdoor experiential learning within the Scottish education system is examined from the 1940's up and until the present day. This review leads on to the final part of the first section, which focuses on the case study of the Aiming Higher programme as an example of one way in which an outdoor experiential learning initiative has been implemented within mainstream secondary education.

The second half of the study presents the evaluation of the Aiming Higher programme. The evaluation considered the specific effectiveness of the programme in terms of achieving its aims and the general effectiveness of an outdoor experiential approach to education. Recommendations in relation to the Aiming Higher programme are given, as are broader theoretical recommendations relating to an outdoor experiential approach to education and further research in the field.

The chapters

Following this introductory chapter, the second chapter examines the Scottish education system by considering the commitments that have been made towards improvement in terms of the 5-14 National Guidelines (LTS, 2000a). The potential for educational improvement is discussed in relation to the aims and influence of relevant educational theorists and philosophers. In short, Chapter Two provides an introduction to the broad theoretical basis upon which the whole study has been constructed.

The aim of Chapter Three is to explore what is meant by an experiential approach to education. This chapter focuses the study and sets the parameters for the thesis. In contrast to the broad theories introduced in Chapter Two, this chapter sets the study within the context of outdoor experiential learning. To better understand how this approach could be implemented within schools in Scotland a variety of outdoor experiential learning programmes are discussed, as are the results from a review of relevant research findings. This enabled the author to give informed consideration to the way in which this approach to education has been developed in respect of the current system.

Chapter's Four and Five provide an example of how an outdoor experiential approach to learning works in practice by examining the rationale behind the programme and its logistical implications, respectively. These chapters act as a natural break between the theoretical aspect of the study and the case study evaluation. In Chapter Four the Aiming Higher programme is introduced and considered from both the perspective of North Lanarkshire Council and Outward Bound. The programme is discussed in relation to each organisation's aims, objectives and rationale. In Chapter Five the

logistics of the Aiming Higher programme are outlined. This chapter focuses on the secondary schools and students involved in the programme, the selection process and the content and delivery of the course.

Following the introduction to the case study, Chapter Six discusses the overall research design. Various techniques such as group interviews, self-report instruments, participant observation and individual interviews were employed and the specifics of each are discussed in separate evaluation chapters. This chapter considers both the justification for each approach and the way in which they fit together and complement one another to produce research that is effective, reliable and original. The final part of this chapter discusses the concept of “dispositions”, taken from the 5-14 National Guidelines for the Curriculum (LTS, 2000a). The “dispositions” are central to the evaluation process for two main reasons. Firstly, they have been used as the framework for analysis of the findings and, secondly, they have allowed the overall results to be understood in terms of contemporary educational aims and objectives.

The first evaluation chapter, Chapter Seven, discusses the method, implementation and results from the self-report instrument. This chapter provides an overview of the experience for the majority of the fourth year students in each of the sample schools. The Life Effectiveness Questionnaire (Neill, 1997) was administered to this cohort (Year 1 n=828, Year 2 n=461) on three separate occasions; before, immediately after, and again three months after, the five-day residential course at Outward Bound.

Chapter Eight highlights the process that the students went through whilst on the course. Six students were specifically observed during two weeks of the fifteen-week

programme. These observations provided an insight into the opportunities for personal and social development during the course. Individual interviews were carried out in conjunction with the observations with the aim of discovering how the students felt whilst they were immersed in the experience.

The group interviews are discussed in Chapter Nine. These interviews were carried out during March 2000 in each of the sample schools. Samples of students (n=53) were interviewed in small groups to gain a better understanding of their experience of the Aiming Higher programme. The interviews were held an average of three months after their residential experience to give the students an opportunity to reflect on their involvement in the programme and the effect, if any, that it had.

The findings from the previous three evaluation sections are considered in Chapter Ten. They are presented and analysed under the headings 'provision', 'process' and 'impact'. The overall findings are discussed in relation to the 5-14 National Guidelines (LTS, 2000a) to relate the outdoor programme back to the aims of mainstream education. The limitations of the study are discussed in this chapter.

The final chapter makes recommendations for the future of the scheme and provides some concluding comments. This chapter also discusses the implications for the broader context of outdoor experiential learning and considers avenues for future research.

In summary, the main aim of the research is to consider the potential role of outdoor experiential learning within the current mainstream secondary education system in Scotland. North Lanarkshire Council's Aiming Higher with Outward Bound

programme provided an example of this type of approach and so it became the focus of the case study evaluation. The recommendations that arose were used specifically to inform North Lanarkshire Council and, more generally, as a basis for considering the broader theoretical recommendations relating to the field of outdoor experiential learning in this context.

Chapter Two

THE SCOTTISH EDUCATION SYSTEM: ROOM FOR IMPROVEMENT?

Introduction

This chapter explains the theoretical and conceptual framework that underpins the study.

Research questions

The questions that arose at the outset of this study, in terms of the Aiming Higher with Outward Bound programme, were:

- Is the overall programme [Aiming Higher with Outward Bound] providing an opportunity for development?
- Does the process, the way in which the course is delivered at Outward Bound, support positive development?
- What is the impact of the programme in terms of its relationship with the dispositions in the 5-14 National Curriculum Guidelines?

There were two main reasons for asking these questions; firstly, to understand the rationale behind the Aiming Higher with Outward Bound programme and secondly to consider whether or not the study had relevance beyond North Lanarkshire Council. Consequently, the programme was considered both in relation to the local educational context and the current education system in Scotland. So in terms of the overall thesis, the case study is provided as an example of one way in which an outdoor experiential approach to education can be implemented in mainstream education.

The background

Before tackling these research questions a broader understanding of the field of experiential learning in relation to its influence and role in the current education system was needed. Prior to that the term ‘outdoor experiential learning’ needs to be clarified. This term is used collectively to refer to the process of learning experientially in an out-of-doors environment. Higgins and Loynes (1997: 2) summarise this process as one in which the “experience should be direct rather than mediated, with the facilitator acting as a guide rather than in the usual formal capacity of a teacher”. Higgins and Loynes (1997: 2) state that when experiential learning takes place out-of-doors, “many report the experience to be effective as a means of personal and social development, and increasing awareness of community and environment”. Although learning through direct experience can take place in a number of situations, for the purpose of this study it is referred to in the context of an outdoor environment. A full discussion of this definitional issue follows in Chapter Three.

The field of outdoor experiential learning is fairly ‘young’ with the bulk of the development only taking place over the last thirty years (Higgins and Loynes, 1997). This means that a great deal of work still needs to be done in order to develop a consistent philosophical base upon which to build knowledge. Therefore, this study was not constructed from a recognised convention of theoretical (outdoor experiential) understanding.

Nicol (2001: 4) described the problem he faced when conducting his own doctoral research in this field:

Within this uncritical culture the practice of outdoor education emerges without any rational development. Consequently, when researching the area of outdoor education, the platform of precedents from which a thesis might normally proceed does not exist in any coherent form. There is no social theory of outdoor education. (Nicol, 2001: 4)

Nicol's research provides a philosophical treatment of outdoor experiential learning and goes a long way towards creating a platform for further work. Interestingly, and not surprisingly, he explains the situation he faced as one of exploring a new area and describes his task as having to construct theory about it. The present study is intended to build upon his work as it continues the theme of exploration and emerging theory.

In terms of the authors experience, she found herself facing similar difficulties. She too discovered that very little had been written about outdoor education that provided philosophical or empirical reasoning. Consequently she had to consider the wider context in which this study was being conducted and explore the related disciplines of education, sociology and psychology for a deeper interpretation of the questions she wanted to answer. This chapter provides a summary of this exploration, which includes a description of various teaching and learning styles, current concepts in Scottish education and a discussion of the aims and influences of a selection of educational theorists and philosophers.

Teaching and learning styles

Following the work of Hopkins (2001), Bentley (1998), Keighley (1985) and others, there is concern about the relevance of much of today's curriculum. The interim report from the National Debate on Education (Munn, 2002c) summarised the responses from parents, pupils, teachers and organisations. It highlighted three major

arguments for curriculum change, which can be summarised as relating to balance, motivation and flexibility. Firstly “balance”: it was felt that inter-personal skills such as “coping with change, personal and social relationships, enterprise and creativity” and some subjects were not valued as much as other subjects (Munn, 2002a: 3). Many people felt that this lack of balance “did not prepare pupils for life in the 21st Century” (Munn, 2002a: 3). Secondly “motivation”: those students who had become “switched off by the academic curriculum” needed to be motivated, as “poor discipline emerged as a major concern for pupils who were not enjoying their school time” (Munn, 2002a: 3). Thirdly “flexibility”: there was a desire for increased “flexibility and choice in the curriculum”, so that schools could best meet “the needs of the pupils’ (Munn, 2002a: 3). These points demonstrate how parents, pupils, teachers and organisations recognise that there is a need to address “what is taught in schools” and perhaps the way in which it is taught (Munn, 2002a: 3).

With reference to education in the UK, Hopkins’ (2001) also considers the current concept of teaching and learning. He states that the “traditional chalk and talk, drill and recite” method still dominates the repertoire of most teachers and the minds of many critics of education “despite the fact that it falls terribly short of reaching the aspirations of today’s schools” (Hopkins, 2001: 14). In contrast the “more efficient models of teaching assume that the whole class will be organized to pursue common learning objectives within which individual differences in achievement [can be] comfortably accommodated” (Hopkins, 2001: 14). Following Hopkins (2001: 25) it would seem that the “broader the range of teaching approaches and learning experiences arranged for our children, the more likely we are to reach our goal of educating our students”. Therefore, an effective education system may be one that

combined a mixture of teaching methods in order to create a range of instructional approaches drawn from a variety of teaching and learning styles.

Over fifteen years ago, Keighley (1985: 26) an outdoor educationalist, stated that the “common curriculum has remained very traditional in its approach, concentrating almost exclusively upon content and ignoring processes by which young people learn to learn and prepare for the real world”. Keighley posed a very interesting question, “has the education system lost its way in an increasingly complex and turbulent society?” Others such as Bentley (1998: 6) share the view expressed by Keighley. He states that “conventional school-based learning” within the UK fails to “mesh the knowledge in the curriculum with the contours of wider experience”. He believes that this fact offers a warning against educational reforms “which focus too heavily on producing correct answers in narrow contexts”. Instead Bentley (1998: 7) suggests that we should be concerned with the “development of understanding” which “can be applied and extended by taking it into the spheres of thought and action which, in the real world, demand intelligent behaviour”.

Unquestionably, learning takes place in a variety of situations and contexts; it is not confined to the classroom. Brandes and Ginnis (1996: 2) state that there is a range of teaching styles which extends from traditional learning involving didactic methods, for example learning by rote, to student-centred learning involving participatory methods, for example learning through active involvement in a problem. They charted these learning and teaching styles along an ‘educational continuum’ (Brandes and Ginnis, 1996: 2). Table 2.1 presents their continuum as two lists of characteristics considered typical of ‘traditional’ and ‘student-centred’ teaching styles.

Table 2.1 Teaching Styles

Traditional	Student-centred
didactic	participatory
accent on memory	learning by discovery
passive pupil role	active pupil role
regular testing	integrated subject matter
concern with academic standards	accent on cooperative work
accent on competition	accent on creative expression

(Brandes and Ginnis, 1996: 2)

According to Table 2.1 this study would fall under the heading of student-centred education. However, having worked with teachers and instructors during the course of this research, it became clear that most of them would not be happy to place themselves wholly under one heading nor at either end of the continuum. For that reason, Brandes and Ginnis's 'educational continuum' and Table 2.1 are perhaps best seen as a basic introduction into various teaching styles or a point of reference rather than strict models of educational techniques.

From Bentley's previous comments it is apparent that he is leaning towards the student-centred end of the continuum by placing a high value upon the integration of subject matter both within the curriculum and beyond the classroom. This is reinforced by his suggestion that there is a need to develop students' knowledge and understanding to enable them to behave intelligently in a variety of situations.

From the earliest age they [young people] begin to convert their experience into assumptions and theories about the world. Their learning should incorporate and reflect these assumptions, and challenge them to become deeper and more sophisticated. But too often, school-based instruction encourages them to place what they learn in a narrowly bounded category, failing to compare it to the other experiences and assumptions that make up their worldview. (Bentley, 1998: 6)

Before Bentley, many educationalists examined the value of traditional methods of schooling and formalised learning and many have considered other ways to approach education (e.g. Dewey, Friere and Montessori). Each of these educationalists has advocated a more student-centred or experiential approach to learning or (to give it its historical name) a 'progressive' approach to teaching and learning. Dewey (1938) provided an insight into the aims of his progressive approach to educational reform:

If one attempts to formulate the philosophy of education implicit in the practices of the new education, we may, I think, discover certain common principles.... To imposition from above is opposed expression and cultivation of individuality; to external discipline is opposed free activity; to learning from texts and teacher, learning through experience; to acquisition of isolated skills and techniques by drill is opposed acquisition of them as a means of attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world... I take it that the fundamental unity of the newer philosophy is found in the idea that there is an intimate and necessary relationship between the processes of actual experience and education. (Dewey, 1938: 19,20)

However these views, as well as those of Bentley and others who share an experiential or progressivist ideal, are not 'new'. In fact, Socrates in 400 B.C. is quoted as saying, "I shall only ask him, and not teach him, and he shall share the inquiry without me telling or explaining anything to him, instead of eliciting his opinion" (Bennett, 1976). The origins of the progressive movement can be traced back to the Romantic intellectual view held by Rousseau, Pestalozzi and Frobel, as Darling notes:

This theory [progressivism] is not a new one. The earliest fully developed version was expounded by Jean-Jacques Rousseau in *Emile* in 1762 [publication date] in which Rousseau declared that 'Nature provides for the child's growth in her own fashion, and this should never be thwarted'. (Darling, 1994: 2)

Nowadays the term 'progressivism' refers to the period from the late 19th century through to the mid-20th century and the educational programmes that grew out of the American reform effort. Since the progressive movement began it has not been without criticism. Hirsch, an American Professor, provides an extensive critique of the progressive movement in the book, 'The Schools we Need and Why we Don't Have Them?' (1997). Although the book deals with the state of education in America, it provides an insight into the areas of the progressive ideal that he believes are "weak" and it also relates directly to the work of Dewey.

Hirsch (1997: 2) suggests that the "typical progressivist caricature of traditional knowledge-based education" ignores the fact that "challenging subject matter - the core of traditional education - can be taught in a lively, demanding way". Hirsch believes that even the most academic of subjects can be made interesting, suggesting that it is the teacher and their ability which make a subject accessible (Hirsch, 1997: 4). In defence of his critique of progressive education, Hirsch states that the "progressives warnings about classic subject matter being 'boring' or 'irrelevant' simply conceal an anti-intellectual, anti-academic bias" (1997: 4).

In short, many progressive educational assertions that have attained the status of unquestioned fact by being repeated constantly are huge oversimplifications. They wither under close scrutiny. And they have done serious harm. (Hirsch, 1997: 4)

Hirsch is not alone in his criticism of the progressive ideal. Others such as Ravitch (2000) have publicly criticised the movement. However, despite the criticisms there is still support for the 'progressive' movement. In Scotland commitments have been made to applying some of the principles of a student-centred or experiential approach to mainstream education, for example the introduction of the National Curriculum Guidelines.

Perhaps if progressive education was considered as an approach to education whereby it was used as a technique within schools to explore some of the more 'academic' subject areas, then both traditional and progressive methods could be used to produce an effective yet comprehensive education system.

The 5-14 National Guidelines for the Curriculum

The Scottish education system has made an important commitment to ensuring a progressive approach to education through the introduction of the National Guidelines for the Curriculum. These guidelines have not only recognised the academic potential of students, but have also placed importance on the personal, social, spiritual and creative development of students.

The revised guidelines (published in 2000) reflect the educational climate or context in which they were written. For example at that time, the link between school and wider society was, and still is, an important issue. Consequently, Learning and Teaching Scotland (LTS) aimed to develop "a strengthened commitment to ensure... a continuum of learning that prepares [students] for the world of work and is based on an inclusive ethos of achievement for all" (LTS, 2000a: 1). The National Guidelines for the Curriculum reflect this issue as they "help develop in children the knowledge,

skills, capabilities and dispositions that they will require in order to gain the best from school and from life”.

The National Guidelines comprise a series of publications produced by Learning and Teaching Scotland (LTS), which were intended to guide Primary and Secondary schools in Scotland. One of the publications which acts as a guide for teachers and managers, sets out the five key principles of “breadth, balance, continuity, coherence and progression” that form the basis of the 5-14 curriculum and provides advice and examples of the implementation of these principles in different Scottish schools. It is called 'The Structure and Balance of the Curriculum' and it describes a curriculum that offers a “breadth of experience and balance of opportunity for learning” as the entitlement of every pupil. The document states that:

From the outset the 5-14 curriculum should provide clear pathways across the range of areas of learning. These provide a basis for personal growth and for further learning in the different structures of primary, secondary and special schools. The curriculum should build on pupils’ experience and learning and be responsive to their needs. It should relate to events and facets of their everyday lives. It should help them develop intellectually, aesthetically, socially, emotionally, spiritually, imaginatively and physically. It should prepare them to face the challenges of life in a rapidly changing society. It should help guide them through the transition from childhood to adulthood.
(LTS, 2000a: 3)

This quote appears to endorse a student-centred and a holistic approach to learning.

It suggests that students should be given the opportunity to develop in a whole range of areas, not simply in terms of academic qualifications. Furthermore, the 5-14 National Guidelines should take into account the individual needs and experiences of the student. This approach to education can be considered to be consistent with experiential learning as it provides the students with a central role in the learning process and encourages them to develop a positive disposition.

Introducing 'dispositions'

The 5-14 National Guidelines detail a set of 'dispositions' that are believed to be the “fundamental basis for a personally rewarding life and an effective contribution to society” (LTS, 2000a: 5). Learning and Teaching Scotland suggest that the National Guidelines should “look to foster young people who are positively disposed to: a commitment to learning; a respect and care for self; respect and care for others; a sense of social responsibility; and a sense of belonging” (LTS, 2000a: 5). The dispositions are an explicit statement of qualities that LTS believe schools should seek to develop in students. They are used as an overall framework for analysis throughout the case study evaluation, thus allowing both the concept of the dispositions and the Aiming Higher with Outward Bound programme to be explored in relation to one another.

The concept of ‘dispositions’ has evolved from an earlier publication by LTS (then called Scottish Consultative Council for the Curriculum) titled 'The Heart of the Matter' (1995). In 'The Heart of the Matter' 'values' were discussed in terms of:

...educating the whole person, generic curriculum principles, the discernment of qualitative aspects of the learners' development rather than the quantification of attainments and the critical importance of climate and ethos in the development of effective schools.
(LTS, 1995: 5)

Since that publication, the terminology has changed from 'values' to 'dispositions', however the ideals largely remain the same. The need for a relevant and effective education system in Scotland has provided the desire to look for a learning environment which encourages students to develop across a whole range of personal, social and academic areas.

Although many educationalists have made significant contributions to the development of an experiential approach to education, I have focused on four theorists and philosophers; Montessori, Dewey, Freire and Gardner. Montessori, Dewey and Freire were selected for investigation as their individual theories share similar themes and collectively they relate to the aims of the case study. Gardner was selected as his Multiple Intelligence theory is cited by NLC as one of the influences behind the development of their Raising Achievement strategy (NLC, 1998). I believe that all four educational theorists can be considered as relevant to an outdoor experiential approach to education.

Bentley suggests that:

...there are two crucial tests of an effective education system: how well students can apply what they learn in situations beyond the bounds of their formal educational experience, and how well prepared they are to continue learning and solving problems throughout the rest of their lives. (Bentley, 1998: 1)

Both characteristics focus on developing the role of learning in schools to ensure that it remains relevant. In summary, the first characteristic focuses on the concept of relevant and meaningful experiences whilst the second focuses on learning beyond the classroom. These traits could be considered as fundamental to an experiential approach to learning. The theories of Montessori, Dewey, Freire and Gardner were considered in light of these characteristics.

Montessori: making learning meaningful

Montessori (1912: 28) developed a method of education that held the “liberty of the pupil” as its fundamental principle; “such liberty as shall permit the development of

individual [and the] spontaneous manifestations of the child's nature". Montessori (1912) put her methods of education into practice through the establishment of the Children's House, the first of which was opened in January 1907, in Rome. The Children's House held social importance as it contained a school within a house, and pedagogical importance due to the educational methods that it employed (1912: 28). Montessori's teaching and learning methods stemmed from her work with 'deficient' children. She felt that techniques used to bring deficient children parallel with 'normal' children could be used on normal children at a young age to support their development.

This passionate message for those involved in education, demonstrates her strong views on methods for teaching and learning:

Often the education of children consists of pouring into their intelligence the intellectual content of school programmes. And often these programmes have been compiled in the official department of education, and law upon the teacher and the child imposes their use. Ah, before such dense and wilful disregard of the life, which is growing within these children, we should hide our heads in shame and cover our guilty faces with our hands!
(Montessori, 1912: 27)

The work of Montessori is interesting for many reasons, one of which is that it appears to deal with some of the fundamental issues currently discussed in relation to experiential education. For example, various authors such as Weil & McGill (1980), Walter & Marks (1981), Kolb (1984), Rogers (1993), DeLay (1996) and Bentley (1998) have examined the issue of making learning relevant to the life of the student as an essential aspect of the experiential approach. Montessori exemplified this by encouraging students to work in the gardens, grow plants, rear animals, and prepare and cook food. Through first-hand experience she sought to teach the students skills that were relevant to their life. This extract from Montessori's work demonstrates her

belief that direct experience encourages students to learn through consequence and reason. She describes why she used mobile desks and chairs in the Children's House as opposed to the traditional method of chairs and tables, which were fixed to the floor:

Our little tables and various types of chairs are all light and easily transported, and we permit the child to select the position, which he finds most comfortable. He can make himself comfortable as well as seat himself in his own place. And this freedom is not only an external sign of liberty, but also a means of education. If by an awkward movement a child upsets a chair, which falls noisily to the floor, he will have an evident proof of his own incapacity; the same movement had it taken place amid stationary benches would have passed unnoticed by him. Thus the child has some means by which he can correct himself, and having done so he will have before him the actual proof of the power he has gained: the little tables and chairs remain firm and silent each in its own place. It is plainly seen that the child has learned to command his movements. (Montessori, 1912: 84)

Montessori's vision is born from her respect for the individual and her commitment to nurturing his or her character. Consequently her educational techniques centre on activities that encourage expression and freedom, which she believes helps to display the child's uniqueness. Montessori (1978: 118,119) compares her teaching methods with traditional pre-school education which she describes as 'graded'; 'teacher motivated'; 'determined by set times'; where children 'work because they are told to' and 'treated alike'. In comparison she describes her own teaching methods as; 'ungraded'; 'motivated by self development' where children 'work for joy of working and sense of discovery'.

The 5-14 National Guidelines for the Curriculum share similar principles to Montessori's work, as both are concerned with developing the whole student through their direct interaction with meaningful and relevant tasks.

Pupils thrive on activities that stimulate them, experiences that engage them and in relationships that affirm and nurture them. Through this they become well-rounded people and effective learners. They develop personally and socially. Their individual and collective sense of who they are and of their role in the world around them grows and takes shape. (LTS, 2000: 3)

Another educational philosopher and theorist who was concerned with making education relevant and meaningful for students was Dewey.

Dewey: learning through experience

Dewey (1925: 62) believed that one of the essential aspects of teaching is ‘the extent to which it creates a desire for continued growth’. The following quote from Dewey argues for relevance in education:

There can be no doubt that a peculiar artificiality attaches to much of what is learned in schools. It can hardly be said that many students consciously think of the subject matter as unreal; but it assuredly does not possess for them the kind of reality, which the subject matter of other vital experiences possesses. They learn not to expect that sort of reality of it; they become habituated to treating it as having reality for the purposes of recitations, lessons and examinations. That it should remain inert for the experiences of daily life is more or less a matter of course. (Dewey, 1925: 190)

Implicit in Dewey’s argument is the notion that traditional methods of education could be enhanced and made more relevant by making connections between the classroom and individual student’s needs. Dewey’s landmark title ‘Democracy and Education’ (1925: 163) makes reference to experience as ‘change’ that is in danger of becoming a ‘meaningless transition’ unless it is ‘continuously connected with the return wave of consequences which flow from it’. Dewey, (1925: 163) states, ‘when an activity is continued into the undergoing of consequence when the change is made in us and the more flux is loaded with significance, we may learn something’.

Dewey argued that education in America (c.1920) should adopt a more relevant approach, which would require a rethink of the way in which the student was considered within the education system. Within Scotland the National Guidelines for the Curriculum state that, ‘the curriculum should build on pupil’s experience and learning and be responsive to their needs’, as well as relating ‘to events and facets of their everyday lives’ (LTS, 2000). These statements from Dewey are reflected in the sentiment of another educationalist, Freire.

Freire: making learning relevant

Freire studied the state of education and national development in Brazil and their combined effect on the suppression of the ‘poor’ (c.1970). He felt that education should be used to redress the balance of power, by giving some control back to the oppressed. Shaul (1996: 11) writes in the foreword to the new edition of ‘Pedagogy of the Oppressed’ (first published in 1972) that Freire operates on one basic assumption; that ‘man’s ontological vocation’ is to be a subject who acts upon and transforms his world, and in so doing moves toward “ever new possibilities of a fuller and richer life individually and collectively”. The essence of Freire’s educational philosophy reflected his belief that education can enable students, irrespective of their poverty and illiteracy, to gain control of their situation. This can be achieved through increased awareness of their own self and greater freedom to challenge that which may have previously appeared to be uncontrollable. He believed that teaching should avoid traditional schooling methods, focus on the actual experience of the student and encourage the use of shared experience (Freire, 1996: 52).

Freire (1996: 52) likens the role of the teacher to that of a narrator who turns the students into ‘containers’ waiting to be filled; ‘the more completely she fills the

receptacles the better a teacher she is' and the 'more meekly the receptacles permit themselves to be filled, the better students they are'. Therefore the act of education is reduced to one of depositing information:

The teacher talks about reality as if it were motionless, static, compartmentalised, and predictable. Or else he expounds on a topic completely alien to the existential experience of the students. His task is to fill the students with the contents of his narration - contents that are detached from reality disconnected from the totality that engendered them and could give them significance. Words are emptied of their concreteness and become hollow, and alienated verbosity.
(Freire, 1996: 52).

Gadotti (1994: 111) believes that Freire saw the responsibility for education in "the hands of the pupil himself", stating that it is the student who has the "the possibilities of growth and self evaluation" and for that reason they should be master of their own learning. Gadotti describes Freire's stance on traditional methods of education, thus:

In the class, knowledge should not be thrown at the pupil, nor are tests and exams ways of checking whether the learning has stayed in the child's head or whether the pupil has kept the knowledge in the way that the teacher has taught him. Education should have a vision of the pupil as a complete person, who has feelings and emotion.
(Gadotti, 1994: 112)

He compares Freire to Dewey due to their insistence on "knowledge of the life of the local community" (Gadotti, 1994: 117). Freire cannot comprehend how mathematics could "fail to be taught by examining the environment" and how "biology and the natural sciences can fail to be taught by observing the environment" (Gadotti, 1994: 117). He insists that the learner will better understand the subject if it is made relevant to them.

Gardner: understanding intelligence

A relatively recent contributor to this discussion of experiential education is Gardner with his work on 'intelligence'. Over the past decade and a half the old assumption that intelligence was a single internal factor that could be scientifically measured for an individual, has been challenged (Gardner, 1993; Bee, 1995; Goleman, 1995). Sternberg and Kolligan describe intelligence as being either 'fluid' or 'crystallised' (1990: 28). They suggest that fluid intelligence consists mainly of "abstract, nonverbal reasoning and problem-solving skills, whereas crystallised intelligence involves mainly verbal skills such as vocabulary and verbal comprehension" (1990: 28). This reflects the way in which traditional IQ³ tests lend themselves to the notion of 'crystallised' rather than 'fluid' intelligence. Following Sternberg and Kolligan's definitions it would seem that a child's ability to store knowledge is given precedence over a child's ability to process knowledge. However as traditional IQ tests tend to include problem-solving skills, it would be more accurate to suggest that it does not take full account of a child's ability to process knowledge. Bee (1995: 187) describes the IQ test as "a specialised tool, which has a fairly narrow range of appropriate use". She states that "when using it one must be aware that a person's IQ is only one facet of the study of cognitive development". Gardner (1984: 18) comments "intelligence tests rarely assess skill in assimilating new information or in solving new problems" as they appear to measure only one aspect of a student's intelligence. In short it does not provide a full and balanced interpretation of someone's 'intelligence'.

³ IQ (Intelligence Quotient) 'a unit used in the field of intelligence measurement and testing as an index of an individual's intelligence relative to a comparable population with respect to age.' (Jary & Jary, 1995: 328)

It is with similar limitations in mind that Gardner argued against the use of standardised examinations as common practice in schools. He believed that they are not an accurate measure of a student's intelligence or their potential for growth. As he suggests "two individuals can receive the same IQ score; yet one may turn out to be capable of a tremendous spurt in intellectual attainment, while another may be displaying the very height of his intellectual powers" (1993: 18).

Howard Gardner's theory of multiple intelligences (MI theory) provides an interesting, somewhat contentious, view of the nature of intelligence. His MI theory developed out of his research into the cognitive development of gifted and normal children, those suffering brain damage, autistic children, savants and prodigies. In short, Gardner's MI theory is premised upon his belief that there are at least seven fundamental areas of intelligence: musical intelligence; bodily-kinaesthetic intelligence; logical-mathematical intelligence; linguistic intelligence; spatial intelligence; interpersonal intelligence; intrapersonal intelligence. The following quote demonstrates how he interprets the seven different intelligences as present in each of us, albeit to varying degrees:

We believe that individuals may differ in the particular intelligence profiles with which they are born, and that certainly they differ in the profiles that they end up with. I think of intelligences as raw, biological potentials, which can be seen in pure form only in individuals who are, in the technical sense freaks. In almost everybody else the intelligences work together to solve problems, to yield various kinds of cultural end states - vocations, avocations, and the like. (Gardner, 1993: 9)

Recent research by Gardner (1999) suggests that there are possibly three more intelligences; naturalist, spiritual and existential intelligence.⁴ Naturalist intelligence

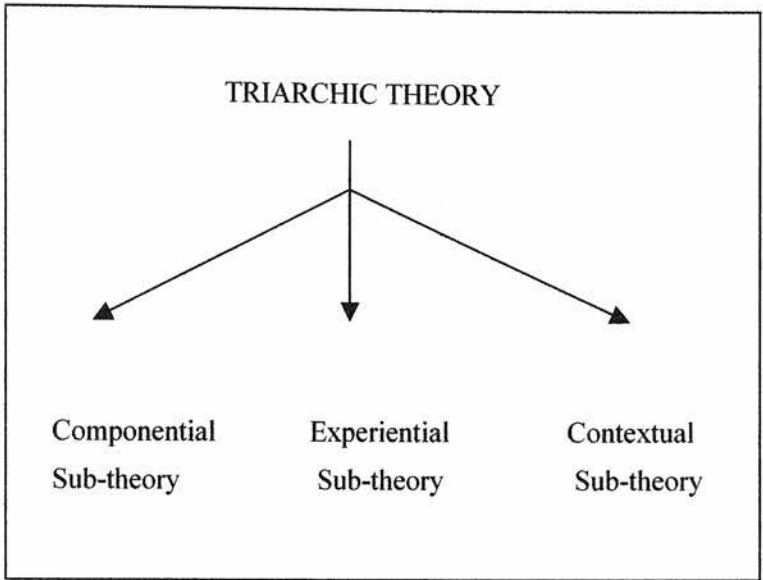
⁴ For the purpose of this study I will concentrate on the 'accepted' seven intelligences advocated by Gardner (1993)

involves the ability to understand and work effectively in the natural world, it is exemplified in biologists, zoologists and naturalists and is beginning to be recognised as the eighth intelligence (Gardner, 1999; Anderson, 1999). Spiritual intelligence (involving the ability to deal with questions of a spiritual nature) and existential intelligence (manifest in someone who is concerned with fundamental questions of existence) are still being considered (Project Sumit, 2002).

To give an example of Gardner's theory, someone who is a gifted musician may display weak social skills and be unable to relate to other people, or someone may display genius mathematical knowledge yet possess little co-ordination or athletic prowess. This theory would suggest that the traditional IQ test that measures one's intelligence by grading students using a set of given performance indicators (primarily concerned with logical-mathematical and linguistic intelligences) is inaccurate, as it does not account for many facets of intellectual functioning in which we might be interested.

Other educational psychologists share a similar view to Gardner's. For example, Berryman states that "one of the most serious objections is that IQ is based entirely on academic abilities and that these are only part of the full spectrum of abilities that constitute intelligence as a whole" (1991: 140). Sternberg devised a Triarchic Theory of Intelligence, which advocates three sub-theories or types of intelligence: componential, contextual and experiential (see Figure 2.1).

Figure 2.1 Triarchic Theory



(Triarchic Theories, 2002:1)

Componential intelligence concerns the potential set of mental processes that underlie behaviour (i.e. how the behaviour is generated), whilst contextual intelligence relates to the external world in terms of what behaviours are intelligent and where. Finally experiential intelligence addresses the relationship between the behaviour in a given task or situation and the amount of experience that the individual has of that task or situation. According to Sternberg (Triarchic Theories, 2002: 1) a complete explanation of intelligence ‘entails the interaction of these three sub-theories’.

Another psychologist, Bee (1995: 174), when discussing the work of Sternberg and his Triarchic Theory of Intelligence suggests that, “Sternberg's point is not just that standard IQ tests have omitted many of these kinds of items, but that in the world beyond the school walls, experiential or contextual intelligence may be required as much or more than the types of skills measured in IQ tests”. It would appear that this

theory is similar to Gardner's in that they both share the concept of multiple intelligence, however Sternberg is amongst several critics of MI theory.

Since its introduction in 1983, one of the most common criticisms of Gardner's theory has focused on his use of the term 'intelligence' (Scarr, 1985; Sternberg, 1983, 1991; Eyseneck, 1994; Morris, 2002). Sternberg (1983: 42) refers to the MI model as a "theory of talents, not one of intelligences". Sternberg (1983: 42) views the difference between talent and intelligence as qualitative stating "intelligence is general; without it we cannot function independently". Therefore, he refers to the MI model as a theory of "talents, not intelligences". Gardner (1993: 70) in defence against such criticisms states that "intelligences are fictions- for identifying processes and abilities that (like all of life) are continuous with one another".

Other common criticisms of MI theory focus on its lack of "scientific theory" and "empirical foundation", which has left it subject to judgement (Morris, 2002).

In the 15 years since the publication of Gardner's 'Frames of Mind', multiple intelligences has gone from being a widely disputed theory to a rallying cry for school reformers to a cultural commonplace. And, amazingly, it has done so without ever winning over the scientific establishment... Most people who study intelligence view MI theory as rhetoric rather than science, and they're divided on the virtues of rhetoric...of course the primary question about this theory is whether or not it's true. (Traub, 1998: 1)

Following the critiques and the counter argument from Gardner, it seems that MI theory provides an interesting introduction into a complex topic, thus encouraging a broader understanding of the nature of intelligence. As Gardner himself states, MI theory explores "the plurality of intelligences and the manifold ways in which human individuals may exhibit them" (1993: 34). This in turn has direct implications not

only in terms of education but also in relation to many other aspects of our lives, for example the future career path that we choose.

Having considered MI theory, in light of some of its critics and in relation to the characteristics of an experiential approach to education, clear links can be made to the implicit theme that learning is something that has to be meaningful and relevant to the student. In short, Gardner (1993: 120) asserts that it is “a cardinal principle of this theory that thinking does not and cannot occur apart from interactions with real materials in a living context”.

Summary

Arguments for the need for meaningful and relevant teaching and learning experiences have been made by various authors and in varying contexts. Such as in relation to nurseries and pre-school education in the case of Montessori or the social emancipation of the illiterate and poor in Brazil in the case of Freire. Each of the approaches to teaching and learning considered in this chapter, have adopted the rationale that education needs to be meaningful to the learner, preferably taking place through first-hand direct experience of the learning situation.

These theories can also be understood as suggesting, although not explicitly stating, that education should be a lifelong process, by their suggestion that we should encourage students to develop a desire to take responsibility for their own learning through learning the value and relevance of education within their life and environment. Almost forty years ago Montessori made a passionate plea to all those involved in education, suggesting that:

Our care of the child should be governed, not by the desire 'to make him learn things', but by the endeavour always to keep burning within him that light which is called the intelligence. If to this end we consecrate ourselves as did the vestals of old, it will be a work worthy of so great a result.
(Montessori, 1965: 240)

This request would not be out of place in the context of contemporary education in Scotland. In terms of the current education system in Scotland there are strong written commitments in place that demonstrate an increased experiential approach to education, such as the National Curriculum Guidelines. The author believes that schools in Scotland are attempting to provide a teaching environment that allows students to develop to the best of their ability within an education system that supports and respects their views, experiences and potential.

Following the response to the National Debate on Education in Scotland (Munn, 2002b: 1), it would seem that many people “do not expect the schools of the future to be very different from those of today”. It also suggests that many people do not want to “risk the key successes of Scottish education” (Munn, 2002b: 2).

Therefore the issue is not one of introducing a new education system, but of devising a way to improve upon current practice to ensure that the education system in Scotland remains effective, meaningful and relevant to today’s students. To that end this study considers ways to provide increased opportunities for learning that might “better reflect the range of human potential and ability” (Bentley, 1998: 23).

Chapter Three introduces one way in which the current education system may be able to broaden its concept of teaching and learning; through the introduction of an outdoor experiential approach to education.

Chapter Three

INTRODUCING OUTDOOR EXPERIENTIAL LEARNING

Introduction

This chapter begins by exploring what is meant by an outdoor experiential approach to learning before arriving at a working definition. To better understand how outdoor experiential learning translates into practice, the context in which it is considered must be explored. This process began in the previous chapter where the theory and rationale behind a broad experiential approach to education was examined, and continues here through a review of the history of this approach within Scottish education. The main sources of information were publications, documents and literature from Learning and Teaching Scotland, the Scottish Executive and local authorities. The latter half of this chapter considers the value of this type of approach by examining its role, use and effectiveness both in terms of a supplement to mainstream education and as a method of learning in its own right.

In relation to the overall study, this chapter contextualises the theories discussed previously in preparation for the case study evaluation. The case study provides a specific evaluation of a programme that incorporated outdoor experiential learning as part of a mainstream educational strategy. Therefore, this chapter provides the background needed to understand how this type of initiative was developed and the current climate in which it operates.

Defining (outdoor) experiential learning

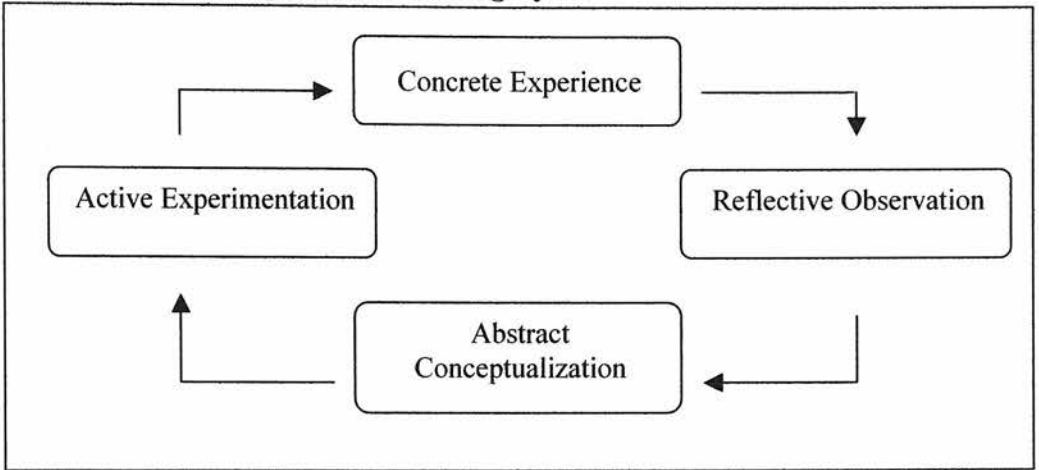
The generic heading 'outdoor experiential learning' has been used throughout this study to refer to a number of terms for example, outdoor education, adventure-based

education and adventure education. I chose this term for two main reasons; firstly the term experiential learning is used within the field, Hovelynck (2001), Keighley (1998), Higgins (1997), Delay (1996), Barrett and Greenaway (1995). Secondly it reflects aspects of the title of two leading international journals, the (UK based) *Journal of Adventure Education* and *Outdoor Learning* and the (US based) *Journal of Experiential Education*. The following discussion explores what is meant by this term and concludes with a working definition.

Hovelynck (2001: 6) describes experiential learning as “holistic, which means that it conceives of cognition, aptitude and attitude as an integrated complex rather than as separate -or even separable- aspects of behaviour”. Holism in this context implies that “experience cannot be understood in terms of either knowledge, skill or attitude, but necessarily comprises of all of those simultaneously, and is embedded in relationships” (Hovelynck, 2001: 6). The term ‘holism’ is also used when referring to experiential learning out of doors. In this case Higgins (1997: 11) describes ‘holism’ as the notion that it (outdoor experiential learning) can “generate opportunities for integrated learning experiences which may incorporate many aspects of intellectual, physical, emotional, aesthetic and spiritual development”. Experiential learning can be understood as providing an opportunity for students to develop in a variety of ways and this holds true whether the learning takes place indoors or out-of-doors.

A further and important aspect is that experiential learning intends that students learn from direct experience. Kolb (1984: 4) produced a model that illustrates the process of experiential learning, which he considers to be holistic, linking “education, work and personal development” (See Figure 3.1)

Figure 3.1 Kolb's Experiential Learning Cycle.



(Kolb, 1984: 42)

This model demonstrates Kolb's view that knowledge is understood through “the transformation of experience” (1984: 41). He believes that “the simple perception of experience is not sufficient for learning (something must be done with it)” and similarly “transformation alone cannot represent learning, for there must be something to be transformed, some state or experience that is being acted upon” (1984: 42).

Kolb's theory is frequently cited as a means of explaining the experiential learning process:

His cycle addresses learning as a dialectic between ‘grasping’ what is happening on concrete and abstract levels, and actively transforming such experience, through reflection or observation, and the testing or application of learning outcomes. (Weil & McGill, 1980: 246)

However Kolb’s model should perhaps be understood as a spiral rather than a cycle, with the experimentation phase being continued and applied to new situations and

experiences. Higgins's (1997: 9) description of a full experiential learning process appears to build upon Kolb's (1984) model. He describes the process as follows:

- Having the experience
 - Reflecting in the experience
 - Applying the new knowledge to this and new situations
 - Generalising the principles so they can be applied to future situations
 - Considering the value of the whole process as a way of learning.
- (Higgins, 1997: 9)

The final stage in this process could be considered as the most important as it is at that point that it becomes possible 'not just to generalise the lessons learnt in the recent experiences, but also to extend this to the process of learning itself' (1997: 10). Although this approach to learning could be applied to a variety of situations, an outdoor environment allows students an opportunity to develop across a variety of senses and emotions. As Higgins (1997: 11) states 'we know the world best when we encounter it through as many of our senses as possible'. So although other situations may offer rich experiential learning environments and not all learning out-of-doors takes place experientially, I believe that the outdoors provides a unique and substantial wealth of opportunities for development.

It is perhaps the adaptable nature of the experiential learning process, which prevents it from having a singular and legitimate definition (Hovelynck, 2001). Its suitability and relevance to a variety of educational, social and organisational cultures and environments supports the general view that it is best understood as a philosophy or an approach to education, (Torbet, 1972; Weil and McGill, 1980; Kolb, 1984; Bound et al, 1993). The notion of an experiential philosophy has been discussed by others. For example Wier and McGill (1980: 246) state that "experiential learning for us is

simultaneously an educational philosophy, a range of methodologies and a framework for being, seeing, thinking and acting, on individual and collective levels”.

This is an important point, especially in light of a recent paper, which challenges the experiential nature of much of “so-called experiential learning” (Hovelynck, 2001). Hovelynck (2001: 4) suggests that “there is a fundamental difference between active forms of teaching and experiential education” and documents that “adventure education is increasingly adopting the didactic teaching methods that it set out to be an alternative for”. Hovelynck (2001: 10) further suggests that definitions of experiential education typically refer to the participants’ “direct” or “first hand experience”, and so he questions “to what extent practices that supplant this ‘immediate’ experience by elaborately ‘mediated’ experiences meet this defining characteristic”. He believes that there is a contradiction in the fact that situations within which the trainees then, by ‘discovering themselves’ learn exactly that for which the sessions were set up (2001: 10).

I understand Hovelynck’s contention with this ‘contradiction’. However, I would suggest that the teacher has a clear role in this process as they provide the students with the opportunity to engage in learning whilst helping to guide them through the experiential learning process. Teachers need to ‘mediate’ the experience, as some students may need assistance to transfer their ‘learning’ back into their home environment (Bacon, 1983; Brand 2001), so outdoor experiential learning can be understood as taking place within a framework that encourages students to make sense of their experience and in so doing allows them to build upon and apply that experience to other learning situations. This process is very similar to Kolb’s (1984) and Higgins’ (1997) approaches discussed earlier. As Brand (2001: 41) suggests,

“clearly a wilderness experience needs to be placed within a more substantial intervention program and within a lengthy follow-up period”. The follow-up should rely heavily on drawing on the wilderness experience and using metaphors from the experience to link different response patterns in everyday life. Kolb (1984: 18) summarises this point by reinforcing the earlier issue of holism stating that “it is important to recognize that experiential learning is not a series of techniques to be applied in current practice but a program for profoundly re-creating our personal lives and social systems”. Perhaps this reinforces the need to consider outdoor experiential learning as a philosophical approach and not as a strict set of educational principles.

So, experiential education lends itself to a variety of situations that can be designed to work in accordance with existing methods of education from pre-school through Primary, Secondary and Tertiary educational contexts. It also has applications beyond a formal educational setting and implications throughout one’s life in terms of personal, social and career development. Higgins (1997: 9) suggests that “in the end all of us must either take responsibility for our own learning or we will cease to learn at all”.

The present study explores one type of experiential learning, outdoor experiential learning, in terms of learning and teaching outdoors in the natural environment. Having explored the term outdoor experiential learning I would define it as a philosophical approach to education that seeks to provide an opportunity to develop across a full range of personal, social, intellectual, emotional and aesthetic areas through direct first-hand experiences out of doors. This working definition may become clearer as the study progresses through a review of the history of this approach within Scottish education.

A historical perspective

...we discovered more and more that the reason for teaching certain things was that these things had always been taught and - well wasn't that good enough? (Mackenzie, 1963: 29)

Mackenzie describes the way in which education has become tradition in that we have passed on the way of teaching and learning from one generation to the next. Consequently he suggests that the current education system is a reflection of the education system of the past rather than one that reflects the climate of today. Mackenzie develops this further by stating that he wishes we had "paid more attention to the needs of the future when we accepted the routines of the past" (1963: 130).

Although Mackenzie made this statement in 1963 it seems relevant to this study as it reinforces the need to continually question the way in which things are done. If we follow the assertions of Mackenzie and assume that contemporary education is a routine of the past, then we must question the relevance of this routine, in order that the education system remains relevant to today's culture and society and subsequently meaningful to the student. More recently, others such as, Hopkins and Putnam (1993: 191) suggest that the "traditional educational orthodoxy that regarded teaching as the transmission of knowledge and skills (which would remain relevant throughout a learner's lifetime) can no longer be the case".

Education then, is not about "accepting received wisdom; rather it is about innovation, rapid and effective decision-making and learning how to learn and re-learn" (Hopkins and Putnam, 1993: 192). The act of receiving wisdom is still

important and necessary however it is the ability to make that knowledge relevant to the learner that appears to be the crucial part of the educational process.

The beginnings of change

Following the Second World War, Britain's attitude towards society changed reflecting the country's concern with social issues and in particular a desire for educational reform, (Hopkins and Putnam, 1993; Cook, 2001; Nicol, 2001). The 1944 Education Act (Board of Education, 1944) and the 1945 Education (Scotland) Act (Board of Education, 1945) reflected the change in attitude by providing a new direction for teaching and learning, which developed alongside an emphasis on intellectual and physical growth. At this time a new position had developed towards "moral training and the development of character" (Hopkins and Putnam, 1993: 23). Cook (1999: 169) states that as the 1950s progressed, "legislation within the 1944 Education Act was increasingly being used to promote the type of outdoor education that valued qualities associated with character training for leadership as recommended in the Norwood Report and promoted by Kahn". In particular the 1944 Act had suggested that:

A period of residence in a school camp or other boarding school in the country would contribute substantially to the health and width of outlook of any child from a town school, especially if the care of livestock, the growing of crops, the study of the countryside and the pursuit of other outdoor activities formed the bulk of the educational provision and were handled by specially qualified staff. (Hopkins and Putnam, 1993: 41)

Although this extract comes from the 1944 Education Act, the 1945 Education (Scotland) Act provided a similar suggestion for education specific to Scottish schools. The Scottish Act (1945, Part1, Chapter37, Section3 {1}) provided Scottish local authorities with the statutory powers to "establish, maintain and manage...facilities for recreation and social and physical training". These Acts then

can be considered as providing the impetus for change by bringing the concept of outdoor experiential approaches to education to the fore. The example provided by Halls (1997b: 12) demonstrates both the types of changes that occurred after the 1945 Education (Scotland) Act and the direct links to the broad progressive ideal:

The case of the city of Glasgow, which established a series of residential primary schools which were inspired by ideologies of social welfare. Pupils were drawn from areas of multiple deprivation and spent up to six weeks at a centre where their social and emotional needs were considered to be as important as their more formal academic needs...the relationship and the roles that existed between resident teachers, visiting teachers and domestic staff. In this instance both sets of teachers worked together in delivering the curriculum...this is in keeping with 'progressive' ideas about education where the welfare of the children was seen as indivisible from their more formal education. (Halls, 1997b: 12)

This example further describes not only the relationship between the staff and students but also the differing aims of social education. The latter points of Halls' example reflects the suggestion from Hopkins & Putnam (1993: 49,50) that a "central concern for much of the post-war period was to find appropriate methods for preparing young people for life in a working environment". In summary the Education Act of 1944 and the 1945 Education (Scotland) Act, although not explicitly, began to set the foundations for an outdoor experiential approach to teaching and learning. These Acts can be understood as visible commitments towards the progressive ideal.

Later in 1963 a Report of the Advisory Council on Education in Scotland, although concerned with Primary education, provided an interesting account of how attitudes, within education, were beginning to change. Chapter II, Part 2 Educational Changes, Section 16 of the Report states:

Another major change is the shifting emphasis from merely intellectual training to the development of the whole personality, with a new emphasis on physical and emotional training; and from passive reception and the memorising of facts to the encouragement of each child to develop by its own activity all those gifts it possesses and those virtues to which it is capable of attaining. (Advisory Council for Scotland, 1963: 3)

The 1963 Report builds on the 1945 Education (Scotland) Act. The Report states that the “recognition of the altered outlook and attitude” has become “increasingly evident in the more recent Education and allied Acts affecting school children”, but, never “so broadly and systematically as in the 1945 Act”. Nearly twenty years had passed between the 1945 Act and the Report in 1963, yet it was still cited as a landmark in educational change. The 1963 Report (Chapter IX, Part 1, Para. 79 pp.20) details the criticisms of the curriculum, for example:

both the content of the curriculum and the methods of instruction are traditional; the whole atmosphere is too academic, verbal rather than real, cut off from the living interests of childhood; emphasis is laid on passivity rather than activity. (Advisory Council for Scotland, 1963: 20).

These criticisms reflect the issues discussed in the previous chapter in relation to the various teaching and learning styles. The concerns assert the failure to engage with the student in the learning process, for example the lack of activity and interaction with learning, and the lack of relevance in the learning. The Report states that “there is enough truth in them [the criticisms] to justify us in recommending that the curriculum and methods of the primary school should be thought out afresh” (1963: 20). The 1963 report focused on primary school education. However, there was concern for the education of older children and young adults, especially during their transition from school into the world of work or further education. In summary, the post-war period up to the 1970s saw a commitment to progressive ideals. The transition between school and work emerged as a strong theme, highlighted in both

the 1963 report and in the literature surrounding the Education Act of 1944 and the 1945 Education (Scotland) Act (Hopkins and Putnam, 1976; Halls, 1997a).

The period between the 1970s to the early 1980s saw the future of “outdoor education with its alternative methodological practices” becoming increasingly “optimistic” (Nicol, 2001). Key publications became available during this period, for example *Outdoor Education* (Parker and Meldrum, 1973), *Education and the Mountain Centres* (Drasdo, 1973), *The Character Training Industry* (Roberts, White and Parker, 1974) and *The Adventure Alternative* (Mortlock, 1984). These texts combined a mixture of philosophical treatments of outdoor education (Mortlock, Drasdo) and descriptive, historical and technical aspects of outdoor education (Parker and Meldrum, Roberts et al).

In 1973, Drasdo discussed outdoor education not only in terms of what people were doing for example the activities, but what they were experiencing. This suggests that there was beginning to be a distinction between the physical activity of outdoor education and the developmental experience that they were going through during the course of the activity. Later in 1984, Mortlock commented on this distinction stating, that the educational value comes from the type of experience people have as opposed to the activity. Thus in terms of the education system, outdoor education became more accessible due to the fact that it was beginning to be recognised as a tool or vehicle for personal and social development.

Cheesmond and Yates conducted a major study in 1978 and 1979 in collaboration with Lothian Region and Dunfermline College, Edinburgh. The research project reviewed the status of outdoor education within Lothian Region and considered ways

in which the Region might sustain and develop its provision. Since that research was conducted both authors developed differing views on whether 'outdoor pursuits' (their wording) have a legitimate place in the school curriculum. Yates (1981: 27, 30) made his position clear in the statement, "I can see little justification for including outdoor pursuits as a compulsory part of the school's programme", as he is sceptical that simple participation will "challenge the individual and pose to the individual the need to consider others when engaged in group activity". Cheesmond, argued for inclusion for a number of reasons, for example he believes that it can be considered as a "rural antidote to the stresses of urban lifestyles" (Nicol, 2001: 46).

The opposing standpoints of Cheesmond and Yates have highlighted the problems of a philosophical kind that exist within this field of study. As Nicol (2001: 47) states:

The interface between ontological assumptions about the nature of the world (reality) and the epistemological means by which you come to understand that reality has been central to the history of western philosophy. It is possible that Yates' (1981) search for first principles to justify practice and Cheesmond's (1981) search for philosophy arising out of practice has its origins within this metaphysical domain. (Nicol, 2001: 47)

Nicol (2001: 47) further suggests that it is possible in reflecting upon their collaborative work that both are defending their different positions using post-hoc rationalisation. So Cheesmond begins from the specific and moves to the general, adopting a more inductive approach whilst Yates employs deductive reasoning beginning with first principles, implying that 'outdoor pursuits' will be critiqued and evaluated against a particular philosophical standpoint. This 1979 study and the papers that followed in its wake provided a further insight into both the provision of outdoor experiential learning and the lack of a set philosophical tradition within the

field. The next theoretical treatment of outdoor education provided by Hopkins and Putnam (*Personal Growth through Adventure*) appeared over ten years later in 1993.

During the late 1970s and early 1980s there was one major international peer-refereed journal that was publishing outdoor experiential learning literature, the *Journal of Experiential Education (JEE)*. The JEE was established in 1978 and was supported by the American based Association for Experiential Education. This Journal provided an introduction to the field of experiential education although it was broad in its focus and so did not concentrate solely on experiential learning out-of-doors. Neill and Gray (2001: 58) describe this Journal as “treading a careful line between being down-to-earth enough to appeal to practitioners, yet academically rigorous enough to attract quality thinking”.

In 1981 the UK based *Journal of Adventure Education*, originally set up by Chris Loynes, before being taken over by National Association for Outdoor Education was launched. This publication underwent a transformation in 1983 and emerged with a new title; *Journal of Adventure Education and Outdoor Leadership (JAEOL)*. In 2000, the Journal underwent a further transformation and emerged this time with a new editor and a firm commitment to being a peer-refereed and academically substantial journal. The Journal is now known by the slightly different title, the *Journal of Adventure Education and Outdoor Learning*.

The Australian *Journal for Outdoor Education* was the third major publication to be launched within the last decade. The AJOE was launched in 1996 and supported by the Australian Outdoor Education Council. Over the years it has made “a very worthwhile contribution to the field” and it is being seen as an “increasingly relevant

and respected publication in other countries” (Neill and Gray, 2001: 62). The development of these three major Journals has provided an international platform for dialogue, research, thinking and understanding in this field that will go some way towards creating a strong philosophical basis for future studies.

TVEI story

Getting back to the influence of outdoor experiential learning in terms of mainstream education, the next formal introduction of a predominately experiential approach to education was the launch of the Technical and Vocational Educational Initiative (TVEI). TVEI was a “curriculum development project”, which sought “to explore ways of making the experience of young people in schools more relevant and useful to them” (Beck and Black, 1988: 5). TVEI placed a strong emphasis on student-centred learning by encouraging students to develop problem-solving skills as well as to gain a better appreciation of the industrial and commercial base of society. In terms of the curriculum TVEI was introduced to create a “better-balanced general education, moving away from authoritarian modes of teaching towards student-centred learning” (Beck and Black, 1988: 5). In 1983 a pilot programme of TVEI was introduced in Britain, this was extended much more widely in 1987; and by 1990 over 4000 colleges and schools were participating (Hopkins and Putnam, 1993: 193).

The first TVEI project in Scotland began in 1984. Since then every Local authority secondary school and Further Education College in every region has been influenced by it (Devine, Minguard, Black and Fenwick, 1994). In 1993 the TVEI unit of the Scottish Office Industry Department conducted an evaluation of the development of the transferable and personal skills that had been given particular prominence by

TVEI, for example communicating, working individually, and in teams, problem solving, taking responsibility and enterprise (Devine et al, 1994).

The research was conducted in two ways, firstly using a National Questionnaire survey, which was administered to secondary schools, further education (FE) colleges, higher education (HE) institutions and employers. Secondly a small number of staff and pupils were involved in both group and individual interviews and were invited to complete an edited version of the national questionnaire. The study provided sufficient evidence to “show that the skills which TVEI identified as the focus for this study are among those valued by staff in FE and HE institutions and employees” (Devine et al, 1994: 51). They concluded that:

Comparisons with pupils in 1993 and 1998 indicated that more pupils felt at ease in their ability to communicate, to work in teams, to solve problems and to use technology. More than three-quarters of pupils also believed that school was good at helping them develop each of the skills. (Devine et al, 1994: 51)

Therefore there is some evidence to suggest that schools have been successful in helping pupils to acquire the ‘TVEI’ skills. An evaluation of the Scottish pilot projects of the TVEI, conducted by Paterson (1993: 47), considered the programme in terms of “examination results, the propensity to truant from school, staying on in full-time education beyond the minimum leaving age and (for those who left education) gaining employment or a place in a training scheme”. His study concludes that:

None of the average effects of the TVEI is large, but the main conclusion is that there is no uniform effect, and that it provided diverse models for educational practice. The diversity was only partly intentional. Being able to learn from the initiative depends on being able to explain that diversity. (Paterson, 1993: 47)

Paterson's paper does not include data on the policies and practices of the individual projects or schools and therefore does not offer any explanation for the diversity. Despite its noted success TVEI has since been phased out of secondary education, this process occurred in the late 1990's.

Although the TVEI approach was essentially experiential, it did not involve the outdoors and the countryside as a specific context for learning. Currently there is one major educational initiative that wholeheartedly adopts an outdoor experiential approach to teaching and learning.

Summer Activities for 16 year olds.

The Summer Activities for 16 year olds initiative was introduced and implemented during the second year of this study (2000). The initiative has very similar objectives to the Aiming Higher with Outward Bound programme and it appears to be consistent with an experiential approach to learning. The creation and implementation of the Summer Activities programme was a political decision, with no recommendation that this was the best way to deliver government objectives. Prior to its conception there was no strong evidence to suggest that the Summer Activities for 16 year olds programme might achieve its aims.

This was similar to the development of the Aiming Higher with Outward Bound programme, the origins of which can be traced back to the Director of Education's personal experience of an Outward Bound programme in his youth rather than supportive research findings. The Summer Activities programme and the Aiming Higher programme were both driven by a belief that the curriculum would benefit from an increased outdoor experiential approach. Consequently it can be understood

that this study is dealing with an important aspect of contemporary educational debate.

With the support of the DfEE the Summer Activities programme was introduced during Summer 2000 and its subsequent evaluation was published in February 2001, with a review of progress published in March 2002. The programme was aimed at sixteen-year-old school leavers and offered a range of projects, predominately based around outdoor activities with a residential element. Other projects offered included information technology related activities; work experience; community and environmental projects; football coaching; introduction to the armed forces; construction skills and indoor activities such as fashion design, drama, music, discussion forums, *curriculum vitae* design.

The overall aim of the DfEE programme was:

To help the transition from secondary school to adult life, and to enhance a range of personal and social skills among young people who might otherwise lose contact with education, employment and training. In addition to the transition aims of the programme it also sought to enhance a range of personal and social skills among participants including self-esteem, confidence, team working, leadership skills, and to broaden horizons.
(Segal, Quincy and Wicksteed Limited (SQW), 2001: 1)

The results of the progress report state that outdoor education and adventure activities were valued for their ability to facilitate group formation and group working. SQW found that this approach “encourages social interaction and facilitates the development and display of a number of positive social actions including responsibility for one’s self and for others, peer group learning, offering and receiving encouragement” (2001: 1).

Of the core programmes or activities on offer, some students were given a choice of activity, some were encouraged to say what they wanted to do and some were given the opportunity to organise events for themselves. In each instance the participants were encouraged to “take responsibility for deciding what to do, or how to do it, at some stage during the project” (SQW, 2001: 2). This style of teaching and learning whereby the students are encouraged to take responsibility is very similar to the progressive ideal discussed earlier.

Originally it was intended that 3000 young people would participate in the programme. However, only 1460 took up the opportunity (SQW, 2001). The evaluation suggests that there was a shortfall of participants for two reasons, firstly “the lack of time to set up the programme” and “problems with fledgling partnerships” between the organisations that were delivering the activities (SQW, 2001: ii).

The aim of the initiative was to achieve impacts either in “terms of the transition from school” or “in terms of greater social and personal skills”, and “preferably both” (SQW, 2001: ii). The evaluation concludes that the programme did have an impact on young people’s plans.

The programme has benefited different groups of people in different ways. In particular, less motivated young people reported greater impacts in terms of transition plans than the more motivated. There was little difference regarding the gender of the participant. For a small minority the programme appeared to have little positive impact. (SQW, 2001: 11)

These findings are interesting as they demonstrate the difficulty that faces any researcher when trying to quantify the effect of an intervention on an individual’s perception of self or ability. That is the experience is often very different for each

person and therefore interpreted in a variety of ways. The Summer Activities initiative is similar to the Aiming Higher with Outward Bound programme as they both focus specifically on young people who are considered to be ‘underachieving’ in one way or another. The Summer Activities programme is targeted at 16 year old students who are leaving formal education and who have no definite plans for the future, whereas the Aiming Higher with Outward Bound programme focuses on 14-16 year old students who are still in full time education.

Although the target groups differ in some respects, the rationale behind both of the programmes is fundamentally similar. This is an important point as it demonstrates that both local and national Government are looking to broaden the education system in order to increase the variety of opportunities for learning that are currently available to students.

The Summer Activities programme has been introduced here as a further example of one way in which an increased outdoor experiential approach to teaching and learning can be incorporated into mainstream education. Although the first visible commitments to this approach can be traced back to the 1944 Education Act, they can still be seen within contemporary educational debate. However, the case for such an approach has not developed since its introduction over sixty years ago. The programmes developed by both local and national government have not been founded on any strong evidence and so the question, ‘how effective is an outdoor experiential approach to learning?’ still remains unanswered.

How effective is an outdoor experiential approach to learning?

Generally speaking, the supporting evidence from previous research is often fragmentary, anecdotal, and based on studies involving small numbers and restricted

populations, (Barrett and Greenaway, 1995; Hattie, Marsh, Richards and Neil, 1997). The role of research throughout the history of outdoor experiential learning appears to be tenuous and infrequent. To date there have been few substantial research articles to reflect the growth of, and the demand for, outdoor education programmes. Hattie et al (1997) consider the increase in provision of courses by one provider of outdoor educational experiences; *Outward Bound*:

There has been a marked increase in the number of adventure programs during the past 40 years. Over 200 *Outward Bound* adventure based programs were operating in the United States by 1975 (Ewert, 1983). A decade later there were 542 wilderness-related courses offered by U.S. universities (Hendee and Roggenbuck, 1984), and in 1994 over 40,000 students participated in *Outward Bound* programs alone worldwide. (Hattie et al, 1997: 43, 44)

The earliest research in the field provides the reader with anecdotal evidence, and a belief or faith in the system that appears to have no grounding in factual evidence. Hattie, Marsh, Richards and Neill (1997) conducted a meta-analysis⁵ of 96 studies to examine the “effects of adventure programmes on a diverse array of outcomes such as self-concept, locus of control and leadership” (Hattie et al, 1997: 43). Their work which extensively reviewed past research within outdoor education, suggested that during the 1970s the “research arena was flooded with 'soft' modes of evaluation” (Hattie et al, 1997: 46). These took the form of narrative accounts, testimonial support, passionate rhetoric and anecdotal examples, which did not provide a comprehensive account of the outdoor experience, and were often viewed subjectively. Roberts, White and Parker (1974: 152) advise that to “make sense of the movement involves initially searching behind the schemes’ manifest goals, to

⁵ [Meta-analysis] summarises the results of large numbers of quantitative studies to establish whether or not they show a particular variable to have an effect’ (Bryman, 1989: 228).

unravel the often more lucid private visions of course organisers, the various motivations of sponsors, and the satisfactions that the trainers seek". This would suggest that there was little attempt at that time to investigate the fundamental issues underpinning the experience of the individual, in terms of course content, instructor influence and the role of provider.

Since the 1970s Hattie et al (1997: 46) reveal that there have been "piecemeal attempts to look at outcomes, usually involving one-off studies using before-and-after comparisons with small samples and ignoring interesting independent variables such as programme length, instructor experience, and differences between programs". Therefore the research that had been conducted was mainly concerned with the outcome of the programme rather than the process that the students went through.

Neill and Richards (1998) conducted one of the most significant pieces of contemporary research. They published a summary of recent meta-analyses that reviewed emerging trends in the field of outdoor education and discusses their implications for future practice. Two separate meta-analyses had been conducted prior to the Neill and Richards publication, Cason and Gillis (1994) and Hattie et al, (1997).

One of the most prevalent claims apparent in previous research, and a conclusion from the Neill and Richards (1998: 2) study is that, "outdoor education programmes make a valuable contribution to a person's sense of him- or herself however there has been very little scientific proof for or against the numerous benefits claimed". This reflects the findings of Hattie et al (1997: 45) who "were struck by the number of research papers that read more like program advertisements than research". Hattie et

al (1997: 45) reveal that, where there was “some attempt at evaluation beyond anecdotal evidence, the analyses were rarely more than correlational”.

Other studies such as ‘Why Adventure?’ (Barrett and Greenaway, 1995) consider the educational processes and claimed outcomes for Outdoor Education experiences through a detailed survey of process and outcome research. The ‘Why Adventure?’ report was commissioned by the Foundation for Outdoor Adventure to collect and review UK research however it does include research from abroad. In his research summary, Greenaway (2000: 2) states that the report determined that “no research has been found which systematically traces the various ways in which adventure affects individual young people’s development”. It considered Sport, Physical Education and Outdoor Education in one section, suggesting that “whilst the developmental value of sport is taken for granted, that of outdoor adventure remains in question, largely because a higher standard of proof is demanded”. They believe that “this is possibly because outdoor adventure is a relative ‘newcomer’, and because larger claims are made about its developmental benefits” (Greenaway, 2002: 2). This ‘proof’ is still lacking today. A consequence of this may be the way in which programmes such as Aiming Higher with Outward Bound, are regarded by other educationalists; they view the programme as “less orthodox” because it has been founded on a “belief” in the value of outdoor experiential learning (NLC, 1998a: 1).

Barrett and Greenaway conclude their report with a plea for “useful research”, which they hope will encourage further investigation into “how outdoor adventure ‘works’” (Barrett and Greenaway, 1995: 3).

Barrett and Greenaway conclude their report with a plea for “useful research”, which they hope will encourage further investigation into “how outdoor adventure ‘works’” (Barrett and Greenaway, 1995: 3).

[Barrett and Greenaway] believe that researchers would be better able to provide meaningful evidence of effectiveness, and more reliable guidance about improving practice, if they ‘try harder’ to bridge the gap between ‘process’ and ‘outcome’ studies. This in turn would help to establish closer links between research and practice. (Greenaway, 2002: 3)

This finding is similar to the outcome of Neill and Richards’ meta-analytic study as they also noted the distinction between process and outcome. They conclude that empirical research evaluation studies have tended to lack descriptive detail about how the programmes were conducted (Neill and Richards, 1998: 6). According to Neill and Richards, all three meta-analytic studies revealed a “lack of detail which limited the extent to which further insights about program processes could be gained” (1998: 6). They suggest that “future empirical studies should provide more information about the participants’ background, the programme content and mode of delivery and any other variables that may influence the programme outcome” (1998: 6). This is not a new finding; others in the field have highlighted the need for future research to focus on the process of the experience as opposed to concentrating solely on the outcome (Hopkins, 1985; Cason and Gillis, 1994; Barrett and Greenaway, 1995). Most recently Nicol (2001) noted the same point, which suggests that it has still not been addressed. Comprehensively, these findings suggest a need for more substantial, reliable and credible research in the field.

Gaps to be filled...

Hattie et al (1997) provide the reader with a detailed set of recommendations for future research evaluations of adventure programmes. The recommendations include: using dependable measures; ensuring reasonable sample sizes; ensuring tests are relevant to the desired outcome; providing clear documentation and analyses relating to appropriate background variables; establishing the influence of the instructors; investigating interaction between the major variables; ensuring the nature of the programme is well documented and ensuring that consideration is given to alternative 'test' designs.

One of the aspects of the work carried out by Hattie et al (1997: 77) that was particularly relevant in terms of providing further justification for this study, was their claim that, "research in adventure programs can provide many insights which might inform 'regular' educational contexts". Hattie et al (1997: 77) suggest that, "adventure programs have been conducted as if they operated in isolation from the educational world". The recommendations from Hattie et al (1997) reflect the suggestions for future research provided by many other researchers in the field (Maruyama, Rubin and Kingsbury, 1981; Ewert, 1983; Marsh et al, 1986; Cason and Gillis, 1994; Barrett and Greenaway, 1995) and are extremely important and relevant to the future of research in outdoor education. The North Lanarkshire case study evaluation provides a genuine opportunity for research to be conducted on an outdoor experiential learning programme that has been developed as part of a mainstream educational initiative, therefore addressing some of the recommendations from previous research.

To ensure originality and to build on the findings and recommendations of past work, future research must consider issues such as sample size, reliable measures and consideration of the process as opposed to focusing solely on outcomes and evaluation. Therefore, the implications for the evaluation of the Aiming Higher programme focus on the selection of dependable measures and ensuring that sufficient attention is given to both the process and the outcome.

Summary

This chapter has sought to narrow the focus of this study in order to prepare the base for the case study evaluation. So far, consideration has been given to the broader experiential approach to education which has been refined into one specific approach; outdoor experiential learning. The broad conceptual development of this approach has been previously discussed in terms of the theories of learning and understanding of Dewey, Montessori, Freire and Gardner. In this chapter the broad practical and historical developments of this approach have been discussed in terms of approaches to teaching and learning. Finally, following a review of the literature both from within the UK and abroad, outdoor experiential learning was examined in light of past research in terms of its worth; that is whether it is actually doing what it has claimed to do. North Lanarkshire Council's Aiming Higher with Outward Bound programme, which has been running in 26 mainstream secondary schools since 1997, offered a case study as an example of one way in which an outdoor experiential approach to learning could become part of mainstream education. The case study evaluation provided an opportunity to consider the effectiveness of this type of programme specifically in terms of North Lanarkshire Council's aims and more generally in terms of the possible future role of outdoor experiential learning in mainstream education.

Chapter Four

AIMING HIGHER WITH OUTWARD BOUND: THE RATIONALE

Introduction

This chapter introduces the case study by considering the Aiming Higher programme from the perspective of North Lanarkshire Council and Outward Bound. The chapter reviews their aims and objectives, thus providing an overview of the initiative and important background information regarding the rationale behind the programme's development.

The Raising Achievement initiative

The communities within North Lanarkshire Council (NLC) have, over many years, suffered from socio-economic deprivation, which has resulted in high levels of unemployment, limited aspirations and an increase in deprivation that has affected almost every aspect of the community (NLC, 1998a). According to literature published by North Lanarkshire Council, the area was recently rated as the second most deprived Local Authority in Scotland (NLC, 1998a: 1). The Council believe that this economic and social disadvantage has resulted in the young people and adults who live in the area, failing to reach their full potential. This belief is supported by recent indications, which suggest that:

Despite some encouraging results in national examinations at Higher Grade, young people in North Lanarkshire are performing below the national average... The differential will increase unless positive action is taken by the Education Department to raise levels of aspiration and achievement, in tandem with the efforts of other Council departments and partnership agencies to revitalise the local economy and promote social inclusion. (NLC, 1998a: 1)

To combat this differential the Education Department developed the Raising Achievement initiative. The initiative is characterised by the following aims:

- A determination to break the links between deprivation and underachievement
- A belief that everyone had the right to succeed
- A broad definition of achievement, related to the development of the 'whole person'
- A belief that the development of self esteem, motivation, determination and aspiration is critical to success
- A need to value a whole range of social, creative, cultural, sporting and academic experiences equally
- A strategy that targets resources, guarantees a range of experiences and monitors outcomes.

(Fenton and Goldman, 1999: 1)

One of the key priorities of the Raising Achievement initiative as identified in the Council's corporate plan (1998a) was to raise levels of educational attainment. A strategic approach was adopted by the Education Department in order to tackle this issue whereby "apparently disparate initiatives, such as community education, psychological service, local business and the personnel section, were brought together in order to provide an overarching commitment to achievement" (NLC, 1998a: 6). Representatives from each sector formed a working group to ensure that the resources within the community were deployed and used to their best advantage. The whole strategy was premised on the belief that:

[Education is]...instrumental in breaking the cycle of disadvantage. It is imperative that the department of education provides a curriculum and services which challenge and enable young people and adults to achieve whatever they are capable of irrespective of socio-economic background, gender, race or levels of ability or disability. (NLC, 1998a: 1)

In terms of actual provision the Raising Achievement initiative has many outlets such as, Easter Schools, Summer Schools, homework clubs, various supported study projects and the Aiming Higher with Outward Bound programme.

North Lanarkshire Council perspective

The word 'achievement' is used repeatedly throughout NLC's Aiming Higher literature, however its meaning in this context is unclear. Before a discussion surrounding the aims of the programme begins, I will explore and discuss their understanding of this term.

Achievement

North Lanarkshire Council state, that whilst "a dictionary definition of achievement encompasses elements which include; 'success', 'performance', 'accomplishment' and 'winning' in broad terms, the focus within education on examination results and 'league tables' in recent years has arguably skewed the ways in which both educators and the wider community view the term" (NLC, 1998a). However, they want their definition of achievement to do justice to the "rights of diverse groups of young people and adults to develop their talents within an educational context" (NLC, 1998a: 6). They clarify their position in the following statement:

Clearly if achievement is to be raised in a way which contributes to the fulfilment and success of the individual in later life, and hence to the social and economic regeneration of the community, then the definition of achievement adopted must extend beyond that which can be measured by traditional means. (NLC, 1998a: 4)

They believe that achievement so defined will need to be supported in a variety of ways, “with an emphasis on the development of the whole person, and on a supportive, positive learning environment” (NLC, 1998a: 4). It would appear that North Lanarkshire Council have adopted a holistic approach to achievement, which considers the development of the whole person. They have identified the issue of achievement as one that does not have its roots solely in the field of education, but one that has a strong connection with a variety of disciplines. Hence their strong relationship with the Early Years Service, the Community Education Service, the Psychological Service, the Network Learning Support Service, the Education Resource Service and other agencies which they believe “can be seen as central rather than as peripheral to the raising of achievement” (NLC, 1998a: 4). Consequently, a great deal of emphasis is placed on the importance of personal and social development, social and vocational skills, work experience and careers education, as well as other areas of the secondary curriculum.

Having gone through this process of identifying components of success and unearthing what they consider to be the determinants of achievement, North Lanarkshire Council arrived at a conclusion:

Achievement, it was concluded, had to be recognised and supported over a wide range of activities and contexts. Characteristically, it can be seen as the outcome of effort, learning, perseverance, self-belief, and encouragement. It involves the individual experiencing challenge, making discoveries and reaping the rewards, either intrinsic or extrinsic, of effort and application. A five year old learning to tie his shoelaces and achieving eventual success after much effort, or an eight year old child with special needs writing her name for the first time may be of equal or even greater significance to the self-esteem and learning patterns of those children as is the acquisition of five Standard Grade passes at credit level to the fifteen year old or the award of an Open University Short Course Certificate in parenting skills to an adult returnee. (NLC, 1998a: 5)

In short, NLC have a broad definition of achievement. They believe that achievement can be understood in terms of socio-economic regeneration and raised aspirations amongst the wider community (NLC, 1998a: 5). In terms of the broader aims of the initiative and the long-term goals of the Raising Achievement initiative NLC are looking towards developing the normal school curriculum to consider alternative ways of raising achievement. They state that the initiative offers a “less orthodox” approach but that it has emerged out of “growing evidence that the development of self-esteem and personal confidence is the key to raising achievement” believing that “it offers an exciting opportunity to help young people develop in ways which the normal school curriculum is unlikely to provide” (NLC, 1998a: 1).

NLC recognise that although they are advocating an unconventional approach, which is not regarded as part of a ‘normal school curriculum’, they still believe that a great deal of emphasis must be placed on national examinations. They state (NLC, 1998a: 5) that “exam results are the traditional indicators of academic ability and a determining factor when seeking employment and further education”. However, they clearly state that a “new emphasis must be given to the development of self-esteem, motivation, determination, self-discipline, and high aspirations” and believe that “opportunities must be found within the educational system for students to experience achievement and success at whatever level and in whatever context is appropriate” (NLC, 1998a: 5). To this end, they have introduced a whole range of learning experiences, - social, creative, cultural, sporting, academic, moral, and spiritual. The broader Raising Achievement initiative has been premised upon Gardner's (1984) theory of Multiple Intelligences (discussed in Chapter Two). They have adopted the principles of Gardner's theory and have sought to include a variety of learning

approaches in order that each student experiences a degree of success or achievement in their school career.

More specifically the Aiming Higher with Outward Bound programme has stemmed from the broader initiative to consider those students who are ‘underachievers’ (for example in terms of social skills, or self-confidence). The objective of the Aiming Higher programme then is to provide an opportunity for students to achieve and succeed in some area of their life. In terms of outcomes they are looking for short-term individual achievement such as improvement in self-esteem and increased self-awareness, however they were also interested in longer-term achievement in relation to socio-economic improvement for example, urban regeneration, or ‘forged community links’. Therefore, their understanding of achievement is twofold, as it can be defined in relation to their short-term goals for the individual and also in relation to their long-term goals for the community. As each definition impacts on one another both must be considered in order to gain a comprehensive understanding of the aim of the programme and their definition of achievement.

In terms of this study I have focused on evaluating the initiative's success in relation to its short-term goals, which are concerned with raising individual levels of achievement through a positive increase in individual self-perception.

Is this a ‘good thing’?

North Lanarkshire Council have premised their programme on the belief that raising students’ levels of achievement is a ‘good thing’. They believe that those students who they determine as ‘underachievers’ will benefit from ‘increased self-esteem’ and ‘increased self-concept’ as a result of their involvement in their programme.

The term 'self-esteem' can be understood as relating to the "value we place upon ourselves" (Fontana, 1995: 76), whilst self-concept refers to the actual value that we hold. As Rogers (1982: 183) describes it, "the self-concept is what we are like, while self-esteem is the degree to which we like what we think". In light of these definitions it may not always be desirable to increase self-esteem. For example if a student, whose skill lies in stealing cars, takes part in the programme, would it be a 'good thing' to enhance his self-esteem and raise his level of achievement? Would his involvement in the programme leave him more confident in his ability to steal cars?

Although the previous scenario is not a desired aim of NLC's programme it is reasonable to assume that an increase in self-esteem may not always be channelled into activities that lead to (socially acceptable) positive outcomes. To counter this issue, the structure of the outdoor experiential learning style used in the Aiming Higher programme would allow any students who may not develop in a 'desirable' way to be guided through the experience. The role of the follow-up work within the students' school environment may be used to ensure that the development is channelled into positive activities and related to 'desirable' areas of their home and school life. As Dennison and Kirk (1990: 1) suggest that if experiential learning "is to be effective, it must be both well organised and purposeful, because the intention is to assist students to construct their own learning cycle, which only they can control". So the process of experiential learning and the post-experience work should help the students to use their 'increased self-esteem' positively and constructively. During the course of this study this 'issue' did not arise and there were no reports of negative outcomes, of this nature, associated with the programme.

The question....

So the question remains do these outdoor experiential programmes 'work'? In terms of the Local Authority's involvement and their aims the question would be: are the students "challenged to develop in self-esteem and to reflect positively on their goals and aspirations?" (NLC, 1998a). In terms of the study the research questions are:

- Is the programme [Aiming Higher with Outward Bound] providing an opportunity for development?
- Does the process, that is, the way in which the course is delivered at Outward Bound, support positive development?
- What is the impact of the programme in terms of the 5-14 National Curriculum Guidelines?

Before these questions can be answered the programme must be considered from the provider of the outdoor experiences perspective.

Outward Bound perspective

Outward Bound provide the residential outdoor experience for approximately 1000 North Lanarkshire students over the course of fifteen weeks (October to February) of each year. Over winter the Outward Bound centre at Loch Eil is generally quiet therefore they have been able to offer the course at reduced rates to NLC. This situation suits both parties as the centre receives guaranteed 'work' during a quiet time and the Council get the 'course' at a lower cost.

It must be stated that Outward Bound is not the only organisation that use the outdoors to enhance and promote personal and social development; there are a great number of organisations all with similar aims using the outdoors as a vehicle for learning. NLC selected Outward Bound as the provider before the evaluation of the

programme began. The Director of Education for NLC, Michael O'Neill can still remember his own experience on an Outward Bound course as a child and firmly believes that it had a very positive impact on his own personal and social development, therefore he strongly believes in this type of programme and Outward Bound. It would appear that the main drivers behind the choice of provider were firstly this previous link with Outward Bound and secondly the costing agreement reached between both parties.

Currently NLC owns and maintains its own Outdoor Centre at Kilbowie for children of primary school age. Over the course of my research it became apparent that many of the students who were taking part in the Aiming Higher programme had experienced some form of residential outdoor experiential learning at Kilbowie whilst at primary school. This is interesting given the appearance of substantial reduction in residential provision since the structure of Local Authorities changed in 1996. Nicol (1999) notes that there are now nine remaining Local Authority residential Outdoor Education Centres compared to fifteen identified by the Scottish Advisory Panel for Outdoor Education in 1996.

Before the research questions are explored, a brief history of the development of Outward Bound and their contribution to the education of young people is provided in order that they can be understood as an organisation distinct from the Aiming Higher programme. Other programmes such as the Moray Sea School (Fletcher, 1971: 11) preceded Outward Bound, however as Outward Bound is the only 'outdoor provider' in this case study I have focused solely on its history and development.

The founder of Outward Bound, Kurt Hahn, developed the original Outward Bound programme as a way of preparing young British seamen for naval warfare. The original month-long courses were designed to “accelerate the development of independence, initiative, physical fitness, self-reliance, and resourcefulness” (Hattie et al, 1997: 44). Others describe the course as training young men to “realise their potential and to develop a stronger character and will to survive” (Marsh et al, 1986: 196). It was the success of these initial courses that prompted Hahn to develop the Outward Bound School.

The Outward Bound School was originally established in Scotland and then Wales. However, its success soon spread with schools being set up on five different continents, Hattie et al (1997: 44), Parker and Meldrum (1973: 45-46), Roberts et al (1974: 34), Fletcher (1971: 25-34). Wilson (1992: 34) wrote that after nearly forty years, Outward Bound had “unquestionably made a secure place for itself in Britain” with its name having “become a household word”.

Fletcher, conducted a study (1968-1969) into the work and influence of Outward Bound Schools, his research report was published soon after. In the report he describes the breadth and depth of the Outward Bound aim, “which is no less than the development of the whole person” (1971: 113). He describes how “skills and experiences are used not as ends but as means for producing personal development, by the contriving of a series of experiences which, in their difficulty, hazard, and often unpleasantness call for powers of the will and decision” (1971: 113). Roberts et al (1974) describe how a warden at one Outward Bound centre interpreted the aims of the centre:

Within any individual there are certain latent possibilities that can be triggered off. We provide a framework within which they may flower. People's conceptions of themselves may become more realistic. There can be an increase in wisdom and maturity. (Roberts et al, 1974: 66)

This description is similar to that provided in a report from the Devon Outward Bound school, where they state that “the main objective is to develop the character through adventure afloat, in the mountains, or through any medium where natural forces are present to produce the inspirations, challenges and obstacles essential to this experience” (Parker and Meldrum, 1973: 16). Currently, a typical Outward Bound course centres on the development of personal qualities such as, “trust, confidence, compassion and tenacity with elements of success and having fun” regarded as essential parts of every course (Outward Bound (OB)-UK website, 2002).

The Outward Bound website describes the simple formula that every course follows:

Instructors give new skills, and the chance to practice and refine them, before inviting young people to take more responsibility for themselves. Finally those skills are tested in the mountains or at sea as they take control of their own expedition, and their own lives. (Outward Bound-UK website, 2002)

One constant over the last 60 years of Outward Bound is their belief that outdoor adventures make a significant contribution to the development of young people (OB-UK website, 2002). North Lanarkshire Council wholeheartedly accepted the claim that “skills and attributes such as leadership and teamwork are critical if young people are to be equipped for the challenges they face whilst at school” (NLC, 1998b: 1).

Outward Bound believes that their courses provide the opportunity for “self discovery” and consequently place a great deal of emphasis upon understanding the self (OB-UK-website, 2002). This issue is considered in greater depth in the

following chapter when the programme design and specific activities are discussed in terms of their use as a vehicle for personal and social development.

Having considered the role of Outward Bound and their use of the term 'achievement', it would seem that they appear to focus on the individual gains made by achieving set personal goals. In terms of Outward Bound's involvement and their aims, the question would be 'do their programmes provide an opportunity for personal and social development'? This relates to their concern with the course content and whether they as providers of the outdoor experience are delivering a successful programme.

Having considered the programme from the perspective of NLC and Outward Bound I have a clearer understanding of their individual roles in the process.

The investigation into the term 'achievement' revealed that it is the elements involved in the task and how they relate to the individual that determine the scale of the achievement. For example, the student who attends Outward Bound and who achieves success on a raft building activity may not be ready to achieve instant academic success and contribute to social and economic regeneration on his or her return from the programme, however it is hoped that over time these longer term aims will be met through continued support for the programme from both the schools and the community.

Chapter Five

AIMING HIGHER WITH OUTWARD BOUND: THE PROGRAMME

Introduction

This chapter builds upon the last by examining the selection process used and considering the course content. In short this chapter considers who goes to Outward Bound and what happens when they get there.

One of the facets of the Aiming Higher programme is that it aims to provide students aged between 14-16 years of age with the opportunity to take part in a five-day residential personal and social development course at the Loch Eil Outward Bound centre near Fort William. Beginning in 1997, the Outward Bound centre has provided 15 one-week long programmes of activity during October to February each year. In total 26 mainstream secondary schools and four special schools are involved in the programme.

Although the programme has been developed in each of the special schools within the area, I felt that it was beyond the scope of this study to include them within the evaluation. I did visit each school (both mainstream and special schools) at the start of the study to meet with the Head Teachers and Outward Bound Co-ordinators in order to make an informed judgement as to how I could combine the schools into the research design. After much discussion it was decided that it would be better to consider the special schools as a single case study separate from this evaluation for two main reasons. Firstly in terms of the logistics, for example there are only a limited number of students who are physically able to attend the course therefore the sample size would be limited and not comparable with the mainstream students, and

secondly in terms of the research techniques used, for example, the majority of the students would be unable to complete the self-report instrument.

There is an Outward Bound Co-ordinator within each of the 26 mainstream secondary schools involved in the programme. The Outward Bound Co-ordinators are self-selected members of staff who act as the liaison between the Education Department, Outward Bound, and the school. Every year the Education Department produces a 'Co-ordinators File' that is distributed to each of the Co-ordinators. The Co-ordinator's file includes information concerning the implementation of the programme and the procedures for the selection of the pupils and accompanying staff.

Who gets to go to Outward Bound?

Approximately 1000 pupils from a possible 4000 are selected each year to attend Outward Bound. The Co-ordinator's file suggests that the selection criteria should be somewhat dependent on the school's judgement:

Places are being allocated to schools on the basis of the school roll and on the percentage of students entitled to footwear and clothing grants. Students should be selected on the basis of the school's judgement of their potential to benefit from such an experience, with the deprivation factor taken into consideration in arriving at this judgement.

(NLC, 1998b: 2)

Clothing grant figures are regarded as a measure of deprivation and were, therefore, used to calculate the number of places made available to each school. The clothing grant figure is calculated as a percentage of the total clothing grant received throughout NLC. Once the places have been allocated the appropriate number of students need to be selected to fill them. NLC highlights three possible selection criteria that could be used to select students for inclusion on the programme. These guidelines provide the schools with issues to consider when choosing students to

attend Loch Eil. However each school is given the liberty of deciding how to select their students and whether or not to adopt the principles suggested by the Education Department. The criteria proposed by NLC are:

- Levels of confidence and self-esteem (and hence, overall achievement) might be significantly enhanced by participation in the programme.
- Entitlement to footwear and clothing grant (if known), or general family circumstances which might indicate unrealistically low self-esteem /aspirations.
- Student will be able to cope (with support and encouragement) with being away from peer group, at Loch Eil, for a week, and will be able to benefit from the opportunity on offer. (NLC, 1998b: 14)

To determine the exact selection procedures that were and are used when selecting their students, semi-structured interviews were conducted with each of the 26 OB Co-ordinators. These interviews acted as a public relations exercise as they provided an opportunity to visit each school and in the process of doing so introduce both the research and the researcher to each Co-ordinator. These visits helped the Author to better understand the area and therefore the rationale behind the programme.

The interviews were conducted at each of the secondary schools at a time and date chosen by the Co-ordinators and lasted for approximately half an hour in each case. The data collected were coded and initially presented in the form of a short paragraph on each school, detailing their selection procedure. The data were then converted into a matrix (Table 5.1).

Table 5.1 Selection Process Matrix

School	Nominated by				Selection criteria						
	Teaching Staff	Guidance Staff	Co-ordinator	Self	Guidelines	Interview	Professional Judgement	Physical Fitness	Behaviour	Other	
1*	#	#	#		#	#			#		
2		#	#		#						
3		#	#		#						
4*		#	#				#				
5		#	#	#			#				
6	#	#	#								
7		#		#	#		#				
8*		#		#					#		
9	#	#	#		#						
10		#			#						
11	#	#			#		#				
12*		#			#		#				
13	#	#			#		#				
14	#	#			#						
15	#	#			#			#			
16		#	#		#						
17	#	#				#					
18		#		#			#			#	
19		#	#	#	#		#				
20		#	#				#				
21		#	#	#	#				#		
22	#	#			#						
23	#	#	#		#						
24*	#										
25		#	#		#						
26		#	#								
Total	11	25	12	6	17	2	10	1	3	1	

* sample schools

The matrix and the paragraphs provided an accessible form of data, which gave both an overview of the process and detailed accounts of each individual procedure.

What is the selection procedure?

The first question concerned the role of the Outward Bound Co-ordinator and their understanding of their subsequent tasks and duties. It became clear that the Co-ordinator was primarily concerned with the administration and logistics involved in organising the Outward Bound programme within their secondary school. The Co-ordinator acts as the main link between the Education Department and school, therefore they liaise externally between their school and the Education Department and internally with the other members of staff, parent groups and pupils. They provided similar answers to this initial question, giving replies such as:

- Very much a management role, an overview
- Liaising with the rest of the staff in the school and with the targeted pupils and parents

The second question concerned the aims of the programme. Once each of the responses had been read they were placed into categories that dealt with similar themes. Four themes emerged which reflect the main aims of the programme:

- Providing an opportunity to pupils that given their home and personal circumstances, they might not have otherwise had.
- Broadening a pupil's horizons
- Bringing a pupil out of themselves
- Giving a pupil a boost in whatever area they feel that they are lacking for example self-esteem, self-confidence or social skills. (OB Co-ordinators, personal interview, 1999)

The final part of the interview focused on the selection process used in each school. Due to the variety of responses, this part of the investigation proved to be the most time consuming in terms of data analysis. It had been envisaged that a 'definitive selection process' would have emerged from the sample responses. However, due to the disparate nature of the data this was not feasible.

Summary of the selection process

This investigation was conducted to gain a better understanding of the various selection procedures employed by each secondary school. The data gathered demonstrated that although each secondary school used a different process, the principles behind the methods were invariably similar. Almost all of the Co-ordinators relied heavily upon the professional judgement of the 'Guidance Team' within the school and their extensive background knowledge of the pupils. It was evident that a host of people, including, Guidance staff and Heads of Department were involved in the selection process, so the task never fell upon a single person. A team approach was adopted with various meetings, discussions and consultations involved at select points throughout the process.

The guidelines within the Co-ordinator file provide the schools with issues to consider when choosing pupils to attend Loch Eil. Although the interviews show that the schools employed a variety of strategies, the guidelines were not used in any of the secondary schools as the sole method of selection. For example in all schools, the programme co-ordinator consulted with guidance staff, while in almost half the schools all teachers are invited to nominate students. In six schools students were able to put themselves forward for selection. The issue of 'student behaviour' was cited as a selection criterion in only three schools and physical fitness in just one.

Although each student arrives at Outward Bound having gone through a different selection procedure, they will all go through the same process during the residential week. Even though certain activities and experiences will be individual to each student, the nature of the course will remain consistent.

What happens once the students get to Outward Bound?

To understand the programme more fully, I spent three weeks accompanying three different groups of students through a typical week on the Aiming Higher programme. The first field visit to Outward Bound took place in the middle of November 1998 the second towards the end of November 1999 and the third towards the end of January 2000.

When each course arrives the students are brought together for a talk from the Course Director (a senior member of staff at Outward Bound) where the nature of the programme, the daily timetable, the safety procedures and the rules and regulations for the course are outlined. The students are then divided into 'clans'; groups of twelve students from a mixture of schools. Each 'clan' is assigned a 'clan leader'; an instructor who works with them throughout the week. The clans are then given a tour of the centre, shown their dormitories, sleeping and showering arrangements, and given time to participate in a few 'ice-breaking' activities⁶. 'Icebreakers' are activities commonly used in outdoor programmes to bring a group of strangers together. They usually involve the group working closely together combining elements of trust, teamwork, physical and mental co-operation.

⁶ See Appendix A for full description of each activity discussed in this study.

Mealtimes within the Loch Eil centre are a communal event; the students arrive in their clans at a designated time, sit around the table together, eat together and then clear and clean their table together. The emphasis at mealtimes is on teamwork and co-operation, and there is an onus on each individual to arrive at the right time (or jeopardise the meal for everyone) and to share the responsibility of clearing and cleaning the table for another clan. If taken lightly these tasks can result in the clan having to wait until everyone has eaten before they can sit down to their meal. The whole 'clan' is penalised for the actions of one clan member, which takes time away from their activities or free time. Therefore the lesson is soon learnt to manage one's time better, take responsibility for one's actions, and to work effectively as a team. Although this is done in the context of a penalty, it is light-hearted and the penalties are nominal.

During the week at Outward Bound students must take responsibility for the equipment they are given. Each member of the clan pays a monetary deposit and this is refunded if the 'kit' is returned in the same condition as it was given. The 'kit' is kept in the 'kit cage' during the week and the clan has a responsibility to keep that area clean and tidy. The students are given daily marks out of ten for the cleanliness of their 'kit cage' and their dormitories so each clan tries to improve their score during the week.

Each day of the programme follows a similar pattern; breakfast, activity, packed lunch (which is often taken and eaten at the activity site), activity and then an evening meal. There is a final activity after the evening meal, which is followed by a period of free time before 'lights out'. The activities vary each day, ranging from rafting to rock climbing. Table 5.2 provides an example of a typical Aiming Higher

programme. The activities, known as ‘dynamics’, are generally organised by the Course Director prior to the start of the week but small adjustments can be made as the week progresses dependent on the cohesion and general attitude within the clan. The final decisions are made depending on the forecast for the day as the weather can influence the choice of activity.

The activities that take place in the grounds of the Centre are called ‘dynamics’. There are ‘major dynamics’ that involve activities such as the ‘zip wire’ or ‘parachute jump’, or there are ‘minor dynamics’, which involve problem solving based activities such as ‘spiders web’ or ‘the wall’ (see Table 5.2 Dynamics).

Table 5.2 Dynamics

Major Dynamics	Minor Dynamics
high ropes course	spiders web
zip wire	the wall
trapeze	low ropes course
parachute jump	the barrel & ropes

The photographs displayed over the following pages were taken during the observation weeks and help to illustrate the type of activities that the students were involved in. They show students taking part in rock climbing, raft building, hill walking and the parachute jump.

Figure 5.1 Parachute jump and hill walking



Figure 5.2 Raft building



Figure 5.3 Jacob's ladder and hill walking

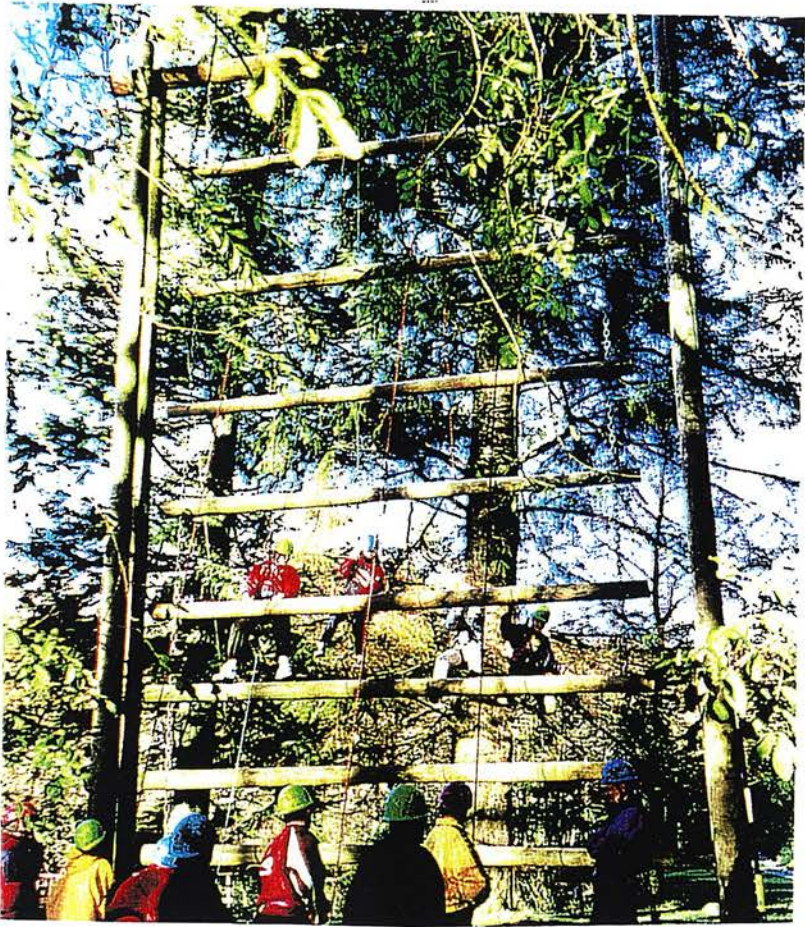
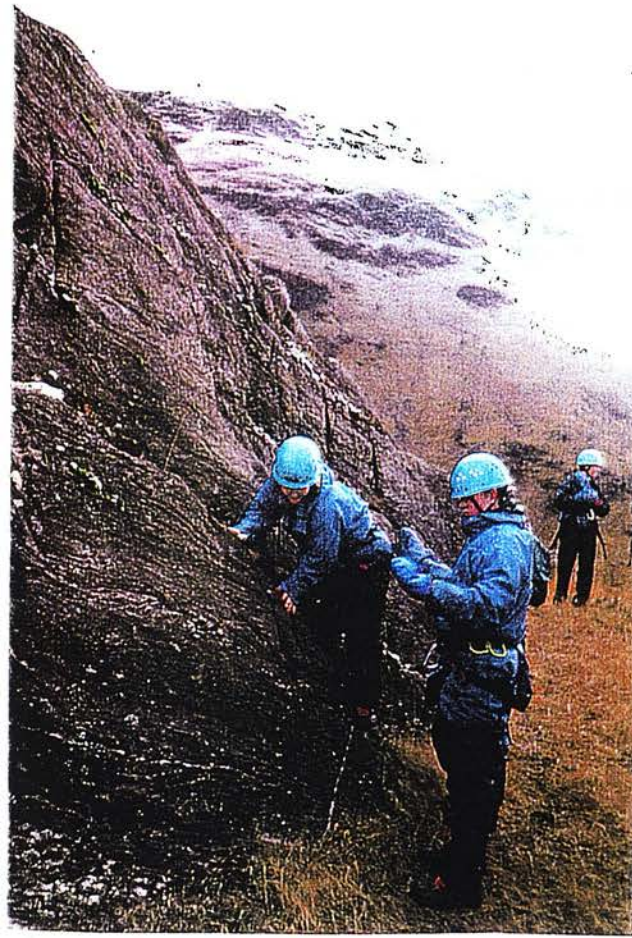


Figure 5.4 Rock climbing



Each morning the students meet at the front of the centre for a 'clan gathering'. This is led by a different 'clan' each day giving each student the opportunity to read out a piece of information to all of the other students; for example, a thought for the day, the weather or the news headlines. The task of preparing the information for the 'clan gathering' encourages students to work together. The students observed all worked with a common interest in producing good work as they all wanted to perform well in front of the other 'clans'. The function of the 'clan gathering' is twofold, it not only provides an opportunity to give information to all of the students at one time, but it lets each student prepare and present to a large audience. For some of the students this is a tremendously daunting task. In spite of this, the students express a sense of achievement and relief once their 'clan' has led the 'gathering'. The process of shared experience is used here to encourage the clan to work as a group and help them to develop self-confidence.

The issue of programme design was raised earlier, however it is expanded upon here, in relation to the course structure and the way in which Outward Bound have reflected the programme's aims through their choice of activities. Table 5.3 'The Outline Programme', was created as part of the in-house Aiming Higher with Outward Bound Year 1 Evaluation 1997-1998, by David Fenton (a Head Teacher from Coltness High School, North Lanarkshire) and Derek Goldman (a Partnership Officer at Bellshill Academy, North Lanarkshire). It describes each activity and its aims, which demonstrates the way in which the activities progress throughout the week. For example the major dynamics are introduced on Day Three to build upon the clans' skills that have been developed during the rafting, rock climbing and the nightline on the previous day.

Table 5.3 The Outline Programme

	Activity	Aim / Learning Outcome
DAY 1	Arrive & Introductions	Building relationship between tutors and participants
Lunchtime	Icebreakers	Building relationship between participants
	Dynamics	Group skills; trust, confidence, communication, participation
DAY 2 Am	Rafting	Creativity in design, working together, sense of achievement. Presenting yourself
Pm	Rock Climbing	Build self-confidence, reliance on others, sense of achievement
Evening	Nightline	A task which requires effective communication to be successful
DAY 3 Am	Water Activity	Personal challenge, building self confidence, sense of achievement
Pm	Major Dynamic	A more complex task designed for the group who need to build on previous learning
Evening	Review course so far Preparation for Hill day	
DAY 4	Hill Day	Personal and group challenge, motivation, putting learning into practice.
Evening	Feedback/ review session	Giving and receiving feedback in a supportive environment
DAY 5 Am	Hill Day presentations	Group presents their learning from the hill day - creativity, communication, and self-confidence.
Pm	Review 'Buzz' activity Depart	Review of course; completion of the learning journals. Fun activities with plenty of personal challenge to end the course.

(Fenton and Goldman, 1999: 17)

The instructor judges whether the clans are working well together and ready for a major dynamic or whether they would be wiser to opt for a minor dynamic. A minor dynamic is a slightly less complex task which would be used in this instance, to build upon the 'clan's' previous learning in order to boost their confidence. Following the activity, a review session is built into the end of Day Three in order for the 'clan' to reflect upon their activities and to discuss their 'clan' performance. This session allows the group to reflect on the course thus far before beginning to prepare for the hill day.

In terms of the overall programme design the element of competition has been removed and replaced by an element of intra-competitiveness, whereby the competition is personal to the individual and not against others. Marsh et al describe this process:

Overt, external competition is de-emphasised and the focus is on "the internal competition of the individual with himself, trying to achieve greater personal goals, ...which form the basis of competition between where the individual's standards have been, and where he wants them to be. (Marsh et al, 1986: 196)

The element of self-evaluation is demonstrated throughout the programme, for example sharing a dormitory with other people, individual responsibility for certain tasks or performance of physical activities. In those situations the students are continually assessing their own abilities in terms of their strengths and weaknesses. So a student who feels shy around others will have to confront this during the programme, as they will have to share a dormitory with new people and work in a 'clan', with others for the week.

The students are aware of the various elements of the course, as they are provided with 'Learning Journals' before they visit Loch Eil. The Learning Journals are introduced and started during pre-course sessions with the accompanying members of staff. The Journals provide an opportunity for the students to assess their strengths and weaknesses before they go to Outward Bound, which encourages them to identify areas in which they want to develop and to improve. For example a shy student may wish to develop social skills and so they can identify possible situations where they will be able to work on this.

During the course of the programme, the Journals are used to help review some of the activities and situations that arise as the week progresses. After the programme the Learning Journals are completed during the post-course sessions and the students have the opportunity to compare their expected learning outcomes with their actual learning outcomes. This process allows the students to assess their own development and consider ways in which they can incorporate the learning outcomes into other areas of their education. Chapter eight explores the process of Outward Bound in greater detail and further discusses some of the issues introduced here.

It is NLC's belief that the variety of activities offered during the week will encourage the students to develop in self-confidence as they take on new challenges and become involved in different experiences. The emphasis on group living, sharing, team work and co-operation are all intended to make the students more tolerant, accepting of others and aware of their own role in a team or group.

The location of the programme is very different to the environment in which the students live, so to experience living away from home and away from their family for a week is a challenge in itself in terms of coping and managing on their own.

Therefore the programme is designed to challenge the students from the moment they step on the bus to go to Loch Eil.

Outward Bound and NLC believe that the value lies in the experience as a whole, for example, the various elements of group activity, group living, shared responsibility, new experiences, new challenges. Following my observations I would suggest that reducing the programme to a timetable of events and activities does not demonstrate the atmosphere of the week; this can only be experienced by watching the students first-hand. The evaluation of the initiative conveys some of this richness, as the group interviews and the diary extracts from the participant observation weeks (which are discussed later) go some way towards describing the flavour of the programme and provide an insight into the students' perceptions of the course.

When discussing educational initiatives, especially those that deal with outcomes that are hard to quantify such as 'achievement', there is a danger that the terminology and definitions become the main focus. It is with this thought in mind that the evaluation of the programme relates theory to practice to provide a stronger link between educational literature and educational practice.

This chapter and the previous chapter combined have examined both the rationale behind the creation and implementation of the Aiming Higher with Outward Bound programme and its delivery. This background knowledge is necessary in order to understand the methodology and methods that have been used to conduct the research, both of which are explored in the following chapter.

Chapter Six

RESEARCH DESIGN

Introduction

This chapter provides an overview of the research design, beginning with a discussion of triangulation, followed by an outline of the conceptions of social reality and their implication for the research design. To conclude, the concept of ‘dispositions’, taken from the 5-14 National Guidelines for the Curriculum, is introduced and discussed.

The background...

One of the essential tenets of outdoor education is its engagement with reality. Real issues, real experiences, real risks and real outcomes.
(Lemmey, 1998: 20)

If Lemmey is right, then research in this field offers tremendous opportunities to “engage with reality” and deal with valid issues in genuine situations. To date research in outdoor experiential learning has been fairly limited and much of it has been criticised as being methodologically weak, (Ewert, 1983; Maruyama et al , 1981; Marsh et al, 1986; Cason and Gillis, 1994; Hattie et al, 1996). This study has the opportunity to make a contribution to the field in terms of valid, original research that has direct consequence for the Aiming Higher with Outward Bound programme, the broader Raising Achievement strategy and outdoor experiential learning in general.

Before the research could be designed the author had to consider and understand the arena in which it was being conducted by giving more thought to the philosophical, ideological and epistemological assumptions, which precede the method selection. This study was being conducted, in part, to evaluate the impact of an intervention on

individual perception of self. Therefore, it deals with the social world and human behaviour. Consequently the notion of social reality has been explored to understand better the various ways in which the students may interpret the experience. During the process varying views on the conception of the social sciences began to emerge. For example an objectivist conception of social reality stems from the traditional approach, which views the social world as not dissimilar to the natural world. Others for example adopt an interpretativist approach, which interprets individuals as differing not only from natural phenomena but also from other individuals. The following summary demonstrates the thought process that had to be worked through to understand these views, it is by no means provided as an overview of all conceptions held within the social sciences.⁷

Models, methodology and methods

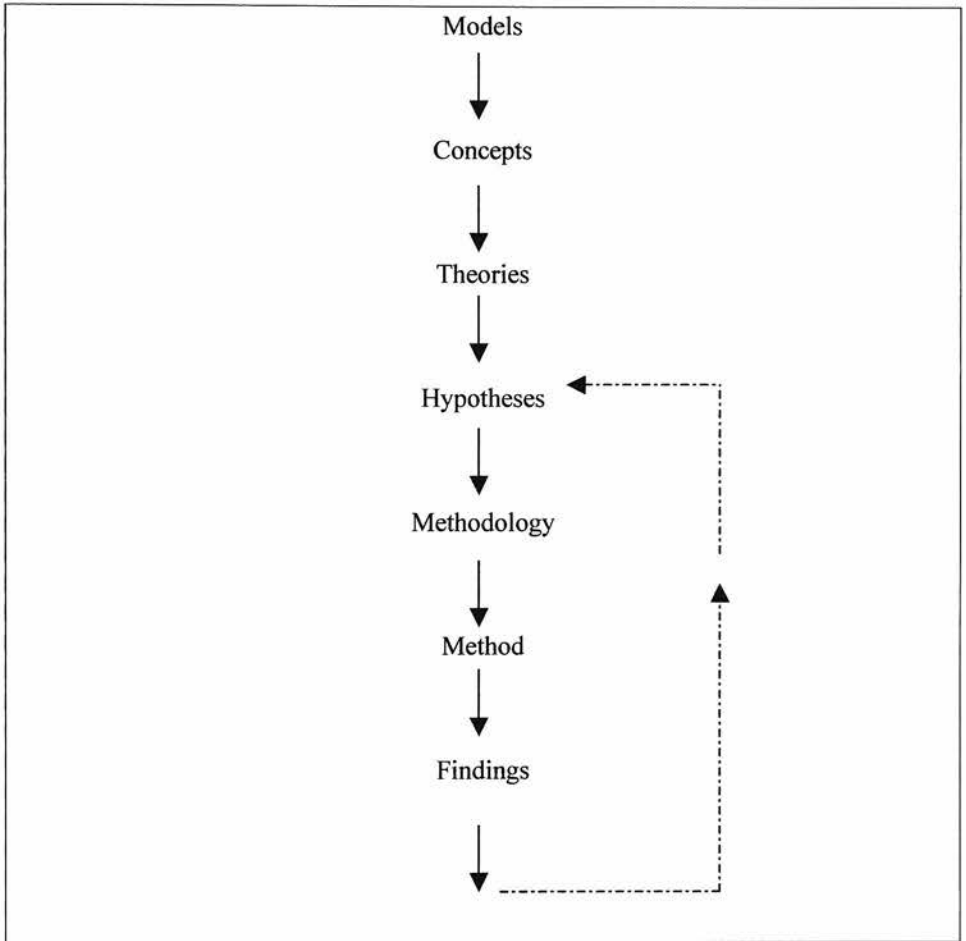
Before beginning to explain the research design the meaning behind, and the relationships between, some of the terms will be explored. The term ‘models’ refers to the overall framework that is used to view reality. Silverman (2000: 77) describes models telling us “what reality is like and the basic elements it contains (ontology) and what the nature and status of knowledge is (epistemology)”.

According to Silverman, (2000: 79), in social research, examples of such models are “functionalism” (which look at the functions of social institutions), “behaviourism” (which defines all behaviour in terms of stimulus and response), “symbolic interactionism” (which focuses on how we attach symbolic meanings to interpersonal relations) and “ethnomethodology” (which encourages us to look at people’s everyday ways of producing orderly social interaction). Approaches or concepts refer

⁷ See Hughes, J. (1990) ‘The Philosophy of Social Research’ for a discussion of this topic

to a set of ideas, which derive from the specific model used. Therefore the model used within a study has a strong influence on the design of the research. Figure 6.1 illustrates this relationship.

Figure 6.1 Levels of Analysis



(Based on Silverman, 2000: 79)

Examples of approaches are “social function” (deriving from functionalism), “stimulus/response” (behaviouralism), “definition of situation” (interactionism), and the “documentary method of interpretation (ethnomethodology)” Silverman (2000: 79). Following this stage theories can be developed to provide a basis for considering the relationship produced among concepts or approaches.

Models, concepts and theories are used to guide the way in which we look at phenomena. As Silverman (2000: 78) states this means they “can never be disproved but only found to be more or less useful”. Hypotheses however, unlike theories, can be tested through research and they can be assessed by their validity or truth. Not all research studies have an explicit hypothesis at the outset, whilst some are produced during the early stages. Methodologies then define how the study will be conducted for example qualitatively or quantitatively. Methods refer to the specific techniques used such as participant observation or questionnaire surveys. The final stage in the process is the production of findings. These can be fed back into the research process by informing the hypotheses which may lead to modification and further analysis.

Research design process

The model that I used as the overall framework for this study was symbolic interactionism (SI). Jary and Jary (1995: 672) describe it as “a theoretical approach in US sociology which seeks to explain action and interaction as the outcome of the meanings which actors attach to things, and to social action including themselves”. This model places a strong emphasis on the role of symbols and language as core elements of human interaction.

There is a major distinction within SI between the 'Iowa school' and the 'Chicago school' (Layder, 1994). Layder states that whilst both centre on concepts such as the nature of self and interaction:

the Iowa school does this in the context of a more traditional approach to scientific analysis. In this sense it is associated with positivism- the idea that it is possible to obtain objective knowledge of the social world through detached study and the application of quantitative techniques. By contrast, the Chicago school has embraced a far more humanist approach to social analysis. This stresses the involvement of the researcher and the idea that he or she should try to unravel the 'meaningful worlds' of those social groups that are the topic of interest. (Layder, 1994: 63)

This duality within the SI tradition influenced the design of the research as the multi-method approach used combining both qualitative and quantitative techniques. The combination of techniques felt comfortable as, Cohen and Manion state that, the SI approach "does not represent a unified perspective in that it does not embrace a common set of assumptions and concept accepted by all who subscribe to the approach" (1994: 3). Therefore specific methods could be chosen that suited both the nature of the study and philosophical position adopted by the Author. Overall the study was considered in terms of an interpretivist approach, however questionnaires were used, participants were observed and group interviews were held.

Interpretivist approach

The 'interpretivist conception' of social reality is premised upon the individual interpretation of the world, as it exists. Cohen and Manion (1994: 10) describe this as, "the world exists but different people construe it in very different ways". Consequently interpretative social reality can be understood in terms of the individual actions and the subjective meanings and rules underpinning those actions. The qualitative interpretation of an individual action allows a set of meanings to be

produced which seek to make sense of the social world under analysis. Therefore interpretative social research can be understood as, “the search for meaningful relationships and the discovery of their consequences for action” (Cohen and Manion, 1994: 10). This ontological approach felt comfortable, as it was consistent with the Authors belief that social reality can be understood as being an individual conception. That being, that there is not one truth or understanding to be revealed as each individual has their own understanding shaped by their own experience and knowledge. This approach should influence the research design, as the experience of Outward Bound will be individual to each student on the programme.

Objectivist approach

An objectivist conception of social reality believes that the world exists and is knowable as it really is. This approach usually involves the use of experimental or quasi-experimental validation of theory to discover universal laws of society and human conduct (Cohen and Manion, 1994: 10). This conception likens the social world to the natural world whereby quantitative methods are used to produce universal laws and values that shape and govern human behaviour and existence.

Both qualitative and quantitative approaches were combined in this study. The self-report instrument (the Life Effectiveness Questionnaire) was used throughout the study to gain an overview of the students’ experience (quantitative approach) and participant observation, group and individual interviews provided a qualitative analysis. These methodologies are now explored in terms of the concepts and methods used.

Qualitative methods

Qualitative research methods are firmly centred on the individual interpretation of social reality. The approach involves the perspectives of those being studied which according to Bryman and Cramer (1992: 134) demonstrates an “emphasis on the interpretation of observations in accordance with subjects’ own understandings”. Hakim (1987: 26) takes this notion further by stating that, “qualitative research is concerned with individuals’ own accounts of their attitudes, motivations and behaviour”. She suggests that this method offers “richly descriptive reports of individuals’ perceptions, attitudes, beliefs, views and feelings, the meanings and interpretations given to events and things, as well as their behaviour” (1987: 26).

In terms of techniques qualitative research can be implemented in a number of ways, for example participant observation, life history or in-depth interviews with an individual or a group (Bernard, 2000). The researcher tries to get close to the subject they are studying in an attempt to view the world as a participant in that setting. The research strategy adopted is often unstructured. A strong qualitative element was incorporated into the research design to understand the student’s perception of the programme in terms of their experience. This was achieved in two ways, firstly by observing the students during their time at Outward Bound, and secondly by involving a sample of students in group and individual interviews both during the course and some time after they had returned.

Although the way in which these approaches have been presented may appear opposing, they must not be considered as positioned at either ends of an extreme, rather they should be considered as lying along a broad continuum. Silverman (2000: xiii) describes this dichotomy or polarity in the social sciences as “highly dangerous

as it seeks to assemble groups of researchers into ‘armed camps’ unwilling to learn from one another”. Others agree and have made earlier suggestions regarding the reconsideration of the polarity of the social sciences, (Hammersley, 1992; Dey, 1993; Cohen and Manion, 1994). In terms of this study the group and individual interviews, participant observation and a self-report instrument, to create a comprehensive research design have been triangulated.

Quantitative methods

Bryman (1988: 11) describes quantitative research methods as concerned with social investigations “generating quantifiable data on large numbers of people who are known to be representative of a wider population in order to test theories or hypothesis”.

Quantitative research is, then, a genre which uses a special language which appears to exhibit some similarity to the ways in which scientists talk about how they investigate the natural order – variables, control, measurement, experiment. This superficial imagery reflects the tendency for quantitative research to be underpinned by a natural science model, which means that the logic and procedures of the natural sciences are taken to provide an epistemological yardstick against which empirical research in the social sciences must be appraised before it can be treated as valid knowledge. (Bryman, 1988: 12)

The role of quantitative research reflects a distant relationship between the researcher and the subject, whereby the researcher remains an ‘outsider’. This technique is structured and premised upon a static image of social reality that tends to neglect the impact and role of change in social life (Bryman: 1988). This approach reflects the role of the self-report instrument in the research design, which acted as a backbone throughout the study, giving an overview of the effect of the experience. Thus providing a longitudinal aspect to the study by generating data over two years and at three different time intervals in each year. This was achieved by distributing a self-

report instrument one month before Outward Bound, one month after and again three months after the whole programme had finished in each of the sample schools.

Primarily, this study was designed in order that the Aiming Higher programme could be understood from the students' perspective. This would help to progress research in the field by illuminating the students' perception of the process they went through and the changes, if any, they felt had occurred during and after the programme. As discussed, past research within the field of outdoor experiential learning has been fairly limited, either tending towards pure outcome based studies or anecdotal testimonials. Hence, this study aims to bridge the gap between these two approaches by combining or triangulating the traditional pre-test post-test, outcome based study with group and individual interviews and participant observation.

Triangulation

Cohen and Manion (1994: 233) define triangulation as the use of "two or more methods of data collection in the study of some aspect of human behaviour" and suggest it increases the validity of research.

Exclusive reliance on one method may bias or distort the researcher's picture of the particular slice of reality she is investigating. She needs to be confident that the data generated are not simply artefacts of one specific method of collection. And this confidence can only be achieved as far as normative research is concerned when different methods of data collection yield substantially the same results. (Cohen and Manion, 1994: 136)

The technique of triangulation is inherent throughout this study to increase confidence in the validity to the results. Hammersley (1992: 163) provides an interesting insight into the technique of triangulation and the issue of combining both qualitative and quantitative research techniques:

We are not faced, then, with a stark choice between words and numbers, or even between precise and imprecise data; but rather with a range from more to less precise data. Furthermore, our decision about what levels of precision is appropriate in relation to any particular claim should depend on the nature of what we are trying to describe, on the likely accuracy of our descriptions, on our purposes, and on the resources available to us; not on ideological commitment to one methodological paradigm or another. (Hammersley, 1992: 163)

This quote suggests that each method has its relative strengths and weaknesses consequently it would seem feasible to assume that both words and numbers could be used to complement one another and so aid the research process.

Black (2002: 3) believes that there are “limitations” to paradigms, particularly when applied in isolation from one another; therefore it seems reasonable to assume that a combination of both methods could produce a “best of both worlds” approach. Black (2002: 3) suggests that “when ideologies are taken to fewer extremes, it can be said that the two paradigms complement each other rather than compete”. Prior to Black, Bryman (1988: 125) stated that an outsider to the “debate” would instantly identify “the obvious way forward” as a “fusion of the two approaches so that their respective strengths might be reaped”.

Although the social sciences were originally conceived of as operating from two distinct positions, recent research publications suggest that the technique of triangulation has become widely accepted. Bernard (2000: 325) states “qualitative and quantitative data inform each other and produce insight and understanding in a way that cannot be duplicated by either approach alone”. Black (2002: 3) agrees with Bernard suggesting that it “often takes both [methods] to answer a good question comprehensively”, believing that:

To choose one [approach] as the basis of research prior to planning may be a philosophical decision, but it also could be likened to opening the tool box, choosing a spanner and ignoring the other tools available when faced with a repair task. To reject the findings of researchers who appear to subscribe to a supposed opposing paradigm is to ignore a considerable body of work. (Black, 2002: 3)

Triangulation also provides the opportunity to use qualitative approaches to inform and aid the interpretation of more impersonal statistical data, which is predominantly generated, by a quantitative approach (Hakim, 1987). To determine the effectiveness of the Aiming Higher with Outward Bound programme there has to be a basic understanding of both the individual conception of reality and the way in which the programme impacts upon that.

Furthermore, Hakim (1987: 145) describes a research programme as being “that much more solid if one can ensure that individual projects are selected with a view to ensuring that both micro-level and macro-level perspectives are covered”. She considers this theory in practice, as meaning that large scale or national data will be required for evaluation in order to produce solid research as well as more focused and intensive studies. In light of this definition, both the macro- and micro-perspective of the programme were considered to produce a ‘solid’ piece of research. This was achieved by developing the quantitative approach (the self-report instrument) to take account of the macro-perspective (e.g. the overview of the experience for the majority of the sample students) and the qualitative aspect of the study to take account of the micro-perspective (e.g. the individual interpretation of the experience).

Therefore it could be argued that it is the process of inquiry that is important and that objectivity is the common aim of all social science. In practice however, to combine both qualitative and quantitative methods effectively, the philosophical rationale

behind each technique must be understood. Rist (1977: 62) states, “when we speak of ‘quantitative’ or ‘qualitative’ methodologies, we are in the final analysis of an interrelated set of assumptions about the social world, which are philosophical, ideological, and epistemological”.

The triangulation of methods approach has not only satisfied the aims of the research it has also helped to address issues raised by other researchers in the field. One such issue raised by Nicol (2001: 2) is that “the ‘classical experimental’ approach to researching adventure education has inherent weaknesses which have prevented it progressing towards understanding the process, rather than just describing the outcomes”. He suggests that this could be addressed by making better use of the broader range of research methods, including participants’ “accounts of their experiences”. His comments and those of others (above) are clearly valid and have influenced the research design.

The approach to outdoor education research advocated in this chapter has been influenced by past research in the field. For example the inclusion of participants’ accounts to help illuminate the process that the students go through whilst they are on the Outward Bound course and some general background information on the participants of the course in order to contextualise the data. Barrett and Greenaway (1995: 54) have highlighted the need for more detailed information on the participants of outdoor programmes, declaring them “almost entirely absent” from the research that they reviewed. Cason and Gillis (1994: 46) state that “few details were given about characteristics of the participants in the studies beyond traditional demographic information”, this suggests that more detailed work into the participants’ perspective is needed to balance out the heavy reliance on statistical

evaluation. In the present study the background information is not a priority issue as the participants have come from a fairly homogenous group, in that they are from the same age group, geographical area and have been selected for this programme.

Reliability and reflexivity

Reliability concerns the consistency of results and findings, over time and across researchers. Black (2002: 80) describes reliability in simple terms, stating that “high reliability means that if you measure something today with your instrument, you should get very much the same results some other time (10 minutes from now; tomorrow, next week), assuming that what or who you are measuring has not changed”. In relation to group interviews, concerns over reliability lie with degrees of consistency between categories, between different observers or the case of the same observer on different occasions. The issue of reliability was addressed by giving the data as transcripts to external coders and asking them to code it using the framework that I had designed for analysis. The results from the inter-rater reliability tests can be used to demonstrate the reliability of the research based on the degree of consistency between the two sets of coded data.

Reflexivity as described by Cohen and Manion (1994: 31), “refers to the way in which all accounts of the social settings descriptions, analyses, criticisms, etc, occasioning them are mutually interdependent”. It can be understood as having implications for the manner in which research is conducted. Humberstone (1997: 8) believes that it is usual that a research report “will include a reflexive account of the researcher’s activities and the dilemmas and tensions which they faced in their research”. This process seeks to highlight the researcher’s position in terms of their judgements and provides an opportunity to analyse the research process. A reflexive

approach has been adopted firstly to demonstrate my role in the research process and secondly to address the limitation that the researcher cannot extricate him or herself from their research. Humberstone (1997: 7) states that “research in outdoor education cannot be neutral” as in any research the “researcher has to make judgements” and “take actions about what they perceive to be right or wrong during the continuous process of their research”.

Therefore it is hoped that a reflexive approach would seek to increase the validity of the research by laying bare the research process and the researcher’s role in that process. In terms of this study, a reflexive approach has been taken when considering the analysis of the participant observation and individual interview data, by recording the data in a diary that included my personal thoughts from the day. The research diary is presented in full in Appendix B.

Ultimately however, reliability and validity will determine the initial value and credibility of a piece of research more so than the underlying epistemological issues. For example, a study that has been badly constructed and designed will be worthless regardless of the philosophical reasoning behind its creation. As Bernard (2000: 46) states “nothing in research is more important than validity”. However, epistemological issues do add to the research process by illustrating where the researcher’s values and philosophical commitments lie, which may help to understand why the researcher has pursued a specific line of reasoning.

In this study the authors own philosophical beliefs have been acknowledged, and as discussed previously she has sought to make her position clear. This study has been conducted primarily from an interpretivist stance and designed to combine various

research techniques in order to produce effective and original research. As Silverman (2000: xiii) states we must be “willing to learn” from one another and seek not to construe various research methods as antithetic.

A note on anecdotalism

Hammersley (1990: 157) describes validity as truth “interpreted as the extent to which an account accurately represents the social phenomena to which it refers”. Qualitative researchers face the problem of anecdotalism when discussing validity. Silverman (2000: 176) poses the question “how are they [qualitative researchers] to convince themselves (and their audience) that their ‘findings’ are genuinely based on critical investigation of all their data and do not depend on a few well-chosen ‘examples’?”. In the case of group interviews anecdotalism can be overcome by ensuring that a wide enough sample of subjects are interviewed and that those subjects are representative of the population being studied.

The interpretive paradigm within which this research has been conducted would encourage the use of anecdotal accounts valuing them for their honest, reliable and accurate description of an individual’s experience. As Bernard (2000: 439) states the idea is “to continually interpret the words” to “understand their meaning and their directives” and from that understanding “insight” is produced. Jary and Jary (1995: 336) describe interpretive sociology as “a variety of forms of sociology (including symbolic interactionism, sociological phenomenology and the approach of Weber) united by an emphasis on the necessity for sociologists to grasp (i.e. to understand or interpret) actors’ meanings”. This description relates to the way the research design has been approached which is consistent with the authors philosophical belief that the students’ understanding of their experiences is of paramount importance in

determining the effectiveness of this programme. Therefore anecdotal accounts in this study provide an insight into the individual's perception and experience of the programme.

Throughout the study questions have surrounded whether a true understanding and description of the students' experience can be genuinely determined. The question that arose in terms of the data analysis was whether someone was able to accurately see what was there or whether they were seeing what they wanted to see.

Waitzkin et al's (1994) research, specifically the interview transcripts, were discussed by Bernard (2000: 443) to highlight the fact that "alternative readings of the same passage are possible" and to advocate, as part of their method, "the systematic archiving, in publicly available places, of texts on which analysis is conducted".

Waitzkin et al (1994) filed their transcripts with University Microfilms International so that other researchers could use the data for later analysis (Bernard, 2000: 443).

This approach of making research evidence accessible to the public, would seem to be the logical answer to the initial question, however it is not always logistically and ethically feasible. In this case, due to the large volume of interview transcripts generated by this research they were not included in the appendix of this study.

However, in an attempt to follow the example of Waitzkin et al (1994), they have been included in the diary entries and notes made during the field work alongside some participant observation and individual interview data (see Appendix B). The inclusion of extracts from the data in the text and other relevant data in the appendix will go some way towards highlighting the process of data analysis and interpretation without cluttering the analysis chapters and interrupting the presentation of the results.

The sample

As discussed in the previous chapter, the evaluation will focus on the 26 mainstream secondary schools within North Lanarkshire. As it was not feasible to include each school in the study, a representative sample of the population was selected. Bryman (1989: 107) and others (Bryman and Cramer, 1992; Cohen and Manion, 1994; May, 1997) warn that representativeness is essential, otherwise “the argument can always be levelled that the results are idiosyncratic and of unknown generality”. To address this issue, quota sampling (a non-probability sampling technique) was used. Thus, having considered the individual characteristics of each school, a representative sample of the population could be selected. This was important as each school had different characteristics, in terms of school size, geographical location, religion and degree of deprivation.

The technique of quota sampling is described by Fink (1995: 23) as the process by which a given “population is divided into subgroups (e.g. men and women who are living alone, living with a partner or significant other, not living alone but not living with a partner etc) and a sample is selected based on the proportions of subgroups needed to represent the proportions in the population”. She describes the benefits of using a quota based sampling technique, as “practical if reliable data exist to describe proportions”. In this case I was able to access data on each secondary school from the Education Department’s database. Having studied the profiles of each school the common characteristics of religion, school size, degree of deprivation and geographical location, were used to create the overall sampling frame, shown in Table 6.1. Sapsford and Jupp (1996: 27) describe a sampling frame as “whatever’s being used to identify the elements in each sampling unit”. They state that the sampling frame could be “anything at all provided it exhausts the total population”.

Table 6.1 Sampling Frame

Sampling Frame	Range	Current range	Sample
Religion	1. Denominational 2. Non-denominational	= 10 Denominational = 16 Non-denominational	3 Denominational 3 Non-denominational
Geographical Location	1. Coatbridge, Airdrie, Wishaw 2. Cumbernauld, Kilsyth 3. Motherwell, Bellshill	= 9 schools = 8 schools = 9 schools	2 schools from each of the 3 areas.
Degree of Deprivation *	Deprivation % ranges from 14% to 58%. The arithmetical average = 32%	-----	Include a variety.
School Size	School roll ranges from 453 – 1422 pupils, therefore the arithmetical average is approx. 900 pupils.	-----	Include a variety.

* This figure is based on the Clothing Grants -

All figures are based on the 1997/1998 data supplied by NLC, Education Department, Policy Unit.

The sampling frame illustrates the characteristics that were used throughout the sampling process. The ‘range’ demonstrates how the characteristic appears in the population. The ‘current range’ refers to the representativeness of that characteristic in the population and the ‘sample’ is the relative calculation of that characteristic in the eventual sample. These characteristics were used to reduce the 26 secondary schools into a manageable and representative sample. In this case six schools were selected, approximately one quarter of the original population. On the basis of their professional judgement and knowledge of the schools and the district, the Education Department agreed that these schools could be considered as a true representation of the mix of schools within NLC.

Relevancy

There is a clear need to ensure that the findings from this study remain relevant to the broader framework of mainstream education in Scotland. Hence the findings were related to contemporary educational literature and terminology. Consequently a framework for analysis was developed that provided an opportunity to consider any links between the findings and the current education system in Scotland.

‘Dispositions’ are at the heart of the 5-14 National Guidelines and are used to guide curriculum development and structure in all areas of education. Therefore there was a natural link between the aims of the 5-14 document (Structure and Balance of the Curriculum) and the need to relate the analysis of this programme back into mainstream education. The 5-14 document (Structure and Balance of the Curriculum) and specifically the dispositions are extremely relevant to the Aiming Higher programme as they deal with similar concepts therefore providing a relevant framework for analysis. The following section considers the origins of these

dispositions, discusses them in terms of the research process and examines the logistics of implementing them into the research process.

Introducing dispositions

The 5-14 National Guidelines for the curriculum underwent their first review and consultation process in October 1998, following their introduction in 1991. The consultation process began after a ‘Ministerial request to review the 5-14 National Guidelines for environmental studies’ and culminated in the publication of the revised guidelines in 2000 (LTS, 2000). The 5-14 National Guidelines provide teachers with guidance about assessment and key elements of the curriculum for primary schools and the first two years of secondary schools. There are separate documents, which relate to specific subject areas and an overall document, which considers the rationale, structure and balance of the curriculum. The aims of the 5-14 National Guidelines as stated in the ‘The Structure and Balance of the Curriculum’ document, are designed to help each pupil acquire and develop:

- Knowledge, skills and understanding in literacy and communication, numeracy and mathematical thinking
- Knowledge, understanding and appreciation of themselves and other people and of the world around them
- The capacity to make creative and practical use of a variety of media to express feelings and ideas
- Knowledge and understanding of religion and its role in shaping society and the development of personal and social values.
- The capacity to take responsibility for their health and safe living
- Capability in ICT⁸ and an awareness of the uses of ICT in the world at large

⁸ Information and Communications Technology - (ICT)

- The capacity to treat others and the world around them with care and respect
- The capacity for independent thought through enquiry, problem solving, information handling and reasoning
- Positive attitudes to learning and personal fulfilment.
(LTS, 2000: 4)

These aims are discussed generally in terms of dispositions, core skills and capabilities and knowledge and understanding. The document states (LTS, 2000: 5) that “core skills foster personal and social development and are widely recognised as essential for a healthy lifestyle, responsible citizenship and, in time, employment and successful lifelong learning”. Core skills include “personal and interpersonal skills such as working with others, language and communication skills, numeracy skills, ICT skills, problem solving skills and learning and thinking skills” (LTS, 2000: 11). The expectation is that core skills and capabilities are developed through learning experiences within school and throughout the students’ lives. The acquisition of knowledge and the development of understanding within each of the main subject areas is another fundamental aim of the 5-14 curriculum. The document (LTS, 2000: 8) states that we must “ensure that pupils make connections between what they learn and what they see in the wider world around them”. Therefore there is a strong emphasis on learning both within and out with the classroom (whether it be the natural world, the community or industry), as students are encouraged not only to make cross-curricular links, but also to make connections to the wider world around them.

The final aim of the 5-14 National Guidelines is to encourage students to develop a positive disposition towards learning and personal fulfilment. It is this issue of

encouraging a positive attitude and a positive disposition that has been used to make sense of the group interview data.

Firstly the meaning of the term dispositions was considered. David Johnson the author of the dispositions section of the 5-14 document discussed his use of the term. David Johnson (personal communication, August 10th, 2001) traced the origins of the term back to the phrase ‘values’, which appeared in a publication (1995) from SCCC (now LTS) called ‘Heart of the Matter’. He felt that the term values was too ‘value-laden’ and believed that although the agenda had not differed greatly since that publication the terminology had.

This quote from that publication provides an interesting introduction to the term dispositions:

...there are qualities or dispositions which will be generally acknowledged as fundamental to any recognisable form of moral life, as a sound guide on which to base personal choice and as central to the prospering of a just and democratic society. (SCCC, 1995: 3)

The publication goes on to suggest that these five dispositions should not be considered as exclusive. Instead they should be considered as a unified cluster that is non-hierarchical in structure. The dispositions are to be considered as being of equal importance and inter-related. The 5 -14 National Guidelines (LTS, 2000: 5) state that the dispositions help to “guide pupils in making decisions and taking action” by providing them with a “fundamental basis for a personally rewarding life and an effective community”. The dispositions encouraged and engendered by the 5-14 National Guidelines are:

- A commitment to learning - Throughout schooling and to equip them for adult life, children need both to acquire new information and skills and to make new connections and meanings in what they have learned. Learning becomes an exciting and rewarding lifelong process.
- A respect and care for self - A sense of self-worth brings a capacity for autonomy and motivation. It is the basis from which care for others grows. It is strongly linked to achievement and attainment.
- A respect and care for others - Recognising that we are interdependent helps pupils develop qualities of co-operation, mutual support and respect for the diversity of people, cultures and beliefs.
- A sense of social responsibility - An awareness of positive social attitudes, principles and skills will help pupils become competent and positively disposed to participate in society. A commitment to the environment will be engendered.
- A sense of belonging - Being part of and committed to the life of the school is achieved when pupils feel valued, knowing that their opinions count and their concerns are addressed.

(LTS, 2000: 5)

It is stated that these dispositions will “find expression in the curriculum that pupils study, in the contexts in which their learning is structured and in the relationships that encompass both their learning environment and later life” (LTS, 2000: 5). It is hoped that through the development of these qualities and dispositions they will develop skills necessary for an effective life, such as personal and interpersonal skills, a commitment to lifelong learning, the ability to communicate effectively, problem solving skills and the confidence to lead a successful life.

Why dispositions?

LTS (2000: 5) suggest that it is desirable to have students who are positively disposed to have a respect and care for self and others, a sense of belonging and social responsibility, as well as a commitment to learning. The desirability and importance

of these dispositions within education is reflected in the fact that they are an integral part of the structure and balance of the 5-14 National Guidelines. They are seen as having benefits within each of the various subject areas taught within schools. LTS (2000) believe that a positive disposition fosters personal and social development, which may in turn help the student to develop core skills. However little research, if any, has been conducted which assesses the existence or development of them (Johnson, personal communication, August 10th, 2001). Despite the lack of research into dispositions, the concept was relevant to this study as it bore similarities to other frames of reference within the field of outdoor experiential education. In particular it proved to be similar to the aims of the Dartington conference and Mortlock's philosophy of adventure. The Dartington Conference (1975) can be understood as the first "systematic attempt...to identify and categorise the different roles of outdoor education and to identify the process by which they might be achieved" (Hopkins and Putnam, 1993: 45). These aims (DES, 1975: 1) were defined to heighten awareness of and foster respect for:

- Self - through the meeting of challenges (adventure)
- Others – through group experiences and the sharing of decisions
- The natural environment, through direct experience.

The first two categories, to heighten awareness of and foster respect for self and others, are clearly closely related to the dispositions of 'respect and care for self' and 'respect and care for others'. Although the Conference aims were specifically concerned with outdoor experiences, the dispositions were related to broad personal and social development experiences. The final conference aim was related specifically to the natural environment, which is not an explicit part of the

dispositions concept. However, the direct experience of the natural environment can be conceived of as one way in which the dispositions can be developed.

There are also parallels with the work of Mortlock and his philosophy of adventure. Mortlock, an outdoor educationalist, believes that life should be approached within a framework of values against which experiences can be evaluated, and the nature of further experiences decided upon. A simple framework would be for a student to try and develop, to the best of his ability,:

- an awareness of, respect for, and love of SELF balanced against,
- an awareness of, respect for, and love of OTHERS, balanced against,
- an awareness of, respect for, and love of the ENVIRONMENT.

(Mortlock, 1984: 18, 113)

He believes that if this framework can be used for all individual actions and if at the same time, this includes a genuine acceptance, in action as well as thought, of all positive human virtues then three things are likely to take place (1984: 113). Firstly the mental, physical, emotional and spiritual potential of the individual is likely to develop to a high degree, therefore increasing his maturity (Mortlock, 1984). Secondly, “his worth as a member of society is likely to be of a most positive and vital type, and thirdly, he is likely to find satisfaction, if not happiness, as part of the vast unity of life” (Mortlock, 1984: 114).

There are clear similarities between the framework created and described by Mortlock, the aims adopted at the Dartington Conference and the concept of dispositions outlined in the National Guidelines for the curriculum. Firstly in terms of the language used, for example the words ‘respect’, ‘self’ and ‘others’ are found in

both concepts. Secondly the underpinning philosophies are also related as they both focus upon developing an awareness of self, others and the environment.

In relation to the individual components of each concept, there are clear correlations between the dispositions of ‘respect and care for self’ and a ‘a respect and care for others’ and Mortlock’s ‘awareness of, respect for and love of self’ and ‘awareness of, respect for and love of others’. Each set of concepts share a similar rationale, which focus upon developing an understanding and love of self and of others. This would suggest that a student (in terms of this study) can better understand and appreciate themselves. This could lead to a better understanding and appreciation of their relationship to others and the relationships that they have with others.

The two dispositions regarding ‘a sense of social responsibility’ and ‘a sense of belonging’ relate in some respects to Mortlock’s ‘awareness of, respect for and love of the environment’. However, Mortlock focuses specifically on the environment and nature, and the dispositions are based on a broader framework which includes both a belonging and responsibility for the natural environment, the built environment and the social environment.

Overall the concept of the dispositions focuses on engendering a commitment to both the natural and the general environment, and developing an “awareness of positive social attitudes, principles and skills” that help a student to become “competent and positively disposed to participate in society” (LTS, 2001: 5). Mortlock’s framework is consistent with the rationale behind this disposition as he too focuses upon developing an awareness and commitment to the natural environment, in order that man can begin to accept responsibility for his actions and the consequences that those

actions have on the environment. Mortlock clarifies his position in relation to man's role in nature and his relationship to the environment by stating that if "modern man is to find happiness then he must accept the fact that despite being an outstanding performer, he is only a tiny part of the natural stage" (1984: 99). Mortlock deals specifically with the natural environment however the dispositions can be understood as dealing with a more general understanding of the term 'environment', therefore correlations can only be drawn where there is reference to the natural environment.

A further disposition that relates to Mortlock's framework in terms of the environment is the development of 'a sense of belonging'. The disposition focuses on the students feeling "valued, knowing that their opinions count and their concerns are addressed" and in so doing they become "part of and committed to the life of the school" (LTS, 2001:5). If we consider the disposition in relation to the wider environment and not simply in relation to the school then we can begin to see fundamental similarities to Mortlock's framework. For example, if a student begins to feel part of nature and connected to their environment then they will begin to develop a commitment towards preserving and respecting it.

Mortlock has noted this relationship between adventure in nature and the development of a respect for the environment:

If young people are to begin to see the values of beauty and of life beyond materialism. If young people are to begin to discern that they are part of nature with all of its implications. If young people are to begin to understand their responsibilities as part of the human race, then they must be given every opportunity to adventure in the natural environment. In return they will bring great benefits to their society through their increased maturity. (Mortlock, 1984: 134)

The final disposition, 'a commitment to learning' considers the need both to acquire new information and skills, and to make new connections and meaning in what students learn. This disposition is engendered "throughout schooling in order to equip students for adult life" and allows the students to regard learning as an "exciting and rewarding lifelong process" (LTS, 2000a: 5). This disposition does not directly relate to Mortlock's framework, however it does bear similarities to his overall philosophy, as he too believes that "curiosity is perhaps the single most important aspect of the intelligence" (1984: 66). So "if the intellectual energies of the young person are centred round his curiosity then adventure can fan this spark into a flame", which can lead the "person into treating the whole of life as a journey and tackling each of the problems on the way in a positive manner" (1984: 66). Mortlock considers the issue of intelligence and the way in which a high degree of importance is placed on 'academic' intelligence and he suggests:

It is little short of tragedy that most of the younger generation are in a secondary education system that, so often in practice ignores them except on terms of academic results. 'Sell your cleverness and buy bewilderment. Cleverness is mere opinion, bewilderment is intuition' (Mortlock, 1984: 67)

This quote reflects a further link between the dispositions and the framework devised by Mortlock as they both suggest that a broader more holistic approach to education should be sought. The two concepts, the disposition and Mortlock's framework, are premised upon a similar philosophy that seeks to consider the personal, social, and academic development of the student as one process.

In relation to this study, Mortlock's work has been introduced to demonstrate the close links between the current aims of this one aspect of the 5-14 National Guidelines and the aims of outdoor experiential learning. It must be noted that the

links are evident only in terms of the dispositions, which are currently under-researched and not a formal part of classroom teaching. David Johnson, the author of the dispositions section of the 5-14 document, was not aware of any research that had been or was currently being conducted regarding the concept of dispositions (personal communication, August 10th, 2001).

Using the dispositions

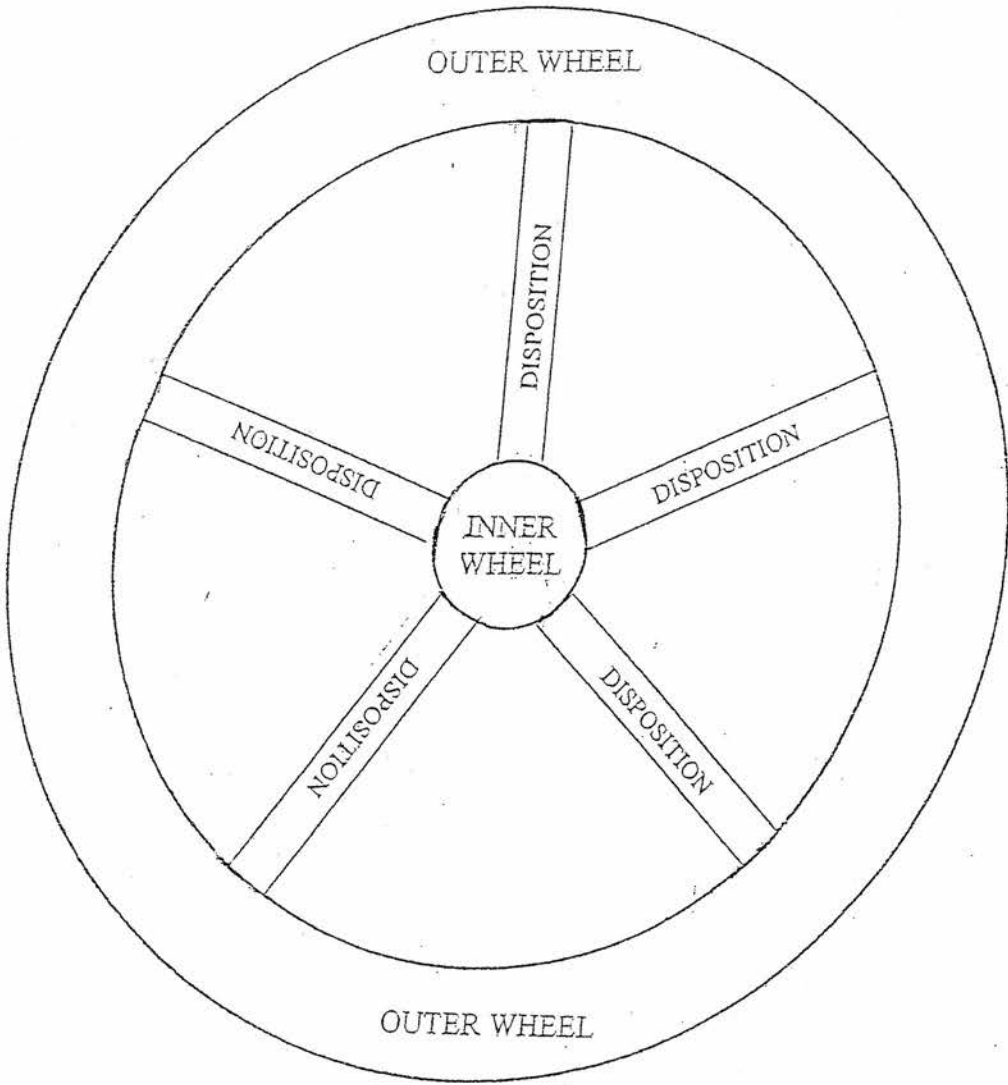
The dispositions were used as a broad framework for analysis of the case study evaluation for two reasons. First, they were consistent with the aims of the Aiming Higher programme, and second, they provided a strong and relevant link between the outcomes of the study and mainstream secondary education. Consequently this study provided an opportunity to produce original research not only in the area of outdoor experiential learning but also in the under-studied area of student dispositions.

How well these dispositions are encouraged throughout a student's schooling and how the students will be developed in these areas is difficult to quantify. David Johnson (personal communication, August 10th, 2001) suggests that one can discuss the "success of dispositions in terms of 'provision', 'process' and 'impact'". Whereby 'provision' would consider the success of a given school in providing sufficient experience for the development of these dispositions. 'Process' would be the specific area in the school where the process would take place, for example the classroom, or after school clubs. Finally 'impact' would be the visible success of the initiative for example, less bullying or less fighting in the playground. According to David Johnson (personal communication, August 10th, 2001) this would seem to be the only rational method of looking for ways in which the introduction of a commitment to developing these dispositions could be measured. As he summarised, "it would seem

that the issue of dispositions lends itself to qualitative research where the value of the programme can be seen in the playground and heard in the classroom” (personal communication, August 10th, 2001).

Following the telephone conversation with David Johnson, consideration was given to how far the Outward Bound programme was developing the student’s dispositions using the headings he suggested. Firstly provision was defined as the partnership link between Outward Bound Scotland and NLC. Therefore the Outward Bound Centre at Loch Eil, Fort William is the ‘space’ provided for the development of dispositions. The second heading, process, would be the five-day personal and social development course, which the students actively participate in when they attend Outward Bound. Finally the last heading, impact could be demonstrated by the students on their return from Outward Bound and their transition back into their normal school routine. In light of this, NLC would hope to see the success of the programme displayed through their students becoming positively disposed and committed to learning, developing a respect and care for self and others, and a sense of belonging and social responsibility. This notion of determining the development of dispositions will be discussed further in each evaluation chapter in light of the specific results and analysis. Each separate evaluation chapter draws on the dispositions and uses them as the broad framework for analysis. The overall evaluation chapter considers the findings from these chapters under these three headings; provision, process and impact.

Figure 6.3 Model of Dispositions



Key

Disposition	Outer Wheel	Inner Wheel
A commitment to learning A respect and care for self A respect and care for others A sense of social responsibility A sense of belonging	Personal, social and academic life Central to positive behaviour Within and out with school	Moral life Sound guide on which to base personal choice Central to the prospering of a just and democratic society Fundamental basis for a personally rewarding life

Dispositions model

As discussed previously, the five dispositions are closely related to one another.

Despite the fact that the three evaluation chapters will reduce the data into separate categories, an overall model, which considered the dispositions as one concept (see Figure 6.2) was produced. Firstly consideration was given to the relationship between each disposition both in terms of the external environment and social influence. This exercise explored the relationship between the concepts. The eventual model was based upon a 'wheel' design, the outer edge of which is characterised by the following concepts:

- Personal, social and academic life,
- Within and out with school
- Central to positive behaviour

The dispositions are central to positive behaviour (in terms of the 5-14 guidelines), they are an integral part of personal, social and academic life and they are necessary both within and out with school. The five 'spokes' of the wheel represent the five dispositions and connect the outer edge to the core of the wheel. The core of the wheel represents the aims of the 5-14 curriculum in relation to the disposition issue, for example the dispositions are a fundamental basis for a personally rewarding life, they are a sound guide on which to base personal choices and they are central to the prospering of a just and democratic society (LTS, 2000: 5).

Summary

The overall objective of the Aiming Higher programme is similar to the aims of 5-14 document in relation to dispositions, whereby both initiatives describe similar goals for young people: increased positive self-perception. For example, LTS (2000: 5) discuss the need to encourage students to develop “positive attitudes to learning and personal fulfilment” and NLC (1998b: 1) state the aim of their education department as enabling young people to “achieve what they are capable of achieving”, therefore there is a consensus over the need to help students realise their full potential. The dispositions were used as a framework to analyse the student’s experience of Outward Bound, and thus presented an opportunity initially to assess the value of these dispositions. This allowed me to consider whether there is sufficient opportunity within the context of this initiative, to develop the students in areas which are clearly valued and seen necessary (by virtue of their inclusion in the revised 5-14 National Guidelines) for the positive personal and social development of students in Scotland.

Chapter Seven

THE LIFE EFFECTIVENESS QUESTIONNAIRE

Introduction

As outlined previously the Aiming Higher programme has been evaluated using a triangulation of research methods, each of which is discussed in a separate chapter. This chapter considers the quantitative approach to the analysis, which offers an empirical evaluation of the programme. It begins by considering basic self-concept research and its significance in terms of this study, before moving on to consider the most appropriate type of questionnaire or self-report instrument, given both the aims of the programme and the aims of the research. The Life Effectiveness Questionnaire (LEQ) was deemed to be the most appropriate measure available, so its origins and past use in research settings is discussed (Neill, Marsh and Richards, 1997). The logistics of the distribution of the LEQ, the analysis and subsequent results follow. Finally the chapter concludes with a thorough discussion of the results and their implications for the other methodological approaches. The research questions addressed in this chapter are ‘is the programme providing an opportunity for change?’ and ‘does the process support change?’

Understanding the self-concept

According to available research the notion of self-concept can be understood as multifaceted; comprising various domains including the academic self, the social self, and the self in relation to peers and to family (Marsh et al, 1986; Shavelson, Hubner and Stanton, 1976).

Marsh et al (1986: 195-204) discuss the idea of “a multidimensional self-concept”, advocating the “need to take account of this in self-concept research”. They cite support from other researchers in the field, such as Boersma and Chapman (1979), Duseck and Flaherty (1981), Fleming and Courtney, (1984), Harter (1982) and Soares and Soares (1982). Others such as Fox and Corbin (1989: 140) believe that the “widespread acceptance of multidimensionality within the field of self-concept research” can be regarded as a “major advancement”.

My understanding of the concept of ‘self’ in relation to teaching and learning was influenced by the work of Honey and Mumford (1986). They devised four different learning styles to account for the way in which people understand and learn in various environments. They believe that much more effective learning can take place when attention is paid to the four individual learning styles that they have identified: ‘pragmatist’, ‘theorist’, ‘activist’ and ‘reflector’ (Honey and Mumford, 1986).

The implication, in relation to this study, is that a particular programme may have a more pronounced effect on some students than on others. This may be attributable to the fact that a student’s learning style will influence how well they will respond to a specific learning environment, such as Outward Bound, and their style of outdoor experiential learning.

For example, the ‘pragmatist’, whose strengths include the ability to be practical, task-oriented and keen to test things out, may find Outward Bound an ideal learning situation, as they would have the opportunity to apply their task oriented nature to problem solving situations. However the ‘theorist’, who favours a disciplined approach to learning, preferring to approach tasks in a logical and rational manner

may be less likely to benefit from the task-oriented activities. The ‘activists’, characterised by optimism and a tendency to rush into action without sufficient preparation, may prefer the more physical activities such as the ‘parachute jump’ or the ‘zip wire’. Apart from the relevant safety instructions, these activities do not demand as much theoretical preparation, therefore the ‘activists’ could get involved in the activity immediately. Finally, the ‘reflectors’, who prefer a cautious and methodical approach to learning, may prefer problem solving activities such as the raft-building or the preparation and planning for hill-walk day, as these provide structured learning.

The course at Outward Bound is designed to address a variety of learning approaches and environments. For example learning through direct activity such as abseiling or rock climbing, learning through discussion and problem solving such as designing, constructing and sailing a raft and learning through self-discipline such as taking responsibility for the cleanliness of the dormitory and the equipment given at the start of the week. Therefore there are a variety of opportunities for each individual to learn, irrespective of their specific learning style. Some activities may be more suited to one learning style than another but as Honey and Mumford make clear;

we are not adding another innovation and claiming that without it nothing useful will be done; we are saying that with attention to the individual learning styles, much more effective learning will take place.
(Honey and Mumford, 1986: 2)

This discussion of multi-dimensionality and self-concept provides an insight into the complexities involved in attempting to evaluate the impact of an intervention on someone’s perception of self. In terms of outdoor experiential learning, findings from previous research involving the self-concept suggest that studies should move away from specific outcome measures such as self-esteem towards broader outcomes,

such as ‘coping’ and ‘resilience’ as indicators of programme effectiveness (Neill, 1997). Previous studies have used established measures of self-esteem to evaluate the effectiveness of outdoor experiential learning programmes such as the Tennessee Self Concept Scale (Fitts, 1965) or Rotter’s Locus of Control (Rotter, 1966). However these measures are predominantly concerned with individual aspects of the self and seek to measure changes in specific levels of self-concept, consequently they are not able to detect changes across a broad range of outcomes.

The in-house evaluation report produced by Fenton and Goldman (1999) following the first two years of the Aiming Higher programme, provide an indication as to the areas in which NLC are looking for results. The report suggests that the aims and expected outcomes of the programme presume a broad understanding of ‘the self’. For example, their definition of achievement, which characterises the programme, is related to the development of the ‘whole person’. Therefore it can be said that they are looking for achievement across a whole range of “social, creative, cultural, sporting and academic” areas (NLC, 1998a: 1). In light of this, the aims of the programme can be understood as consistent with thinking in self-concept research, as NLC have adopted a broad approach to the understanding of ‘the self’ (Marsh et al, 1986, Shavelson et al, 1976).

In terms of research techniques, an instrument that reflects the holistic nature of the programme was considered to be the most suitable both in terms of the programme evaluation and in relation to current knowledge in self-concept research. Ideally a self-report instrument would have been specifically designed in accordance with the aims of the programme. The development of a psychometric instrument was both beyond the scope of this study and my own ability at this stage. Therefore a

previously developed instrument was used, the Life Effectiveness Questionnaire (LEQ), see Figure 7.1.

There were two main reasons for using the LEQ in this study. Firstly given the instruments that were available at the time it appeared to be the most suitable in terms of its size, it was a one-sided self-report instrument that took approximately five minutes to complete. Also, it was relatively simple, therefore the students easily understood it and as it had been developed for specific use within the field of outdoor experiential learning, it appeared to be relevant.

Secondly on considering the LEQ, similarities were discovered between the instrument and the concept of dispositions, which has similarities with Mortlock's philosophy of outdoor education. Mortlock's work is still well regarded as an early philosophy of outdoor experiential learning and much of the teaching and learning happening out-of-doors with young people today is informed by the fundamental principles set out in his early work. Therefore having established that there was a link between outdoor experiential learning and the concept of dispositions it was no surprise to find that the LEQ appeared to measure changes in areas that were consistent with the concept of dispositions (even although the choice of instrument preceded the inclusion of the dispositions in the research).

The Life Effectiveness Questionnaire (LEQ)

The LEQ provides a multidimensional measure of 'personal or life effectiveness' (Neill et al , 1997). Its name would suggest that it is a questionnaire however it is technically a self-report instrument (see Figure 7.1). Table 7.1 provides a description of each of the components and the specific items or statements to which they correspond.

Figure 7.1 Life Effectiveness Questionnaire

L.E.Q. - H[©]

NAME: _____	AGE: _____ (years)
DATE: ____ / ____ / ____	MALE / FEMALE (circle one)
COURSE CODE: _____	GROUP: _____

STATEMENT	FALSE	TRUE
	not like me	like me

01. I plan and use my time efficiently.	1 2 3 4 5 6 7 8	
02. I am successful in social situations.	1 2 3 4 5 6 7 8	
03. When working on a project, I do my best to get the details right.	1 2 3 4 5 6 7 8	
04. I change my thinking or opinions easily if there is a better idea.	1 2 3 4 5 6 7 8	
05. I can get people to work for me.	1 2 3 4 5 6 7 8	

06. I can stay calm in stressful situations.	1 2 3 4 5 6 7 8	
07. I like to be busy and actively involved in things.	1 2 3 4 5 6 7 8	
08. I know I have the ability to do anything I want to do.	1 2 3 4 5 6 7 8	
09. I do not waste time.	1 2 3 4 5 6 7 8	
10. I am competent in social situations.	1 2 3 4 5 6 7 8	

11. I try to get the best results when I do things.	1 2 3 4 5 6 7 8	
12. I am open to new ideas.	1 2 3 4 5 6 7 8	
13. I am a good leader when a task needs to be done.	1 2 3 4 5 6 7 8	
14. I stay calm and overcome anxiety in new or changing situations.	1 2 3 4 5 6 7 8	
15. I like to be active and energetic.	1 2 3 4 5 6 7 8	

16. When I apply myself to something I am confident I will succeed.	1 2 3 4 5 6 7 8	
17. I manage the way I use my time well.	1 2 3 4 5 6 7 8	
18. I communicate well with people.	1 2 3 4 5 6 7 8	
19. I try to do the best that I possibly can.	1 2 3 4 5 6 7 8	
20. I am adaptable and flexible in my thinking and ideas.	1 2 3 4 5 6 7 8	

21. As a leader I motivate other people well when tasks need to be done.	1 2 3 4 5 6 7 8	
22. I stay calm when things go wrong.	1 2 3 4 5 6 7 8	
23. I like to be an active, 'get into it' person.	1 2 3 4 5 6 7 8	
24. I believe I can do it.	1 2 3 4 5 6 7 8	

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Table 7.1 Life Effectiveness components

Components	Items	Description
Achievement motivation	3, 11, 19	The extent to which the individual is motivated to achieve excellence and put the required effort into action to attain it.
Active Initiative	7, 15, 23	The extent to which the individual likes to initiate action in new situations.
Emotional Control	6, 14, 22	The extent to which the individual perceives he/she maintains emotional control when he/she is faced with potentially stressful situations
Intellectual Flexibility	4, 12, 20	The extent to which the individual perceives he/she can adapt his/her thinking and accommodate new information from changing conditions and different perspectives.
Self Confidence	8, 16, 24	The degree of confidence the individual has in his/her abilities and the success of their actions.
Social Competence	2, 10, 18	The degree of personal confidence and self-perceived ability in social interactions.
Task Leadership	5, 13, 21	The extent to which the individual perceives he/she can lead other people effectively when a task needs to be done and productivity is the primary requirement.
Time Management	1, 9, 17	The extent that an individual perceives that he/she makes optimum use of time.

(Neill and Flory, 1999: 3)

Each of the 24 items or statements on the instrument is divided into subsets of three. These subsets relate to eight components of life effectiveness. The possible responses for each of the statements range from 1 'Not Like Me' to 8 'Like Me'. The score for

each component is the average of the scores on the three related statements for that component. For example the score for Achievement Motivation is the average of the score on items 3, 11 and 19.

The Development of the LEQ

Early intervention studies used psychometrically developed instrumentation such as, the Coopersmith Self Esteem Inventory (Marsh and Richards, 1988, Lawrence, 1980, Coopersmith, 1976), LAWSEQ Questionnaire (Davies and Brember, 1999, Lawrence, 1980), Self Description Questionnaire-I (Hay et al, 1988), Children's Self Concept Scale (Burns, 1979). Neill et al (1997: 3) believe that these early studies were limited as the instruments used "were not specifically designed to measure changes, were at times only directly matched to program aims, and did not always have psychometric structures which stood the test of applied research settings". For example the Coopermsith Self Esteem Inventory only detects changes in self-esteem, therefore it would have measured only one of the programme aims. In general, those instruments focused solely on issues of self-esteem and self-concept, which meant that subtle changes within the students in terms of social skills or leadership skills would have been overlooked. In contrast, the LEQ has the advantage and appeal of being a psychometrically sound instrument that has been developed for specific use in this field.

According to Neill et al (1997), five main principles guided the development of the instrument. The first principle dealt with the length and complexity of the instrument; Neill wanted to create a practical and simple tool that could be administered quickly within the field yet he wanted it to be sufficiently sophisticated so that it could generate relevant information. Secondly, the instrument had to be robust enough to

“encompass a wide range of life proficiency domains relevant to general and specific programs” (Neill et al, 1997: 4). The third principle concerned the assessment of competence. They wanted to create an instrument that assessed a range of life skills that they believed to be relevant to general and specific personal and social development programmes.

The fourth principle focused on ‘detecting change’, as Neill wanted to develop an instrument that was sensitive enough to measure change yet accurate enough to produce reliable findings. The final principle concentrated on the instrument’s ability to “facilitate the process of self-examination, goal setting and feedback”. Neill et al (1997) believed that the instrument had added value if it could work as part of an overall educational exercise that would provide an opportunity for self-assessment and feedback on personal progress. From these five principles the main areas that related to the specific aims of the Aiming Higher programme were those concerning detecting change and relevance. In short the instrument was designed to measure the broad outcomes of outdoor experiential programmes.

As the LEQ is a relatively new instrument it has only been used as a major research method in a limited number of studies, most of which were conducted in Australia (where the LEQ was created). One study has been conducted involving the Women’s Wilderness Institute, Colorado (Neill and Flory, 1999). Currently, the LEQ is being used in a number of research projects in a variety of places including Singapore, Mongolia, Utah, New Hampshire and Queensland (Neill, 2002). As yet the LEQ remains little known in the UK.

How reliable is the LEQ?

The LEQ has various versions, ranging from LEQ-C to LEQ-I. Neill (2000) states that the LEQ-H (the version used in this study) was examined using confirmatory factor analysis, which is a statistical procedure for testing fit between theoretical structure and actual data. Neill considered the LEQ in terms of a goodness-of-fit (GFI) test, which is a “measure of the relative amount of variance and co-variance jointly accounted for by the model” (Joreskog and Sorbom, 1986: 41). The closer the GFI index is to 1.00 the better the fit of the model to the data. In this case Neill was looking to find out how closely the eight components of the LEQ related to the data that he had gathered using it. Neill reported that that the “LEQ-H was very impressive - with a fit of 0.95 (out of a possible 1)” (Neill et al, 1997: 12, Neill, 2000). This suggested that the LEQ was reliable, it measured something, and measured it consistently. However there was little data relating to validity. So although it was measuring something it was unclear whether it was necessarily measuring ‘life effectiveness’. Neither the available ‘Life Effectiveness Questionnaire: Development and Psychometrics’ paper (Neill et al, 1997) nor a more recent paper ‘A Tool for Measuring Change’ (Neill, 2000) included any measure of validity. The issue of validity is discussed on page 142.

Both of those papers did reveal that the LEQ-H could be used with both mixed age and gender populations. Neill reports that the instrument is “equally applicable to males and females, as well as for adolescents and adults”. (Neill, 2000: 5). Thus reinforcing my view that the instrument was suitable for use with the population of this study; mixed gender adolescents.

To determine the reliability of the instrument for this study, a confirmatory factor analysis was conducted using the data gathered during both years of the present

study. Ordinarily, internal consistency would be reported in the form of a Cronbach's Alpha coefficient. This would calculate the extent to which the items in an index, in this case the LEQ, are measuring the same thing (Bryman and Cramer, 1999).

Cronbach's Alpha works by splitting the items in a scale and comparing the results from each set to provide a split-half reliability coefficient for each. Therefore this calculation is very sensitive to the number of data items in a given scale. In this case a split-half reliability coefficient would have been conducted for three items, as there are three items in each of the eight components of the LEQ. This calculation would have produced a very small figure, as small scales (less than ten) tend to give low Cronbach's Alpha values (Pallant, 2001). Consequently, this type of calculation would not have produced an accurate reflection of the instrument's reliability.

In light of this, a factor analysis was used to explore the internal consistency of the instrument. Neill has also used a form of factor analysis in his study, which suggests that he too found this to be the most suitable form of reliability analysis. Robson's describes this method thus:

[Factor Analysis] ...allows you to assess the extent to which different test items are measuring the same concept (strong intercorrelations), or whether their answers to one set of questions are unrelated to their answers on a second set. Hence we get an assessment of whether the questions are measuring the same concepts or variables.
(Robson, 1993: 349)

The LEQ-H comprises 24 items, each of which is related to one of eight different components (see Figure 7.1). Factor analysis, allowed consideration to be given to each of the items in terms of their relationship to the eight components and the overall instrument. Initially a Principal Component Analysis (PCA) was conducted using Statistical Package for the Social Sciences (SPSS). PCA seeks to reduce large

amounts of correlated data into smaller manageable chunks of uncorrelated data (Vogt, 1993). In this 24 questions were reduced to eight scales.

The suitability of the data must be assessed before a factor analysis can be conducted. There are two main issues to consider when determining whether a particular data set is suitable for factor analysis. Firstly sample size, generally the larger the better and secondly the strength of the relationship among the variables. (Bryman and Cramer, 1999;150). Two statistical measures are generated by SPSS to help assess the factorability of the data: Bartlett’s tests of sphericity (Bartlett, 1954) and Kaiser-Meyer-Olkin value (KMO).

The Bartlett’s tests of sphericity should be significant ($p,0.05$) for the factor analysis to be considered appropriate. The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis. (Bryman and Cramer, 1999: 153)

Table 7.2 KMO and Bartlett’s tests of sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.878
Bartlett’s Test	Approx Chi-Square	9521.588
of Sphericity	df.	276.000
	Sig.	0.000

The Kaiser-Meyer-Olkin value was 0.878, exceeding the recommended value of 0.6 (Kaiser, 1970, 1974) and Bartlett’s Test of Sphericity was statistically significant

($p < 0.05$)⁹, and so supports the factorability of the correlation matrix (Bryman and Cramer, 1990: 207). The results suggest that the factor analysis was justified and so the PCA was conducted.

Table 7.3 Principal component analysis

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
Achievement Motivation	6.651	27.713	27.713
Active Initiative	1.703	7.097	34.810
Emotional Control	1.452	6.951	40.861
Intellectual Flexibility	1.377	5.736	46.598
Self Confidence	1.164	4.849	51.447
Social Competence	1.019	4.246	55.694
Task Leadership	0.994	4.140	59.834
Time Management	0.974	4.058	63.892

The results from PCA are discussed in terms of eigenvalues, which indicate how much a particular factor accounts for discrepancies in the original group of variables. In this case the eigenvalue indicates how closely the items relate to one another, so the larger the eigenvalue the more variance is explained by the factor; that is the more closely the questions relate to the specific components. Principal Component Analysis revealed the presence of six components with eigenvalues exceeding 1 (see Table 7.3). Two further components had eigenvalues close to 1 (Task Leadership at 0.994 and Time Management at 0.974) and it was decided to retain these for further investigation. In total the eight components explained 63.89 % of the variance.

⁹The concept of significance is discussed in this chapter, see page 146).

The results from the PCA were further examined using a Varimax rotation. A Varimax rotation can be used with confidence when the factors underlying the observed correlations are expected to be independent of one another, or nearly so; in this case the conditions were suitable. A Varimax rotation simplifies the factor structure by maximising the variance of a column of the pattern matrix, in this case, it allows the correlations between the 24 items and the eight components to be considered (Kim and Mueller, 1978).

The rotation solution (see Table 7.4) revealed a pattern of variable loading that was consistent with the LEQ components. The 24 items listed on the left-hand side of the table relate to the 24 items or statements on the LEQ. The components along the top of the table represent the specific aspect of life effectiveness measured by each of the 24 items. For example, the component Social Competence relates to item A02 (I am successful in social situations), A10 (I am competent in social situations) and A18 (I communicate well with people). The eight factors have been labelled to relate to the eight components. The labels were attached after the patterns had been determined.

...the scientist will study them and attach an appropriate label. These labels facilitate the communication and discussion of the results; they also serve as instrumental tags for further manipulation, mnemonic recall and research. (Factor Analysis, 2003:1)

Table 7.4 Rotated Component Matrix

Factor Loadings (Varimax normalized) Extraction: Principal components									
Item	Social competence	Active initiative	Time management	Achievement motivation	Self confidence	Emotional control	Task leadership	Intellectual flexibility	
A02	.804								
A10	.784								
A18	.594								
A05	.468								
A15		.854							
A23		.833							
A07		.637							
A01			.795						
A17			.757						
A09			.678						
A11				.726					
A19				.713					
A03				.610					
A08					.750				
A24					.677				
A16					.619				
A06						.859			
A22						.838			
A13							.761		
A14						.330	.629		
A21		.379					.468		
A04								.784	
A12				.308			.362	.624	
A20				.321				.521	

The results show how those items relating to Social Competence (A02, A10, A18), Active Initiative (A07, A15, A23) Time Management (A01, A09, A17), Achievement Motivation (A03, A11, A19) and Self Confidence (A08, A16, A24) cluster around their respective factors. Thus establishing that the majority of the questions were related to the components that they were designed to measure. For example items A03, A11 and A19 represent the three questions that relate to Achievement Motivation, as they have clustered neatly around Factor 4, which relates to this component. This process revealed that three components, Emotional Control, Task Leadership and Intellectual Flexibility related not only to their respective factors (six, seven and eight respectively), but to other factors as well. For example item A05 designed to measure Task Leadership (factor seven), appeared to measure Social Competence (factor one). Similarly question A14, designed to measure Emotional Control (factor six) appeared to measure both factor six and factor seven (Task Leadership). A varimax rotation was carried out on the post-OB data and the follow-up data and a similar pattern was revealed in each case (see Appendix D).

These correlations can be understood as demonstrating the way in which those concepts operate in the real world. In a real life situation we would draw upon many aspects of our 'life effectiveness' to cope in different situations. Therefore it is difficult to completely extract a particular part of one's 'life effectiveness' from another. This is similar to the problems surrounding the concept of dispositions, where difficulties were encountered when the dispositions are introduced into separate parts for the analysis. In terms of the LEQ each of the eight scales are related to one another as they all combine to produce an overall measure of life effectiveness. Essentially, the results from the Varimax rotation demonstrates that there is a high level of internal consistency in the LEQ.

Validity

Neill (2000: 9) acknowledges that there is a “need to develop concurrent validity evidence, especially corroboration with other methods of observation and data collection”. To address this issue the research was designed so that the results from the LEQ, interviews and observations could be triangulated to provide a form of convergent validity. The technique of triangulation is used here “to get a ‘true’ fix on a situation by combining different ways of looking at it (the situation) or different findings” (Silverman, 2000: 177). In this study the results from the different measures are considered together in order to get an overall understanding of the effectiveness of the Aiming Higher programme, however in doing so they also provide an indication as to the LEQ’s validity in terms of producing findings which are relatively similar to those produced by the other measures. Cohen and Manion (1994: 238) describe this process as “triangulation between methods” stating that it involves “the use of more than one method in the pursuit of a given objective”.

The sample

The LEQ’s were distributed in each of the sample schools to every fourth year pupil, both those students who attended Outward Bound (OB group) and those who did not (non-OB group). Table 7.5 provides details for each school, the school roll, numbers of students in fourth year, numbers of students attending Outward Bound and numbers for those students who remained in school. The fourth column of the table provides an index of deprivation, as calculated by NLC. In common with NLC’s practice for allocating resources under its Raising Achievement policy, the clothing grant figure for each school has been used as the main measure of deprivation (NLC, 1998).

Table 7.5 Summary of sample

School	School roll	Year 4 total	Deprivation Index %	OB places
1	1144	199	27	35
2	1085	210	37	52
3	830	175	24	28
4	448	90	53	32
5	588	114	30	23
6	946	198	25	34

(Based on 1999/2000 figures)¹⁰

This figure is used to calculate the number of places that each school receives on the Outward Bound programme. The higher the degree of deprivation in a particular school, the greater the numbers of places that they will receive. The size of the school roll is also taken into account when calculating the number of Outward Bound places. For example school four has an index of deprivation of 53% and receives 32 places, however it is a relatively small school with only 90 pupils in fourth year. Therefore proportionately over one third of their fourth year students attend Outward Bound. In comparison school two, which has a much larger school roll and a 37% deprivation index, receives 52 places. This equates to one quarter of their fourth-year students attending Outward Bound.

North Lanarkshire Council believed that the students were chosen using a strict selection process, as indeed they were, albeit differently in each school. Following

¹⁰ The totals in Table 7.5 were deliberately based on 1999/2000 figures as this was the first year of the research therefore these figures provided the basis of my initial research design.

the selection process guidelines provided by NLC, the population should be divided into achievers (those who did not go to Outward Bound) and underachievers (those who did go to Outward Bound). The results from the T1 scores established that both groups (non-OB and OB) were similar in terms of their life effectiveness scores, however this did not have any bearing on the findings as the results were based on changes within the individual.

Adapting and Administering the LEQ

The LEQ had been designed for use with a variety of age groups ranging from adolescents to adults in a pre- and post-intervention setting (Neill and Flory, 1999). As the present study is of a mixed ability student population the vocabulary used in the original LEQ was thoroughly examined as it was felt that some of the students might have struggled to understand the language used. To determine the suitability of the questionnaire in terms of the students' ability, a full copy of the covering letters and a comment sheet were sent out to the five¹¹ Outward Bound co-ordinators involved. The comment sheets were returned and all of the remarks were collated. Four out of five of the co-ordinators felt that the instrument was suitable for use with the students in their schools. The only comment received regarded the instruction sheet that accompanied the instrument. One co-ordinator felt that it would be clearer for their students if it was formatted in the style used throughout the school for examinations and surveys. They felt that the students would instantly recognise the layout, therefore they would be better able to understand what was being asked of them. This comment was acted upon and the instruction sheet was altered, although the information remained exactly as it had been on the original.¹² The final

¹¹ Only five of the sample schools were involved at this stage. One school had opted out due to the Co-ordinator being 'signed off' with a long-term illness.

¹² See Appendix C for LEQ instruction sheet.

instruction sheet was consistent for all schools. So, having established the suitability of the LEQ, the issue of reliability was considered.

With the co-operation of the Outward Bound Co-ordinators an identical version of the LEQ was administered to each of the six sample secondary schools. The LEQ was administered with an instruction sheet that explained how to complete the questionnaire. The Outward Bound Co-ordinator and the teacher in charge took responsibility for the task of explaining the instructions to the students. Therefore, as well as receiving their own copies of the instruction sheet, students had it explained to them by a member of staff.

Each questionnaire was distributed one month before Outward Bound (t1), one month after Outward Bound (t2) and finally three months after Outward Bound (t3). The three-month post-test (t3) investigated any long-term effect of the programme and was least likely to be subject to any 'Post Group Euphoria Bias' (Marsh et al, 1986). The LEQ was distributed in year one during the 1999/2000 session, and again in year two during the 2000/2001 session. This part of the evaluation involved approximately 800 students taken from the six sample schools. In each case the distribution method was consistent within each school and between each time series. The teacher in charge distributed the LEQ during social education classes, and at no point was reference made to the purpose of the instrument in relation to the Aiming Higher with Outward Bound. In preparation each of the sample schools were visited and the LEQ procedure was discussed with each of the Co-ordinators, individually agreeing upon the best and most appropriate way in which to handle the administration of the LEQ.

It was agreed that no reference was to be made to the programme in relation to the instrument as it was felt that this might influence the results. For example those students who knew they were going to Outward Bound may have completed the LEQ more favourably than a student who wanted to go to Outward Bound but was not selected. Therefore, to get results that were as ‘natural’ as possible the origin of the instrument was not disclosed.

The logistics of the programme lent themselves to this type of quantitative study in that large numbers of students were available in their school before and after the intervention. This provided the opportunity for the students to be accessed through their school and teachers, throughout the course of the study. Overall response rates were higher for the first year of the data collection than for the second year (Tables 7.6). This was due in part to the timing of the distribution of the LEQ, which was governed by the programme dates and reliant on the OB Co-ordinators to return the data. Those pupils who were absent due to illness on the days when the questionnaires were administered also account for the number of non-respondents.

Table 7.6 Sample response rates

	T1 - one month before OB	T2 - one month after OB	T3 – three months after OB
Year one	828 (100%)	595 (71.9%)	404 (48.8%)
Year two	461 (100%)	233 (51.8%)	424 (58.8%)
Total	1289 (100%)	834 (64.7%)	675 (52.4%)

The response rates were considerably lower for the second year of the study, for two distinct reasons. Unfortunately in the middle of the second year of the research, the OB Co-ordinator in school six went on extended leave of absence due to illness. A supply teacher was brought in during this time, however he was not made aware of the research programme and so did not know to distribute the questionnaire one-month after Outward Bound. The author was unaware of the Co-ordinator's absence and so was unable to approach the supply teacher; subsequently the overall response rate was lower for the second year of the study. One school did not participate in the second year of study as they were undergoing a school inspection during the first week of the research programme.

The majority of the sample schools co-operated and generously put time and commitment into the research producing as much data as they were able to given the constraints of their curriculum and their school calendar.

Considering the analysis

The raw data were analysed using Statistical Package for the Social Sciences (SPSS). Initially, a number of Analysis of Variance (ANOVA) tests were conducted in order to analyse the data and determine what if anything was happening to those students that went to Outward Bound. An ANOVA is used to test the hypotheses about differences between two or more means (Lane, 2002). In this case, the ANOVA compared those students who went to Outward Bound with those students who did not, in terms of the time series and year of the programme. This provided an overview of the students pre-Outward Bound, one month post-Outward Bound and again three months after Outward Bound. Having considered the overall effect of the course, the consistency of the delivery was examined by week and by year. Finally to

determine whether the school had any effect on their experience the data was analysed by school for those students who went to Outward Bound.

A note on significance

The findings from the ANOVAs are discussed in terms of statistical significance in this chapter and considered alongside the results from the other approaches in Chapter Ten.

In normal English, 'significant' means important, while in statistics 'significant means probably true (not due to chance)'. A research finding may be true without being important. When statisticians say a result is 'highly significant' they mean it is very probably true. They do not (necessarily) mean it is highly important. (The Survey System, 1997: 1)

Statistical significance is discussed in terms of 'p values' that is the "probability that any particular outcome would have arisen by chance" (Greenhalgh, 1997: 1). A p value of less than 1 in 20 (expressed as $p < 0.05$) is considered as "statistically significant" and a p value of less than 1 in 100 ($p < 0.01$) is "statistically highly significant" (Greenhalgh, 1997: 4). The lower the significance level, the more the data must diverge from the null hypothesis to be significant. That is the more likely that the outcome has arisen as a direct result of the variable or factor in question. The results in this study are discussed in terms of significance at $p < 0.01$ and $p < 0.05$. In each table the column marked 'sig.' denotes the statistical significance.

A major problem with statistical significance is that its presence does not mean that the effect noted is either large or important (Wright, 1997; Robson, 1984). Therefore it does not refer to 'significance' in anything like the normal meaning of the word; "the statistically significant result could be trivial" (Robson, 1984: 351). Bakeman (1992: 168) and Salkind (2000: 18) in reference to statistical significance note that

“there is no reason to be particularly dazzled” by it or “depressed by its absence”. They state that it should be borne in mind that “whilst statistical significance is important as a concept, it is not the end-all and certainly should not be the only goal; of scientific research”.

However statistical significance is important as it demonstrates how likely it is that a result is to be due to chance. Although Salkind (2000: 18) concludes that, “statistical significance in and of itself is not very meaningful unless the study that is conducted has a sound conceptual base that lends some meaning to the significance of the outcome”. Bakeman (1992: 168) refers to a concept called “real world significance” whereby statistical significance is not taken as the only indicator of any notable effect”. Therefore in order to fully understand the findings from this study they must be considered in terms of the educational context in which they rest (that is the wider Raising Achievement programme, the individual school and the individual student). This concept is relevant to the study as the evaluation concerns a real-life situation therefore the results have very ‘real’ consequences. To better understand what the programme means in terms of the students’ self-perception, the concept of statistical significance must be considered in relation to real world significance. This was achieved by using the concept of dispositions as an overall framework for analysis.

Changes of LEQ over time by participation and non-participation in OB programme

The first statistical test conducted, considered whether there was any difference in LEQ scores between those students who experienced the Outward Bound course and those who did not. This was considered in terms of the difference between the LEQ results for students one month before and one month after Outward Bound (time series - ‘t2-t1’) and the difference between one month before Outward Bound and

three months after Outward Bound (time series -'t3-t1'). The results are displayed in Table 7.7 in terms of 'f' values which refer to "the ratio of explained to unexplained variance" in an ANOVA and significance ('sig.')

values (Vogt, 1993: 94). The ANOVA results indicate that for the overall totals there is no statistically significant difference between each group in either the t2-t1 set or the t3-t1 set for either year one (1999/2000) or year two (2000/2001), thus there is no statistical evidence of any effect.

When the distribution of the effect is considered in terms of the separate life effectiveness scales, then the results appear to be 'stronger' in some areas than in others. For example in year two intellectual flexibility is significant for the three months after Outward Bound time series, although it was not significant at any prior time series in either year of the study.

So there are some individually significant results however they do not represent any pattern or demonstrate any consistency throughout the study. Therefore the first and perhaps the most obvious conclusion to be drawn is that there is no consistent statistically significant effect.

Table 7.7 Changes of LEQ over time by participation and non-participation in an Outward Bound programme

LEQ Component	Course	t2-t1				t3-t1			
		M	sd	F value	Sig.	M	sd	F value	Sig.
Achievement motivation	OB	-0.06	1.26	1.01	0.32	-0.18	1.01	2.04	0.15
	N-OB	0.16	2.17			-0.03	1.03		
Active initiative	OB	-0.02	1.32	0.15	0.70	0.00	1.01	0.70	0.40
	N-OB	0.03	1.37			0.15	1.77		
Emotional control	OB	0.38	1.69	1.16	0.28	0.34	1.78	0.16	0.69
	N-OB	0.17	1.88			0.27	1.57		
Intellectual flexibility	OB	0.34	1.18	1.70	0.19	0.23	1.15	3.33	0.07
	N-OB	0.13	1.69			-0.01	1.28		
Self confidence	OB	0.47	1.33	0.93	0.33	0.35	1.27	1.43	0.23
	N-OB	0.27	2.06			0.20	1.22		
Social competence	OB	0.26	1.21	3.70	0.06	0.17	1.23	0.11	0.74
	N-OB	0.02	1.20			0.13	1.17		
Task leadership	OB	0.46	1.32	0.34	0.56	0.58	1.20	1.48	0.22
	N-OB	0.33	2.44			0.37	1.70		
Time management	OB	1.15	1.13	1.20	0.27	0.24	1.14	0.01	0.95
	N-OB	1.37	1.21			0.25	1.30		
Overall LEQ	OB	0.27	0.85	1.72	0.19	0.22	0.86	0.31	0.58
	N-OB	0.14	0.97			0.16	0.88		

The course and year by time

The second test considered the course by year of the study. The Outward Bound programme runs weekly with different groups, for 15 weeks each year, with a variety of instructors running each week and different students attending. Therefore it was interesting to determine whether there would be a difference in LEQ scores irrespective of the year of the course. The analysis from the overall LEQ scores produced no notable difference in scores over either time series sets.

Table 7.8 Descriptive statistics of overall LEQ for course and year by time

Time	Course	Year	N	Mean	Std. D
Time 1	non-OB	Year 1	250	5.941	.776
		Year 2	136	6.100	.881
		Total	386	5.997	.817
	OB	Year 1	84	5.979	.765
		Year 2	8	5.698	.954
		Total	92	5.955	.781
	Total	Year 1	334	5.951	.773
		Year 2	144	6.078	.887
		Total	478	5.989	.810
Time 2	non-OB	Year 1	250	6.025	.932
		Year 2	136	6.222	.890
		Total	386	6.095	.921
	OB	Year 1	84	6.209	.751
		Year 2	8	6.021	1.100
		Total	92	6.192	.781
	Total	Year 1	334	6.072	.893
		Year 2	144	6.210	.900
		Total	478	6.113	.896
Time 3	non-OB	Year 1	250	6.080	.984
		Year 2	136	6.309	.823
		Total	386	6.161	.936
	OB	Year 1	84	6.209	.949
		Year 2	8	6.208	1.186
		Total	92	6.209	.965
	Total	Year 1	334	6.112	.976
		Year 2	144	6.304	.842
		Total	478	6.170	.941

Table 7.8 demonstrates the effect for the overall LEQ factor. No statistically significant effects were found when the LEQ scores distribution were considered in terms of the eight different scales, which suggests that there was no difference in effect irrespective of the year of the study. This could mean that in terms of the LEQ study the course is delivering a consistent programme. Although the statistical significance of the results has been considered these probability values do not examine the variables degree of association or effect size. This is important especially when dealing with large samples as even very small differences between groups can become statistically significant, although the difference does not always

have any practical or theoretical significance. Table 7.9 demonstrates the results from the test for effects for year and OB participation on overall LEQ.

Table 7.9 Test of effects for year and OB participation on overall LEQ

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
COURSE	0.281	1	0.281	0.174	0.677	0.000
YEAR	0.029	1	0.029	0.018	0.892	0.000
COURSE* YEAR	2.499	1	2.499	1.544	0.215	0.003
Error	767.392	474	1.619			
Total	770.201	477				

In this case effect size has been measured using the characteristic of Eta squared¹³. Eta squared can be understood as representing the proportion of variance of the dependent variable that is explained by the independent variable (Bryman and Cramer, 1999). For example in Table 7.9 (left hand side column) the Outward Bound course is considered in terms of its degree of association with the year of the study. The values for Eta squared can range from 0 to 1 with 0.01 being a small effect, 0.06 being a moderate effect and 0.14 being a large effect (Bryman and Cramer, 1999). The results in Table 7.9 show no effect in each case, which could suggest that the course is consistent over both years.

The influence of the school upon the experience

In 1998 at the Ethos Network Conference, ‘Ethos in Achievement: Valuing Achievement’, NLC publicly highlighted the issue of school ethos and achievement, by running a workshop devoted to the Aiming Higher with Outward Bound programme. The workshop investigated their explicit recognition of a link between ethos and achievement (McGhie, 1998).

¹³ SPSS calculates partial Eta squared although it is not labelled as such in the output.

McGhie (1998: 2) broadly outlines some of the work on ethos, which she believes impacts on achievement. She includes “putting in place for all young people certain essential experiences”, “developing a variety of ways of recognising and celebrating achievement” and “developing positive and supportive relationships”. These points highlight the way in which the ethos of a school could effect a pupils experience of achievement. It seems reasonable to expect that schools may have made different levels of commitment to the broader Raising Achievement programme and the Aiming Higher with Outward Bound programme, therefore the last test determined the effect the students’ school had in terms of their experience at Outward Bound. The individual data was explored in relation to those students who went to Outward Bound as compared to those students who didn’t go to Outward Bound in each of the sample schools.

The results of the descriptive statistics (see Table 7.10) suggest that the overall LEQ scores were not significantly different for t1, t2 or t3. Again an Eta squared analysis was conducted to consider the relationship between the course and the school. Table 7.11 demonstrates that the variables of course and school are not significant as they show no effect. There is a slight interaction effect between course and school but this is not indicative of any overall effect as the two items are not significant when considered individually. Therefore, this investigation did not produce any evidence to support the notion that the school may influence the success of the programme.

Table 7.10 Descriptive statistics of overall LEQ for course and school by time

Time	Course	School	N	Mean	Std. Deviation
Time 1	non-OB	School 1	213	6.098	.817
		School 2	75	6.051	.816
		School 3	73	5.748	.773
		School 4	25	5.707	.777
		Total	386	5.997	.817
	OB	School 1	31	5.753	.934
		School 2	17	6.221	.676
		School 3	16	5.859	.703
		School 4	28	6.071	.656
		Total	92	5.955	.781
	Total	School 1	244	6.054	.838
		School 2	92	6.082	.792
		School 3	89	5.768	.758
School 4		53	5.899	.732	
Total		478	5.989	.810	
Time 2	non-OB	School 1	213	6.175	.892
		School 2	75	6.157	.815
		School 3	73	5.917	.870
		School 4	25	5.738	1.403
		Total	386	6.095	.921
	OB	School 1	31	5.934	.715
		School 2	17	6.211	1.138
		School 3	16	5.974	.572
		School 4	28	6.592	.519
		Total	92	6.192	.781
	Total	School 1	244	6.145	.874
		School 2	92	6.167	.876
		School 3	89	5.927	.822
School 4		53	6.189	1.111	
Total		478	6.113	.896	
Time 3	non-OB	School 1	213	6.262	.847
		School 2	75	6.182	.799
		School 3	73	6.005	1.156
		School 4	25	5.695	1.157
		Total	386	6.161	.936
	OB	School 1	31	6.027	1.059
		School 2	17	6.047	1.352
		School 3	16	6.250	.759
		School 4	28	6.485	.594
		Total	92	6.209	.965
	Total	School 1	244	6.232	.878
		School 2	92	6.157	.918
		School 3	89	6.049	1.096
School 4		53	6.112	.980	
Total		478	6.170	.941	

However the LEQ is designed to measure students’ ‘life effectiveness’ and not school ethos. Therefore the link between ethos and achievement is still in need of

investigation beyond the scope of the Aiming Higher with Outward Bound programme. This type of investigation would be best done within the Scottish Education Department in light of any research that may have been conducted previously.

Table 7.11 Test of effects for school and OB participation on overall LEQ

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
COURSE	3.647	1	3.647	2.308	0.129	0.005
SCHOOL	2.815	3	0.938	0.594	0.619	0.004
COURSE by SCHOOL	24.028	3	8.009	5.069	0.002	0.031
Error	742.674	470	1.580			
Total	773.164	477				

Summary

Firstly the findings suggest that the course was statistically insignificant and so did not appear to have any effect on those students who took part in the Aiming Higher with Outward Bound programme.

The second finding highlighted the consistency of the programme, by demonstrating that the results were similar when considered over year one (1999/2000) and year two (2000/2001) of the course (see table 7.9). This finding suggests that the programme is consistently delivering similar learning experiences.

Finally, the individual schools did not appear have any influence over the student's experience of the programme. This issue needs further investigation in terms of analysing the individual ethos of each sample school in comparison to the other secondary schools within the district of North Lanarkshire.

Throughout the study the LEQ has been under investigation as a research tool in itself. The initial reliability tests conducted by Neill and his co-workers established that the questionnaire was robust enough to be used in settings similar to this and the findings have substantiated this. However no statistically significant findings were produced. Neill's research using the LEQ tends to analyse and discuss the results in terms of effect size only. Neill (2003a: 4) describes effect size as "a measure of how much difference exists between ratings at two different points e.g. before and after an outdoor education programme"; therefore it indicates the "quantified amount of change". The reporting of effect size allows the comparative quantification of programme effectiveness. For example as results can be compared with internal benchmarks, for example one year's programme can be compared with previous programmes. It also allows comparison with external benchmarks such as typical effects from one programme to the next.

Neill (2003b: 1) suggests that significance testing should be used "where you want to generalise from the sample you've studied to a broader population, e.g. we have samples from 10% of our clients and we want to generalise to all our clients". In such cases, and as is the case here, the sample results are representative of a broader population and the results were discussed in relation to that population (that is all of the secondary schools involved in the Aiming Higher with Outward Bound programme). This study did not use external benchmarks. Instead it considered the difference in the data between those who went to OB and those who did not and the interaction effects between the variables of course, year and school. As the results proved to be statistically insignificant no further tests were conducted for effect size.

Salkind (2000:180) states the “statistical significance in and of itself is not very meaningful unless the study that is conducted has a sound conceptual base that lends some meaning to the significance of the outcome”. Therefore the context in which this experience takes place must be further considered before we can properly understand the results. This finding reflects past research outcomes within the field, which have suggested that future research should consider a better understanding of the process as opposed to focusing solely on programme outcomes, (Cason and Gillis, 1994; Barrett and Greenaway, 1995; Nicol, 2001).

The real world significance of this analysis can be understood fully when the findings from the other research techniques employed are considered in relation to the LEQ results. So by using the technique of triangulation consideration has been given to the programmes effectiveness in a number of ways.

Chapter Eight

PARTICIPANT OBSERVATION AND INDIVIDUAL INTERVIEWS

Introduction

The previous chapter considered the quantitative approach to evaluating the Aiming Higher with Outward Bound programme. However, to construct a clear picture of the whole process and to understand the students' perspective, their experience of the programme needed to be examined. To this end, six students were 'followed' through their experience using participant observation and individual interview techniques. This allowed me to gain an understanding of the student's experience and determined whether any changes occurred at an individual level.

The research questions, 'does the programme provide an opportunity for positive development' and 'does the process support positive development' are considered in this section. The opportunities for development were considered in relation to mainstream education so that the programme can be clearly discussed in terms of the dispositions. The process was considered in terms of the opportunities that exist both within and throughout the five-day course. The following section details the methods used and outlines the way in which they relate to the other research techniques employed. The results from the observation weeks were presented in diary form to illustrate the students' experience.

Observing the students

Visits to the Outward Bound centre at Loch Eil were made in November 1998 and again in February 1999. These initial visits were used to test various pieces of

recording equipment, in order to determine the most effective methods for data collection. Each piece of recording equipment is discussed in terms of its advantages and disadvantages.

Dictaphone

The dictaphone was easy to use and to store whilst moving around, although the students were aware that they were being recorded and this distracted them from the activities. To minimise the distraction it was used discretely when travelling to and from various activities and whilst the students were immersed in the activities. Overall the dictaphone was extremely practical for use in the field and in all weather conditions as it offered a quick way of recording thoughts and taking notes without drawing too much attention.

Video camera

The video camera proved to be very cumbersome in the field and not particularly practical for all situations. For example, when the students were on the water they had to be videoed from the loch-side, which meant that the verbal interaction was lost. All of the observers watched from the lochside and only the instructor accompanied them onto the water, therefore to go out with them would have disrupted the group dynamics. The way in which some students reacted to being 'recorded' caused some problems, as often they did not act 'normally'. The video camera tended to encourage some students to 'perform', which detracted from the learning process. As a result, some students who were perhaps shy than others tended not to attempt activities that they may otherwise have, were they not being recorded. Therefore it tended to cause most of the students to act 'out-of-character' by either over-performing or under-performing. One of the advantages of the camera was its ability to provide an excellent visual record of the students' performance on

the activity. The footage from each day provided an opportunity to review the scene from a variety of perspectives. Nevertheless the validity of the recorded image was contentious, as it was often a record of the student's reaction to the camera and not necessarily a true reflection of their experience.

Camera

The use of the camera during the pilot week was fairly successful, as the students were accustomed to the teachers taking photographs for the school, and other students taking photographs for themselves therefore it caused no distraction. A static image of the week was often produced, giving a snapshot of the week as opposed to telling the whole story. However the photographs did work extremely well as reminders of the activities, helping to capture some of the atmosphere and acting as a prompt.

Personal diary

During the pilot weeks, the daily field notes, which were recorded or written down, were transferred into a diary. This method caused no disruption to the students during the day as they were not written out until the evening. For example, at lunchtime or when the students were getting their kit together notes would be made. This process provided a fairly comprehensive account of the week from the author's perspective.

Method

Following the initial visits I decided that I would record my observations using field notes, which would be written up every night in the form of a diary of events and experiences. I also decided to use a dictaphone to record these thoughts during the day. During the week I followed one of the clans per day. Within each clan I randomly selected one student and chose to observe them throughout the day. This

process began on the very first day of the week when the students arrived at the centre; by selecting one male or female student as they came off of the bus. After the first day, I randomly selected a student at breakfast time.

In each case, I observed the 'sampled' student for the day and had an interview with them in the evening. I did not take part in any activities during the observations, as I felt that this might have disrupted the group and influenced the research process. There was one instance where the group requested that I join them and take part in one activity. In this situation Katy ¹⁴would only do the 'parachute jump' if I jumped before her. So I jumped first as not to jump would have caused more of a disruption than to go along with the situation. Therefore although participation in the activities was not necessary I did join in when the students requested, as this allowed the day to flow naturally and helped to make them feel at ease around me. The fact that the students were used to me accompanying their group during the day helped the interview session in the evening as they were familiar with me and so were relaxed in my company. The students were used to observers throughout the week, as there were various teachers, instructors and trainees watching them.

Following the observations the students were interviewed. The interviews were informal chats about their day, their experience of the week so far and their expectations for the remainder of the week. They presented an excellent opportunity to probe the students about specific incidents that had occurred during the day that had been perceived as important. Thus, giving them a chance to explain their version of the incident and to describe their experience. In this way the interview session

¹⁴ Pseudonyms have been used throughout this study to protect the students' identities.

helped to refine the Authors understanding of their experience, which enabled her to understand the Outward Bound course from their perspective.

The original plan had been to observe two male and two female students and to hold a group interview with all of the interviewees to discuss their various experiences on the last day of the week. However during week one it became obvious that the students were intimidated by the individual interview so the decision was taken to invite one of their friends to 'sit in' on the interview. The idea of introducing another person into the interview helped to create a more relaxed and open environment. By having two students to interview instead of one the pressure was taken off the student under observation as the focus was distributed between the two students. As a result they were more willing to discuss their experiences through the use of shared stories and shared experiences.

During week one, Gillian, Peter, Dawn and Ian and interviewed, Gillian, Peter, and Dawn (with her friend Janet) were observed. During week two Sean and Caroline and interviewed Sean (with his friend Robin), and Caroline (with her friend Andrea) were observed. The small number of students observed and interviewed in week two was due to a lack of accompanying staff. One of the teachers was unable to attend the course so the author stood in for them, which meant that she was unable to complete all of the interviews as she had intended. The opportunity to take on the role of a 'teacher' for the week meant that I could have a further insight into the process of the week from a teacher's perspective.

To ensure that the students felt comfortable the interviews were kept as open as possible. This was achieved by using an informal manner, not using recording

equipment and by holding the interview in a relaxed and familiar environment; the dining hall.

Results

A visit was made to Outward Bound for week four of the fifteen week-long programme (week beginning 22.11.99) and week eleven (week beginning 31.1.00) during (1999/2000). The results from these observation weeks were recorded in diary form and are discussed in the next section. This extract from the diary demonstrates the format used:

WEEK 1 - Day One - Monday - 22/11/99 - Female A

Day Plan

Breakfast, Introduction, Clan allocation, Dorm allocation

Lunch

Group dynamics (i.e. ice breakers), Kit allocation/ Kit Cage

Tea

Night Line, Night Expedition, Review Room, Hopes and Fears

Chat / Review

Weather: Cold, Overcast Showers. Ground was very muddy.

Observations - Gillian

The clan had its first group dynamic together on the front lawn. The aim of the afternoon activity was to act as an icebreaker. The use of icebreaking activities was a good way for everyone to get introduced to one another and to feel relaxed around other members of the clan. Gillian did not appear to be any less or more shy than any other members of the group. She involved herself fully in the activities and participated confidently. The group on the whole participated well together on each of the activities.

Gillian was quick to speak out when a question was put to the group. She gave sensible answers. She did not speak out of turn nor did she behave inappropriately. She was confident and participated well, acting responsibly at all times. When asked whether they should increase the level of difficulty of the activity (adding another ball into the game - juggling in a group), she was keen to increase the number of balls in the game. However the females refuted this initial sign of confidence by squealing and proclaiming that it was 'impossible' and that they 'couldn't do it'.

The group didn't get a night activity as one member arrived late therefore the clan's activity was jeopardised. This received a mixed reaction, Gillian was

relieved, as she didn't want to do it anyway...however when juxtaposed with her favourite activity, abseiling, she had a different reaction; she was very annoyed.

Interview- Gillian

Gillian was quite shy and nervous giving short answers. She was not keen to share any experiences or stories. I found it very hard not to prompt the answers and therefore compromise the credibility of the responses. To overcome this I tried to keep the questions as open as possible and to word the questions in such a way that one-word answers were not sufficient. She appeared to be having a good time and is looking forward to the rest of the week, she sees it as a good opportunity to bond with the other clan members and to make new friends. Originally she was not keen to come up to Loch Eil, as she didn't know why she had been selected to go. On reflection she thinks that the reason why she was chosen to go to Outward Bound may have something to do with 'communication skills'. She was to make new friends during the week and to try abseiling. She was keen to be sharing a dorm and mixed in with the other students in the clan. She appeared to be settling in well and looking forward to the rest of the week. She felt that the week would go too quickly. We agreed to chat again on Friday morning.

Issues for Friday

Clan - bonding - Time keeping

Confidence

Made new friends

Mixing with other students

At various points throughout the diary entries there are comments from the authors personal research diary. These personal comments are included to make sense of the results and to demonstrate how the process evolved as the week and the research progressed. For example, during the first week it quickly became apparent that it was going to be very difficult to get the students to speak about their experiences. This extract from the 'Researchers Diary' demonstrates the type of conflict that I found myself facing:

It is very hard to get the students to speak as they are very shy and not very forthcoming, especially the males. Although I want to keep the interview as relaxed, emergent and informal as possible, I am finding it hard to do this, as the students need a lot of encouragement to talk. Therefore I am keen to encourage the students to speak openly as I do not want to make the interview into an interrogation. (diary entry, November 23rd, 1999)

By this stage the initial research design, which had focused upon individual interviews, was being questioned. It became apparent that it may have been more beneficial to interview the students in pairs. Having a second student in the interview would help to take some of the attention off of the student under observation. This entry from the Researchers Diary on day three, week one demonstrates my thoughts on the research design:

I decided to interview two students together for two reasons. Firstly to create a more relaxed atmosphere and secondly to encourage the students to speak more freely with each other and me. I selected the student under observation and someone that they appeared comfortable and relaxed around. This worked quite well and the students were more open, more willing to share stories and happy to share their experiences with me. I felt that by involving another student a certain amount of pressure was removed from the student under observation. (diary entry, November 24th, 1999)

The development of the research design during the observation week helped to improve the data collection as it allowed the students to become more relaxed and in so doing they were able to talk about their experiences more openly. Although the research design was modified slightly the aims of the research remained the same; to get a better understanding of the individual experience. So although the design changed, the aims remained consistent and the quality of the data were increased.

Coding the data

The data gathered over the two weeks were coded manually. The diary entries were cut and the interview transcripts into separate pieces of data and placed each piece into a category. The categories were labelled with the five dispositions and one category was left for any data that didn't fit under the disposition headings:

- A commitment to learning
- A respect and care for self
- A respect and care for others
- A sense of social responsibility
- A sense of belonging
(LTS, 2000: 5)

These categories formed the framework for the analysis. To overcome the issue of reliability a sample of the diary extracts and the transcripts (one week's entries) and the five categories were given to an external coder. The 'coder' was asked to code the sample data. Thus the participant observation and individual interviews underwent the process of inter-rater reliability, which "aims to lay bare the research process in order that other researchers can determine the degree of consistency with which instances are assigned to certain categories" (Silverman, 2000: 188). As Silverman (2000: 188) states, "unless you can show your audience the procedures you used to ensure that your methods were reliable and your conclusions valid, there is little point in aiming to conclude your research".

Inter-rater reliability

The first observation week was randomly sampled (by writing a code for each week onto two separate pieces of paper and then drawing one from a hat) and given to the coder to perform the inter-rater reliability tests. The coder was given a brief outline of the research process and talked through the role that they had in terms of the research design. The coder works for a charitable organisation, teaching adults with learning difficulties. Although she was aware of the 5-14 National Guidelines she had no prior experience of the dispositions.

The results from the initial coding system were consistent with inter-rater's results for nine out of a possible 12 items (75%). This meant that we disagreed on the categorisation of four items of data. Once the inter-rater results had been reviewed, and compared with the initial coding system, the four outliers were discussed. The conversation surrounded one another's reasons for selecting the various categories, ending in an agreement that we could accept why one another had made that choice but we still felt that the items of data in question were relevant to both categories. It was concluded that this exercise had demonstrated the fact that the dispositions were inter-related; therefore they cannot be wholly reduced to separate categories. For example it was felt that there would be some instances when more than one disposition could be developing at one time.

Following the inter-rater reliability test the issue of reducing data in order that it fits a chosen framework was considered. At the outset it was unclear exactly how the inter-rater tests would affect the research process as it was uncertain how the results would establish the reliability of the method. This was due to the fact that in order to use the dispositions as a framework for analysis, the data had to be reduced into manageable pieces before coding it, categorising it and reconstructing it for the analysis. In doing this, there was concern that the overall process may become overlooked and full consideration may not have been given to the relationships between the five dispositions. In short the results demonstrated that for the most part (75%) the coding system was consistent.

As a result of the inter-rater reliability test and the concerns experienced with the reduction of the data, the decision was taken to discuss the results in two ways: firstly

in terms of the individual categories and then together under the global heading of dispositions.

Results: A commitment to learning -

Throughout schooling and to equip them for adult life, children need both to acquire new information and skills and to make new connections and meanings in what they have learned. Learning becomes an exciting and rewarding lifelong process. (LTS, 2000: 5)

One extract from the diary provides an interesting example of a student who demonstrated a very mature attitude to learning and his involvement in the programme. The discussion surrounding the reasons behind their involvement in the Outward Bound programme. Robin took over the discussion giving an open account of his attitude towards school, explaining the reasons why he felt that he had been chosen to go to Outward Bound:

He told me how he had been selected because he didn't do too well in first and second year but now he is really trying to improve himself. He believes that this Outward Bound course will help him to achieve this.
(diary entry, February 1st, 2000)

Robin displayed a strong commitment to learning, as he could see the opportunity that the Outward Bound programme was providing in terms of helping him to 'improve himself'. He had begun to realise that he had to take responsibility for his own education by resolving to do better when he got back to school. It was apparent that it could be argued that Robin was already positively disposed to a commitment to learning before he went to Outward Bound, (although evidently not in terms of his schoolwork in first and second year). However irrespective of whatever pre-dispositions he may or may not have brought to the week, he can still build upon and

positively reinforce his behaviour by being in an environment that encourages this type of personal and social development.

Those students, who go to Outward Bound who can be considered as already having a positive disposition, could act as a good example for others. Other students can learn from them and in turn they too can become positively disposed in those areas. For example, this extract from the research diary demonstrates the type of situation where some students who may be better able to talk to others influence the behaviour of those students who are quieter than most:

There is a definite mixture of students at Outward Bound this week. There are students that are very outspoken which tend to dominate the clans and compromise the behaviour of the less confident and quieter students; as a result they are feeling as though they are not part of the clan.
(diary entry, November 23rd, 1999)

It is clear that the mixture of students attending Outward Bound provides a situation in which students can learn from one another, and in doing so they have the opportunity to learn valuable skills. Consequently, throughout the programme the students are able to acquire 'new information and skills' as every situation they find themselves in presents another form of learning, whether it be learning more about others, their own motivation or about social skills and attitudes (LTS, 2000).

Having read and reread the diary entries this disposition was ingrained in the framework of the week. For that reason, it was difficult to see clear examples of its development in the students. Instead the conclusion that 'a commitment to learning' was inherent in everything that they were doing, during the Outward Bound course became increasingly apparent. Therefore it could be argued, and in some instances it was by the inter-rater, that the items of data that could be categorised in this

disposition could be placed under other headings. This issue will be resolved when the dispositions are considered collectively in the final section of this chapter.

A sense of belonging

Being part of and committed to the life of the school is achieved when the pupils feel valued, knowing that their opinions count and their concerns are addressed. (LTS, 2000: 5)

To understand this category better Loch Eil Centre was considered as the school. Instead of looking to engender a 'willing participation in the life of the school' similar qualities were noted, in relation to the Outward Bound programme.

The analysis of this category posed similar problems to the last, as again it was difficult to classify each item of data into single sets. For example, on three separate occasions one piece of data was relevant to this category yet it could also be considered relevant to the 'respect and care for others' dispositions. These situations were resolved by selecting the stronger category; that is placing it under the most comfortable heading. Once the inter-rater reliability tests had been the item was further considered in relation to both category choices and the inter-rater results. Only three pieces of data were 'problematic' in this category out of the full transcripts (approximately 16,000 words), and from that only one piece of data had not been coded as I did not feel that it fitted into any category. In that instance it was placed into the extra category, which had been created for this purpose.

The two remaining pieces of problematic data fell between two categories. For example this extract details my observations from the first day's activities:

The aim of the afternoon activity was to act as an icebreaker. The use of ice-breaking activities was a good way for everyone to get introduced to one another and to feel relaxed around other members of the clan. Gillian did not appear to be any more or less shy than any other members of the group. She involved herself fully in the activities and participated confidently. On the whole, the group participated well together. (diary entry, November 22nd, 1999)

Gillian and the other members of the clan were demonstrating a 'sense of belonging' whereby each student felt 'valued and where group and individual concerns and opinions counted' (SCCC, 1995). On the other hand, the students were developing a respect and care for others as they were learning to work together and to cooperate, therefore they were "developing qualities of co-operation, mutual support and respect" (LTS, 2000:5). In this instance, the data could be interpreted in terms of either disposition. A sense of belonging was being developed and this was corroborated by the inter-rater results.

On another occasion, a sense of belonging was being encouraged and developed. During the morning activities, Peter found it difficult to relax and communicate his opinions clearly to the group, however by the afternoon he had begun to open up to the rest of his clan to the point where he had become fully involved in the activities. The diary entry from that morning reads:

He was very keen, but kept himself back from the group. When it came to planning he was slow to get involved but when he did he had very good suggestions and ideas. (diary entry, November 23rd, 1999)

Which is very different to the diary entry made later that same day:

[Peter] ... is the first person to shout out the answers and to become involved. He was very aware of others in his group and keen to help them out by offering support on the tasks. (diary entry, November 23rd, 1999)

After observing Peter, and talking with him in the evening, he had become more at ease with the other members of his clan over the course of the day. This was evident in his behaviour, as in the morning he had been too self-conscious to speak out in front of the group however by the afternoon he was fully involved in the group tasks, offering advice and support to other members. It appeared that Peter had settled into the clan and that this had given him the confidence that he needed to be able to express his opinions. Consequently he began to feel comfortable enough to be able to contribute to the activities and perhaps in so doing he had developed a sense of belonging to the group.

If the students were positively disposed to develop a sense of belonging to their clan and to their dormitory, then this disposition could transfer back into the classroom and the framework of the school. During the week at Loch Eil a sense of belonging was engendered and this can be built upon when the students return to their schools, therefore broadening the sense of belonging in line with the original concept.

A respect and care for self

A sense of self-worth brings capacity for autonomy and motivation. It is the basis from which care for others grows. It is strongly linked to achievement and motivation. (LTS, 2000: 5)

The analysis of this disposition generated a wealth of data throughout the two observation weeks. Throughout the Outward Bound programme the students were constantly assessing their own abilities and their own skills through the new experiences and activities that they were involved in. The students were exposed to group living, sharing mealtimes, new challenges and a variety of new situations. Consequently they had to assess how they felt about these situations and in so doing they were learning more about themselves and what they were capable of.

For example, Caroline discussed how she was finding the course difficult in some respects, mainly because she felt that she did not mix well with the other girls in her dormitory. Though this bothered her she was still enjoying the other activities, as she was able to speak to the other members of her clan during the day. She was a confident individual who was still able to 'challenge' herself and do a lot 'more than expected' even though she was not enjoying all aspects of the course.

The process of the week at Outward Bound provided the students with the opportunity to evaluate their own abilities and test themselves in a variety of situations. Therefore every aspect of the week could be interpreted as encouraging the students to develop a respect and care for self by allowing them opportunities to experience feelings of achievement and attainment that are strongly linked to this disposition (LTS, 2000). The achievement that the student experiences during the week is very personal and not necessarily defined in terms of completing an activity.

I observed Dawn, taking part in an abseiling session, she would go no further than leaning back over the edge of the abseil, and so she had to take off the equipment and walk down the side of the hill instead. Having watched Dawn during the morning abseiling session and during the afternoon activities I noted that she seemed to be a lot more self-assured and involved in the afternoon session. My diary from that day notes that 'she was more confident and seemed keen to be involved fully in the afternoon activities'. Even although Dawn had not 'completed' the abseil, she had managed to achieve far more than she had thought she was capable of (as she had previously thought that she would not be able to go near the edge). Therefore, Dawn's abseiling experience highlights one of the many ways in which students

could experience feelings of achievement and success, which, in turn, could lead to a stronger sense of self-worth (LTS, 2000).

A respect and care for others

Recognising that we are interdependent helps pupils develop qualities of co-operation support and respect for the diversity of people, culture and beliefs. (LTS, 2000: 5)

All of the students that were involved in the observation and interview sessions felt that they had made new friends during the course. The social aspect of the course was frequently cited as one of the highlights. The students made regular references to 'new friends' or 'making friends'. This supports and reflects the way in which the course has been designed, as it encourages group living, communal eating, working together, and trust. Once the students arrived at Outward Bound they were separated into clans (which they work on the activities with all week) and are assigned to share dormitories. They spend mealtimes with their clan, eat as a clan and clear the table as a clan. A kit cage is designated to each clan, which holds their equipment for the week. They are collectively responsible for its contents and its cleanliness. All of these elements within the programme combine to encourage the students to become aware of their role in their clan, which in turn helps them to develop a sense of respect and care for each other.

The diary extract from the observations and interviews with Sean, describes the way in which his clan progressed throughout their activities:

The tasks got progressively harder and complicated as the morning progresses. The clan realised the need to plan, co-operate and work as a team as a result of this. This progresses into the afternoon activities the rock climbing and abseiling session where they worked together, encouraged and supported each other. (diary entry, February 1st, 2000)

So the strong emphasis on tolerance and support inherent in the design of the Outward Bound course provided an opportunity for the students to begin to develop a sense of respect and care for others or to reinforce this disposition if they already worked in this way. The instructors built upon this by organising the activities in such a way so as to emphasise the need for teamwork and co-operation.

A sense of social responsibility

An awareness of positive social attitudes, principles and skills will help pupils become competent and positively disposed to participate in society. A commitment to the environment will be engendered. (LTS, 2000: 5)

This disposition was facilitated throughout the design of the Outward Bound week, as at every opportunity the students were encouraged to take responsibility for their actions and their influence on their clan.

During the course of the activity Peter began to demonstrate an awareness of the needs of other members of his clan, by checking that they were managing to cope with the activity, offering them support and encouragement. The diary extract from those observation reads:

He coped very well with the physical aspect of the activity. He was also very aware of the other students and helped them both physically and mentally by offering encouragement and support. When he was belaying he was offering other clan members constructive advice and encouragement from the ground. (diary entry, 1st February, 2000)

This example demonstrates the way in which he began to foster an understanding of, and empathy for, the other clan members throughout the activities and over the course of the week. This could be understood as developing a sense of social responsibility,

demonstrating an “awareness of the social mores - the pro-social attitudes, principles and skills, which will make them competent to operate in society” (SCCC, 1995: 3).

It is hoped that the students will have experienced a sense of social responsibility within the context of Outward Bound and that they will then take this back to the school and from there develop a sense of social responsibility in their everyday life. This concept is similar to the ‘commitment to learning’ disposition discussed earlier.

Analysis

The participant observation weeks were extremely useful as a way of providing an insight into the experience for the individual student on the Aiming Higher with Outward Bound programme. The students provided very colourful and rich accounts of their experiences. All of the students interviewed and observed enjoyed the experience of Outward Bound, they found it to be challenging, rewarding, an opportunity to meet new people and a chance to make new friends.

Of the students observed and interviewed during the course of the week, any fears that they harboured prior to the course disappeared as they settled into the routine and began to make friends. Most of their fears focused on making friends and sharing dormitories with people that they didn’t know, however those feelings were also mixed with excitement, as they were keen to meet new people and to enjoy the week together. This was demonstrated in one interview with Dawn and Janet on day three week one:

They talked about sharing a dormitory with other people that they didn’t know, however by this third day they were all very good friends with one another. They felt that there were one or two girls in the dorms who were not happy, but they were aware of this and responding to it.
(diary extract, November 24th, 1999)

This interview demonstrated that the students were not only aware of their own feelings but also the feelings of other students. On the whole, the majority of the students had by the end of the week become more relaxed and confident having managed to share a dormitory with people they hadn't known previously. For most students the programme was a success (in terms of being a positive experience). The success of the week at Outward Bound can be attributable to a number of factors, for example programme length, instructor influence and age of the student. There are so many variables that combine to make a residential week a success or failure that to break it down into components goes against the spirit of spontaneity that adds to the excitement of the experience.

Instructor influence

The concept of instructor influence was chosen as an example as it is widely recognised (Riggins, 1985; Riggins, 1986; Phipps and Claxton, 1997; Preist and Gass, 1997) as a major variable and, the majority of material surrounding it, can be understood as equally true of teachers.

I feel that the instructor has to display enthusiasm, sensitivity, understanding and respect in order for the students to relate to them and to feel secure in their care for the week. As Fletcher (1971: vi) suggests “unless the staff contrive to bring about a real rapport with those in their care they will fail to kindle that spark of enthusiasm, perhaps even idealism, so essential to success”. In some cases instructors, and this was demonstrated during the week and reiterated by the students during interview, gave the impression to the students that they ‘don’t want to be there’. Some students felt that their instructors lacked enthusiasm and failed to inspire them to try or to

achieve. The students were quick to pick up on the mood of their instructor and their behaviour was often interpreted in a variety of ways.

For the majority of students their relationship with their instructor is a valuable one that adds to their enjoyment of the week and ultimately the success of the programme. During the interview held on the last day of the course, (week one) the students discussed the influence of their instructor in terms of their enjoyment of the course:

The students felt that different tutors had affected the dynamics of the clans in various ways and subsequently each of the students had favourite tutors for varying reasons. (diary entry, November 26th, 1999)

The students reported that they enjoyed the adult relationship that they developed with the instructor and benefited from the informal teaching methods that they used. For example they were given a task to complete and the instructor was there to help and give encouragement. Grant describes his relationship with his instructor:

Oor instructor never really checked us, because he never treated us like five year olds, we acted more mature, aye we had the occasional sort of banter between everybody, and he would go 'right we are goin tae dae this' and we would all shut up and listen' I think it was because he didnae check us and act like a teacher towards us he acted like one o' oor pals. I think because he was quite young as well, we liked him mair.
(personal interview, March, 2000)

Clearly, the instructor-student relationship has to be developed during the course of the week. Grant's experience highlights that the relationship was both important and fundamental to his enjoyment of the programme. Not only is this an interesting area of research, it is also an area that deserves further attention as it may be pivotal in terms of the 'success' of a programme. Currently it remains largely understudied. A recent article by Neill (2003a) available on his website provides an insight into

‘instructor effectiveness’ and a list of studies that have been conducted, although most are unpublished dissertations or conference presentations.

There are of course a multitude of variables that have an influence on the smooth running and eventual success of a programme, some of which can be controlled to a greater extent than others. On the whole the Aiming Higher with Outward Bound programme has been successful in that it has run smoothly and there have been no major problems so far. There were problems anticipated with student behaviour however the ‘sending home’ procedures implemented before the beginning of the session ensured that any discipline issues were dealt with calmly and safely. For example if a student is expelled from the course then one of the accompanying teachers will take the student back to their school where the student’s parents will collect them.

Summary

To conclude, the programme can be described as delivering opportunities for personal and social development, which can be considered as similar in nature to the concept of the dispositions. The way in which the programme has been designed appears to encourage the students to become positively disposed in each of the five areas outlined in the curriculum guidelines. It is clear from my observations and from the students comments during the individual interviews that they felt that they had developed in a variety of ways. Although the students did not discuss their feelings in terms of the dispositions I was able to see the correlations between their comments and the concept.

In terms of the model of the dispositions introduced in Chapter Six (see Figure 6.3) this evaluation looked at the core of 'the wheel' and the way in which the course provided opportunities for development across the range of the dispositions. In light of this, the opportunity for change appears to exist within the programme but the question must now be asked whether the students are making the most of these opportunities?

The following chapter examines this question through the analysis of the group interviews conducted with a sample of students shortly after their return from Outward Bound.

Chapter Nine

GROUP INTERVIEWS

Introduction

The theme of the previous chapter is continued through a discussion of the interviews held with a sample of those students who had gone to Outward Bound. These students were asked to discuss their experience to understand their perceptions of the week. This time groups of students were interviewed approximately one month after the end of the whole Aiming Higher with Outward Bound programme. Each student who goes to Outward Bound as part of the Aiming Higher initiative will begin with his or her own preconceived notions about the week ahead and leave having had a very personal experience.

The interview data were analysed using the dispositions as a broad framework, before being considered in terms of its effectiveness in providing an out-of-school programme that has direct links to the curriculum. This chapter builds on the previous chapters by exploring the research question, ‘is the programme providing an opportunity for change?’

Why interview?

Kvale (1996:1) states that the “qualitative research interview attempts to understand the world from the subjects' points of view, to unfold the meaning of peoples' experiences, to uncover their lived world prior to scientific explanations”. Therefore the task of exploring the effect of this week was very difficult, and even more so to qualify with supporting evidence. In this case the experience was often profound and in some cases it had an immediate effect on the student. For example some found it

easy to recount specific events that had impacted on their life and felt that what they had learnt about themselves had affected their behaviour. Others claimed to have found the week immensely satisfying in terms of a week's holiday or a break from their normal routine, but viewed it as no more life changing than if they had spent the week at home or anywhere out of school.

Part of the interviewing process involved understanding that "one persons experiences" were not "intrinsically more true than another's" (Rubin and Rubin,1995:10). As Rubin and Rubin state

If the interviewer discovers four different versions of the same event, it doesn't necessarily mean that one of the interviewees is right and the other three are wrong. They may all be right reflecting different perspectives on what happened or observations of different parts of an event. People looking at the same event may understand them differently. (Rubin and Rubin,1995: 10)

It was accepted that values would change from group to group and from person to person consequently any interview must be examined in terms of the social and cultural context within which it takes place. Therefore in terms of the present analysis the investigation concerned 'effect' of a specific intervention, which was delivered within a similar social and cultural environment. Neill (1996: 4) states that there is a tendency "for outdoor education programmes to be designed and conducted as though students are a homogenous group". Therefore if the LEQ had been the only method of analysis, then there may have been a danger that the individuals experience may have been masked by a generalised overview of the programme. However the participant observation, individual interviews and the group interviews produced an in-depth understanding of the process that the students went through which allowed their personal experiences to be discussed and considered as part of the overall evaluation.

The data generated have been analysed to provide the reader with an insight into any effect the Outward Bound programme had upon the individual, and the relationship between the programme and the dispositions. Therefore the group interviews provide anecdotal evidence and go some way towards making a case for its effect in terms of mainstream educational initiatives.

The following section considers the logistics of the group interview process, discussing the various organisational and methodological considerations involved in organising and administering the interview sessions.

Method

Twelve group interviews were carried out during March 2000. A total of 53 students were interviewed. The interviews lasted for approximately 45 minutes, the usual length of one class module within the school timetable. Twelve students from five¹⁵ of the six sample schools were invited to participate in the group interviews. These students were randomly sampled by drawing their names from a hat. The hat held the names of those students who had attended Outward Bound in each sample school that year (2001). From the sixty students invited to participate fifty-three did so and seven were absent due to illness. Twenty-eight males were interviewed and twenty-five females. Two interviews were held at each of the schools and the students were randomly allocated to one of two groups, again by drawing names out of a hat. The sample students were divided into groups and their names were sent to the schools.

¹⁵ Five schools were involved as the sixth school had 'dropped out' of the research at that stage. This was due to the OB Co-ordinators ill-health and their long-term absence from the school.

The Co-ordinators in each of the schools arranged prior consent with their colleagues to allow the selected students to attend the interview.

The interviews were held approximately six months after the start of the programme and approximately one month after the programme had ended. The dates for the interview were important as they were designed so as to allow a substantial period of time to pass between the experience and the interview session. Thus, the students had time to reflect and consider what if anything the programme had meant to them, both whilst they were there and, now that they were back into their school environment. In comparison to the interviews conducted at Outward Bound, the students had been given a substantial amount of time to reflect on their experience. This was intended to take account of any post-group euphoria (PGE) bias.

A Note on Post Group Euphoria Bias

Marsh, Richards and Barnes (1986) have studied and written about PGE bias within the field of outdoor experiential learning. Students, they claim, typically report good feelings immediately after adventure programmes. For that reason any research conducted immediately after an adventure programme could produce distorted results. For example, Wetmore's (1972) research claims that 95% of his sample reported favourable effects, when asked to write critiques on the influence of their Outward Bound experience on their lives. Marsh et al (1986) argue that measures, especially self-report measures taken on the last day of a programme or immediately after a programme are often affected by this as demonstrated in the inflated findings described by Wetmore (1972).

Some techniques can be employed to redress the tendency such as investigating longer-term effects, and including scales that would not be affected by adventure programmes. The group interviews were scheduled to account for the possible Euphoria bias by ensuring that a number of months had passed between the programme and the interview.

Conducting the interviews

The interviews were held either in a spare classroom or meeting room. They were semi-structured and kept informal by creating a relaxed atmosphere throughout. This format ensured that they ran smoothly and that all points were covered in the time given, yet the tone allowed the students to communicate freely and without fear of repercussion. So although the interview agenda was adhered to as much as was possible, the style was emergent allowing for individual input and story telling.

The use of story-telling was particularly constructive, as some of the students were slightly anxious at first and found it difficult to speak out. Once the interview began and shared experiences and stories began to emerge the group relaxed, talked and laughed freely with one another. The shared experience of Outward Bound helped the group to feel at ease in one another's company. Adelman (1981: 39) suggests that peer group norms are quite a powerful influence whether they are supportive or destructive. He has found that if the students have previously worked together as a group then they can be "quite supportive in the group interview". This was demonstrated throughout the group interviews whereby some students encouraged others to tell stories, and to share their experience. This atmosphere of coming together to review the 'Outward Bound' experience, helped to set the tone of the

interview as relaxed and enjoyable which helped the discussion and the quality of the data produced.

Recording equipment was used throughout each of the interviews. It was necessary to record the interviews, simply because there were six students involved in the interviews at one time and not all of the information could be heard and dealt with in that space of time. The tapes provided an accurate record of the interview allowing me to pay full attention to each student's responses, which may have otherwise been overlooked. The interview agenda was printed out and laid out on the table and neither covered, nor held during the interview. Although notes were taken throughout the interview they were written on a sheet of paper that could be seen by each student.

Various notes were made immediately after the interviews, which recorded attendance, the layout of the room in which the interview was held and my immediate thoughts following the interview. Verbatim transcripts were made from the tapes, which were then coded using the dispositions:

- a commitment to learning
- respect and care for self
- respect and care for others
- a sense of social responsibility
- a sense of belonging

(LTS, 2000: 5)

Coding the data

The interviews were recorded as ten separate transcripts. To code the data, the transcripts were read through thoroughly until the author felt familiar enough with the text and stories to begin to code and sort them into data sets. This was done by laying each of the data sets out onto the floor and placing each section of data into the specific data set. Each data set consisted of a large sheet of paper with the disposition written at the top of the sheet, underneath which various sections of the transcripts were glued. This technique of physically working with the data helped to bring clarity to the process as it allowed me to work closely with the transcripts and to see the patterns that were emerging as the data were being analysed.

As each data set was defined prior to the data collection and analysis, there was no need to look for emergent categories or typologies. Instead the task was to categorise each section of data in terms of the five dispositions. However, patterns began to emerge both in relation to the type and distribution of the data. The author was aware of these patterns and to acknowledge any influence that they may have had on the research process. If they had not been identified they might have influenced the process, as that author may have been less likely to follow her judgement on the suitability of the data for each category. Thus by identifying and acknowledging this issue in the first instance, any possible influence was reduced. Also the use of inter-rater reliability (Silverman, 2000) testing helped to establish consistency between the data and the data sets.

Inter-rater reliability

These tests aim to explore the consistency between the data in each of the data sets¹⁶, following the initial data analysis. In this case three coders were invited to each take a copy of one randomly selected transcript and, with a pair of scissors and glue manually code the data by cutting it out and placing it onto five large sheets. Each sheet represented one disposition. Due to the volume of data and the length of time it took to code a single transcript, it was unfair to expect the ‘coders’ to code more than one transcript.

The coders were given a brief description of each of the dispositions and an outline of the research process to help them understand their part in the process. They were given as much time to complete the exercise as was needed. The three coders comprised, a retired Principal Teacher (Secondary School), a Parental Services Officer (Social Work Child and Family Centre) and an undergraduate student, Faculty of Science and Engineering, University of Edinburgh. This mix in age and life experience would allow the reliability of the coding scheme to be fully tested.

The results from the testing proved to be 78% consistent with my initial coding scheme. There were one or two ‘problems’ where the coders were in disagreement over where to place certain pieces of data. The issue arose from the data being relevant to more than one disposition. However when these issues were discussed and the reasoning behind each coder’s decision was made clear it became apparent that the interview extract in question could be considered as relevant to two or more categories. Again this highlights the point raised in Chapter Eight about the

¹⁶ See chapter Eight for an introduction to inter-rater reliability testing.

dispositions potential for fitting into more than one category, which is indicative of their interdependent nature.

When the dispositions were chosen as the framework for the analysis of the interview it was acknowledged that problems might arise when the categories were separated out as they are related to one another. However the process of inter-rater reliability testing allowed this issue to be resolved as it provided a way of testing out the reasoning behind the allocation of the data to the different categories.

Results: a sense of belonging

A sense of belonging is important because without it, the qualities and dispositions, the skills and the understandings with which we would wish to equip young people, are less readily achieved. A sense of belonging involves an active desire to be part of the enterprise as a whole, a commitment to the common purpose that goes beyond personal interests. It implies a willing participation in the life of the school, engendered by an understanding of school as a place where each feels valued, and where both group and individual concerns and opinions count. Developing a sense of belonging is about developing an understanding of something of the nature of human interactions. It is both a continually evolving atmosphere in which young people can grow, learn, and mature, and an important outcome of the learning process. (SCCC, 1995: 5)

This disposition refers to the way students feel about their school and how much they feel part of the life of the school. If this disposition is extended to take account of a wider learning context such as Outward Bound there is a link to the transcripts. One of the first issues that arose when conducting the interviews and when reading the transcripts was the tremendous sense of fellowship amongst the students in each of the clans and each of the dormitory groups. From the moment the students arrive at Outward Bound they are divided up into clans, which have been devised in such a way as to separate students from the same schools in order that they integrate with students from other schools.

Throughout the first day and for the remainder of the week the students have to mix with students from other schools, which encourages them to meet new people. This is designed to develop personal and interpersonal skills. Heather¹⁷ describes how she felt during the first day when everyone was getting to know one another:

Everybody is in the same position 'cause like nobody really like knows everybody so you all get to know people. (personal interview, March, 2000)

Within a couple of hours of arriving at the centre the students are divided into clans and sent out on their first activity. The first activities are usually 'icebreakers' - activities geared towards encouraging students to meet one another, interact and work together. These initial activities help to create group cohesion by uniting a group of strangers through a common goal, which could be for example, using planks and barrels to cross an imaginary river. This extract from a conversation between John and Pamela illustrates how the students realised that they had to communicate in order to manage the tasks:

When it came to the activities you had to talkAye as sometimes the group would ask you what you thought they should do and if you thought that was tight or not. (personal interview, March, 2000)

This demonstrates how these type of activities generally encourage students to communicate, learn each others names, and engender trust and co-operation amongst the group. They also provide a topic of conversation and a shared experience, which the group can then talk about.

¹⁷ Pseudonyms have been used to protect the student's identity.

The main source of data for this disposition came from the ‘clans’ as the students felt a great sense of belonging to their groups. The clan appeared to provide security and a sense of shared purpose, which helped the student to cope with the week. Take for example this extract from a transcript where David is describing his favourite activity, the trapeze:

I enjoyed the trapeze, ‘cause I felt good when I done it. I think everyone in our group done it, but we encouraged each other to do it, and all that, so everyone felt pretty good after doing it. We all managed to do it. It was pretty exciting as well. (personal interview, March, 2000)

This extract demonstrates feelings typical for the majority of the students whereby they describe the clan encouraging each other and supporting each other on various tasks and activities. The students often referred to the way in which the clan worked together describing this as a ‘good thing’. On the whole it appears that the students were happy to belong to the group and this is reinforced in their discussion of their favourite activities as they centre on group tasks where their clans worked together and co-operated. The favourite activities were often special because the team worked well together or because they all helped each other and gave each other confidence.

A respect and care for self

Respect and care for self is important because without a sense of self-worth, the well being, either of the individual or of the wider community, is unlikely to flourish. An understanding of what caring for self physically, mentally, emotionally and spiritually means, in terms of responsibility for personal well-being, is an essential pre-requisite for an understanding of how to care for others. Respecting and caring for oneself also brings both the capacity for autonomy and self-motivation, and the potential for inner peace in a world of rapid change. (SCCC, 1995: 4)

This disposition was one of the easiest to categorise in that there were many links to be found throughout all of the transcripts, from very obvious statements of self-improvement to statements where the disposition was more covert and deemed to be

there by implication. One of the main sources of evidence to support this disposition was the recurring theme of increased confidence, whether this was expressed through an increased confidence to “speak out”, to “try new things”, to “give your opinion” or quite simply to feel “you can do it”. These examples describe how the student felt about being at Outward Bound, it would be interesting to see if they transfer back into the classroom, which would allow their increased self-confidence to be seen in terms of their academic career.

This extract from Laura describes how she feels about her Outward Bound experience:

I think it gives you determination, like to do stuff, to try out new things and new experiences. Try to make friends with people you don't know. Things like that. (personal interview, March, 2000)

Laura's situation is a typical example of the way in which the majority of the students felt about Outward Bound. If the students had been interviewed immediately after their activities, their responses may have been exaggerated (PGE Bias). However four or five months after the experience they were still feeling as though their confidence has improved. Obviously there were some students who did not feel that the experience had affected them in any way. In two extreme cases both students felt that their time would have been better spent staying at home and studying for their exams. The majority of students reported increased feelings of confidence, which had improved their ability to speak to other students or to speak out in class. For example they felt that they could “speak to teachers in class”, “do solo talks in French or English”, “make new friends” and “approach strangers”(personal interview, March, 2000). James felt that the course had improved his chances of getting a job, as he believed that he would interview better:

If you are going for an interview for a job, you might be scared, but I think I'll no be scared anymair, I'll no be nervous, I just try and be ma'sel and answer as best a' could, an' get a job. (personal interview, March, 2000)

Another student, Andrew was able to describe how this newly found confidence had repercussions in other non-academic areas of his life. He talks here about his music band:

....Aye, 'cause like before I played in a band and I used to be dead scared and that 'cause there was loads of people watching but now I just am not bothered. (personal interview, March, 2000))

Katy felt that her increased confidence had a direct influence on her school life as she had taken the opportunity to audition for school plays and become involved in activities within the school as she felt that she had something to contribute. She felt that this was something that she would not have done before Outward Bound.

Determination was another area of change for the students; they seem to have discovered in themselves the need to persevere and to keep trying in order to succeed. North Lanarkshire Council talk about 'stickability' in their aims for the programme, which I take to mean the 'ability to stick things out' and to persevere. If that is the case, the students appear to have learnt this skill as the majority talk about "trying harder", "sticking in" and "determination"(personal interviews, March, 2000).

Lindsay illustrates this notion, demonstrating that he is no longer afraid to ask for help with something:

Just that if I am stuck with something I will just go with it as I know what it is like on that week, cause if you could 'nae do something you just found a way around it, that is what kinda helps you in school work and that. (personal interview, March, 2000)

Another student, Robert, discusses his increased determination using rock climbing as an analogy:

See doing something like rock climbing it makes you challenge yourself so, as you just keep slipping off the wall, you just keep trying to get back up to the top. (personal interview, March, 2000)

Robert's analogy is very powerful in that the activities are used as a vehicle for learning. The activities help the students realise their strengths and weaknesses, which in turn encourage self-awareness. Gavin's description of the week summarises this point perfectly, capturing the intended purpose of the programme:

It shows you who you are, what kind of skills you've got.
(personal interview, March, 2000)

The activities allow the students to become aware of their own abilities and from this position they can reassess their skills and work on them during the course. This is an interesting exercise in itself as it can either let the students see that they are perhaps not as good at everything as they thought or that they are capable of a lot more than they thought. Either way it offers the students a chance to reassess their own worth and from that build upon their strengths and work on their weaknesses. For example, Michael discovered that he was not very tolerant of others and he worked on this during the week. He states:

I used to lose ma head quite easily, it is hard to believe, but Outward Bound the first day ehh... when we were doing the ice breaking games, somebody rolled over me and I got up and started losing the head wi' them. _____(Instructor) seen that and by the end of the week he says ma tolerance level had gone up. (personal interview, March, 2000)

Gillian described a similar experience, where she learnt to become more tolerant of others and accepting of different ways of living and working:

Just learn to get on with other people, and not to get too angry with other people, if something goes wrong, just try and take it. Patience. If you can't do something deal with it, something I've no got is patience, so I just need to try my best and just get off my high horse and not go mental.
(personal interview, March, 2000)

These extracts demonstrate that the students were more accepting of failure as they began to realise that they did not have to be good at or succeed at everything.

Through working in their clans the students seemed to realise that everyone had relative strengths and weaknesses and that some students were better at certain tasks than others, therefore they couldn't all be the best at everything. This was coupled with the realisation that they had to take responsibility for their actions, for whatever role they took within the clan. Whether it was cleaning the tables, tying the knots on the raft, belaying at rock climbing, they all had a responsibility not just to themselves but to the rest of the clan. One female described this as "realising that you cannot do everything on your own", you have to "rely on others for help or guidance at some points in your life" (personal interviews, March, 2000).

The students did rely on each other during the week. They clearly valued the opinions held by the other students in their clans, especially when those opinions related to their own abilities, as this extract from Barry demonstrates:

For once people thought I was bright.... the whole group thought I was brainy and I thought 'Yes I am brainy for once'. It was good, I was brainy, I got treated as if I was the man. (personal interview, March, 2000)

Barry thoroughly enjoyed his time at Outward Bound as it gave him a chance to be away from his usual surroundings, from his peer group and to be accepted by another group of students. Rachel described the programme as an opportunity to be a different person. She felt that as people didn't know who you were then you could be different "than what you are like in school" (personal interviews, March, 2000). Rachel enjoyed the anonymity that the week gave her and saw it as an opportunity to reinvent herself. Barry also described his week in a similar way, stating that he saw it as an opportunity to "shine", a time when he felt "brainy" and "valued" by his clan members (personal interviews, March, 2000). However those feelings were short lived, ending when he returned to school:

Then I was back to school with a bang...dopey ...dunce. I came back doon tae Earth with a bang, forever. Back doon tae Earth wi' a bang.
(personal interview, March, 2000)

These comments, illustrate that there needs to be an adequate support system for the students returning from Outward Bound to help integrate the experience. This would help the programme become part of the life of the school and not simply a 'week away'.

A respect and care for others

Respect and caring for others is important because our well being as individuals and as a society depends on our living interdependently. The good relationships which young people forge with each other are essential to the development of qualities such as co-operation, interdependence and respect for a diversity of people and cultures which will allow them to live and work in the realities of the world of today and of the future. (SCCC, 1995: 4)

The week at Outward Bound is designed to bring the students together through shared mealtimes, shared dormitories and team activities. This encourages the students to work in a team, either as part of their clan or as part of their dormitory group. This

focus on group living and working helped the students to form relationships and to learn to co-operate and share, which in turn helped them to develop a respect and care for others. The students were put into clans in such a way as to ensure that each of the schools became integrated. Jenny gives her opinion on the clan system:

I think if you were put in a group wi' say like people fae your school that you already knew, it would nae have been the same as you would have been carryin' on and you would nae have cared if you were no working. But because you did nae know these people you wanted tae work for them and help them in the group. But if it was just people from your school you would just carry on and fight. (personal interview, March, 2000)

Jenny felt that it was an excellent way of introducing the students to one another and encouraging everyone to mix well. The activities were also highlighted as an excellent introduction as they 'exposed' everyone, allowing the students to get to know one another through a shared experience. Linda felt that the way in which the activities were organised helped the groups to mix:

I think it was good the way they did the ice-breakers with us, when we first went into our clans, as everybody got to know each other, and we had an idea of kinda what we were like. (personal interview, March, 2000)

The majority of the students interviewed felt that by being separated from the students from their own school they had the opportunity to reinvent themselves and to be who they wanted to be. It also gave some of the students a chance to see their peers in a different light, away from their usual surrounding. One student, Elizabeth described how she was on the bus with another female from her school, Sarah, whom she had never spoken to before. She didn't speak to her on the journey to the centre, however on the return journey they began to chat. This was an example of one of the

ways in which the experience worked to bring together students from different schools, as well as, students from the same school.

During the week Donald came to realise everyone had something to contribute to the tasks, and that the clan was working well together:

I thought one of the best things was when you done something as a team an activity you completed it, and everybody felt good, and it wasn't just you, it wasn't an individual thing. The whole group had done well, 'cause that was what they were encouraging you to do during the week was work as a group, and you felt a lot better when you done it.
(personal interview, March, 2000)

The variety of tasks on offer coupled with the fact that the majority of the students had never experienced anything like this before meant that no-one was an expert at any given task. Everyone was starting at the same beginner level. This meant that most of the students were willing to try the tasks as they were all in the same situation, and the other students were also able to offer support and encouragement.

Matthew describes the way that his clan worked together to build their raft:

we were all working dead, dead, hard it was no as if anyone was sitting at the beach, were all dae'ing oor bit, the other team was finished before us, they went oot and they got halfway and theirs fell apart, and we went oot and we just we were going right by them, as oor's was better.
(personal interview, March, 2000)

Matthew and Donald displayed an element of tolerance demonstrating that they were accepting of other people and their values. For example Matthew described sharing the dormitories as "challenging" as "you had to adapt to their style" (personal interviews, March, 2000). Amongst those students who talked of learning, there was a definite acceptance of "different peoples emotions" and an increased understanding of how to "get along with other people" (personal interviews, March, 2000). This was

noted by virtue of the fact that some of the students talked about others “not making fun of other people but accepting their differences” (personal interviews, March, 2000). This kind of response demonstrates an understanding of others and a willingness to accept that we are different and therefore in the context of Outward Bound and in relation to surviving the week, a certain level of tolerance and compromise was required.

A commitment to learning

A commitment to learning is important because it is a fundamental element in personal growth and development, both throughout schooling and throughout adult life. Increasingly, we are living lives, which require us to change and adapt and to recognise that learning is not just a matter of acquiring new information but of making new connections and new meanings. Young people need to develop an attitude of mind, which both accepts the inevitability and recognises the excitement of learning as life-long process. (SCCC, 1995: 5)

This disposition was particularly difficult to consider separately from the others as it had implications for each of the dispositions. As for any of the students to display any of the dispositions they had to have learnt something either about themselves, or about others.

During the programme, it seemed that learning took place in a variety of ways and in a variety of situations. The course was constructed in such a way as to provide continual opportunities for personal and social development. This was apparent in the way they took responsibility for clearing away their own dishes at mealtimes, responsibility for keeping their kit and storeroom clean and also their performance on the tasks. At every opportunity the students were made aware of their actions and the consequences of their actions. This was particularly important as the consequences of their actions were felt not just by themselves but also by each member of the clan. So, for example, a student who failed to turn up for breakfast on time not only missed

breakfast but also jeopardised breakfast for the whole clan (as they would lose their time slot and have to wait until everyone else had eaten before they were allowed to). This punitive approach designed by OB is used in this instance to help all of the students realise the consequences of their actions. Outward Bound believe that this style of learning where there is a direct consequence for the student's action helps to reinforce the need to take responsibility for both their actions and the effect of their actions. The emphasis at OB, and specifically in terms of the Aiming Higher programme, is to develop a sense of teamwork and co-operation whereby all of the students in a 'clan' work together in order to achieve their tasks. Jack's comment illustrates this:

I didnae like the rafting much, oor team didnae pull together at all, as soon as we got the raft in the water it was the barrels just caved in and we just sunk. (personal interview, March, 2000)

This demonstrates a very real consequence of not working well as a team and building a watertight raft, as a result it came apart and all of the clan members had to swim back to shore. Although the raft could have been built successfully by one member of the team the instructor watches the 'clans' to ensure that all members of the group have a part to play in the design and construction process.

The students talked about the issue of responsibility in relation to other non-academic areas of their lives, moving the discussion from Outward Bound to housework. Some students commented on how the Outward Bound week had helped them to be able to organise things better, such as tidying their rooms, or doing their homework. This suggests that the students increase in positive feelings has led them to "develop an attitude of mind" which is consistent with a commitment to learning

(LTS, 2001: 5). So that they are not only learning new things but they are able to make connections and new meanings (SCCC, 1995)

The students displayed a certain level of maturity during our discussions about personal issues, changing emotions and levels of confidence. Whether that was there prior to Outward Bound or whether it came as a result of the Aiming Higher programme or some other factor (e.g. the school or the broader Raising Achievement strategy) was unclear. However, it was clear that the students were very self-aware when discussing changes in themselves following the course. For the majority of the students the experience was deemed very worthwhile and very positive. As highlighted previously, a minority (two students out of a sample of fifty students) felt that their time would have been better spent at home studying for their prelims. Kathryn was one of the students who commented on this:

Well we went the week before the prelims, and I thought I could have done better if I had studied more before we went away cause we didn't really have time tae like we when we were there. Like we got told to take books wi us but we didn't have time tae. (personal interview, March, 2000)

In contrast to this statement the majority of the students felt that the timing of Outward Bound was ideal and it didn't affect their study timetable or exams. Others felt that the week at Outward Bound gave them the chance to forget about the stress of the exams and gave them a chance to relax. Some even felt that it would "probably help you with your exams as it will make you believe in yourself more when you are gae'in in" (personal interviews, March, 2000). However whether this improvement is visible beyond the students' perception of their achievement is a matter for further debate.

In light of these interviews the programme was deemed a positive experience. In some cases students felt that the experience had a direct impact on their schoolwork. Those students felt that this effect was most noticeable in English and French, where they felt their solo talks had improved. They felt that they had improved in their solo talks because they had something to stand up and speak about. They felt passionately about the experience and so they wanted to share this with the other members of their class. Jamie describes his English class as:

full of troublemakers who try and put you aff, and that, but I just carried on and they tried tae put me aff and I didnae think I'd be able tae dae that, I think I would nae have done it. But I did 'cause I don't care anymair what anybody thinks if me and I know I am the same as everybody else noo.
(personal interview, March, 2000)

Jamie felt that having been to Outward Bound and learnt greater respect for himself and others, he now had the confidence to stand up and give his solo talk and get a pass for his English, whilst the troublemakers in his class would fail. Before Outward Bound he would have classed himself as a troublemaker. Others, such as Martin and Janice saw direct transference between skills learnt at Outward Bound and school:

At Outward Bound you had to talk in front of everybody so that helps a bit, when it comes to group talks and thingssometimes you don't get as embarrassed easily, 'cause you've like you just show a different personality when you were there than what you would do at school and noo you just feel as if you may as well just do it anyway, 'cause you did it at Outward Bound.
(personal interview, March, 2000)

The majority of students interviewed offered obvious examples of learning where they gave very accurate descriptions and talked openly about how they felt the week had changed their perception of themselves. It was hoped that through this overall increase in positive feelings toward his or her own self that the student would engender a commitment to learning. This could be built upon through post-course

work where the positive feelings of achievement could be built upon through success in the classroom.

A sense of social responsibility

A sense of social responsibility is important because human beings are social animals, who either prefer or are required by circumstances to live and work together. A society geared to the general well being of all is strong on social coherence. Young people, therefore, need to develop an awareness of the social mores - the pro-social attitudes, principles and skills, which will make them competent to operate in society. This sense of social responsibility should also entail a commitment to living in an environment, which is held in trust for future generations.

(SCCC, 1995: 4)

This disposition was fairly difficult to relate to the transcripts as I felt that the students did not give much indication of development in this area. Although, when the students discussed or referred to the other clan members the language they used did display a certain level of social responsibility. For example they referred to “the team”, “working for the team”, which suggested that they were aware of the other students as team members (personal interviews, March, 2000).

Comments from the students such as not leaving “all of the work to one person” and “not just standing and watching” demonstrated that they were aware of everyone having their role to play in their clan (personal interviews, March, 2000). They seemed to appreciate that everyone had to work towards the common goal of helping the clan to succeed on whatever task they were doing. As Ian commented, “it is important to work as a team” (personal interviews, March, 2000).

Ian described the value of working together and co-operating to help one another to succeed. Encouragement was an issue that arose during the interviews in terms of encouraging other members of the clan whether that was a student helping others to

succeed or others helping them to succeed. This issue was clearly a strong component of their success, for example Lucy felt that she would not have completed the “tree climb”, had she not had help given to her by her clan (personal interviews, March, 2000). Once she had reached the top of the tree she took the opportunity to give support and encouragement to other members of the clan so that they too would complete the task. Therefore there was a reciprocal element to the notion of encouragement, which helped to make each student an effective member of the clan.

Craig was able to take this issue further by relating it to the computing class that he has become involved in since returning from Outward Bound. He describes how he helps to teach other students who are struggling with their work:

It makes you want to help people more, cause like we have been getting help you want to dae it for other people from other classes. Like I am good at computing and I have been helping a lot of people.
(personal interview, March, 2000)

Craig demonstrates that he has developed some sense of responsibility for other students as he realises that he understands the work and so can help others who are finding it more challenging.

The course’s ability to reveal students’ strengths and weaknesses has been discussed previously as part of another disposition. This notion can be seen in the way the activities are used to provide opportunities for the students to discover their talents. Some students were more able than others, and sometimes they were very quick to take over and show the weaker ones how to complete a task or show them how things should be done.

Ryan discussed how he was aware that he had a tendency to take over but realised that other students were more than capable of completing the tasks just as well as himself; they simply needed the opportunity to do so or in some cases the encouragement to do so.

Well before I was, before I went to Outward Bound I was like if there was a team I was working in I would want tae take over and start dae'in everything ma'self but if there is a team that I was working in after Outward Bound I would be prepared to take a minor role in it, and just do ma part and let other people do it even though I would usually be front'in something.
(personal interview, March, 2000)

Considering the whole school context

The findings from the participant observation and the individual interviews suggest that the programme provides an opportunity for personal and social development. This chapter suggests that the students are taking advantage of this opportunity whilst they are at Outward Bound. In terms of the model of the dispositions (introduced and illustrated in Chapter Six, see Figure 6.3), the overall framework is not stable, as the outer wheel does not support the dispositions. If the dispositions are represented by the spokes of the wheel then the outer rim can be seen as the students' academic, social and family environment, ie. the world in which the students live before and after the Aiming Higher programme. Therefore the context in which this programme is conducted is not conducive to maintaining the effect of the programme once the students return to their home environment. So although an opportunity for development is provided and the students appear to be taking this opportunity whilst they are at Outward Bound they need to be given adequate support to ensure that they make the most this programme. This in turn will help the students to relate the experiential learning process back to their 'real-life'.

Throughout the interviews the students made reference to feelings of change within themselves and noticeable changes in others who had also attended Outward Bound. These references were made mostly about Outward Bound, that is the changes were seen whilst the students were there. Some students felt that they could see some transference back into school through continued change both in themselves and others, however it was still apparent that there was a sense of immediacy about the programme. The students saw Outward Bound as something that happened for a week last term that held little relevance for their daily life in school.

Therefore when it comes to the consideration of dispositions it would seem that where the students make reference to being positively disposed towards a respect and caring for others it seems that they are making direct reference to Outward Bound.

Peter summarised this issue in the following statement:

If you were there you would notice a change, but it is hard to notice it here [in school] as you don't really do rock climbing in school. It is hard to notice. You can't exactly explain it but you know it is there. You've changed and that. (personal interview, March, 2000)

Peter knew that he had changed but he found it difficult to consider that the change could have an impact in areas of his life beyond the Outward Bound experience. As this is the intention of the Aiming Higher with Outward Bound programme there is clearly a need to help the students to make connections between the very real experience of the programme and the more abstract notions of transference back into the classroom.

There was an overall change in the nature of the students, which can be understood generally in terms of the students' levels of confidence both in themselves and their

ability to mix with others. When this change is considered in relation to the five dispositions I can conclude that the students have become positively disposed in each of those areas. However, a five-day residential course does not provide sufficient time in itself to bring about long-term developmental changes in the students, although adequate pre- and post-course work could help to sustain and encourage this process.

Chapter Ten

DISCUSSION: EVALUATION OVERVIEW

Introduction

The theory discussed in the first half of this study focused on including an outdoor experiential approach to education in order to improve upon the experience of school pupils from North Lanarkshire, thus helping to reinforce the lessons learnt within the classroom and encouraging students to see the relevance and application of their knowledge and skills in new areas. This ‘theory’ was tested in a genuine and applied educational setting through the case study evaluation of the Aiming Higher with Outward Bound programme.

The case study was evaluated using a multi-method approach, which gave an overview of the programme, from before the students went to Outward Bound through to three months after the experience. This provided an opportunity to understand both the programme and its impact during the week (observation method) and the students’ perceptions of the experience and its effect (interview method). Thus gaining a comprehensive interpretation of the students’ experience before, during and after the programme, using a suitable self-report instrument (quantitative method) as well as anecdotal and observational data. This approach addressed some of the recommendations from previous research which suggested that past studies had been limited due to either an over reliance on anecdotal support, or the use of inappropriate psychometric instruments and where the eventual findings had proved too specific to be of use (Cason and Gillis, 1994; Barrettt and Greenway, 1995; Hattie et al, 1997; Neill and Richards, 1998).

The findings from the case study were considered using the concept of dispositions (LTS, 2000a) as an overall framework for analysis. By doing this, any links between the case study evaluation and current educational literature surrounding the dispositions were identified. This process was important for two reasons. Firstly comparisons could be made between each set of findings and secondly those findings could be discussed in relation to contemporary education, thus satisfying one of the original and important aspects of this study, which was to produce research that was relevant to current practice. This chapter reviews the combined findings from the previous chapters in order to create an overall evaluation of the programme.

Considering the findings

David Jonson (2002), author of the dispositions section of the 5-14 document, suggested that the dispositions and the overall findings could be considered in relation to three categories: provision, process and impact. Firstly, provision would relate to the success of a given school in terms of providing sufficient experience for the development of these dispositions (Jonson, 2002). In this case, the Aiming Higher with Outward Bound programme would be the overall provider of the experience, and so the programme would be considered in terms of the opportunities that it provides for positive personal and social development. Secondly, process can be understood as referring to the specific area in the school where the process would take place (Jonson, 2002). In terms of the case study, process would relate to the way in which the programme was delivered. Finally impact relates to the success of the initiative, which in this case could be measured in terms of the student's perception of his or her own development. The overall results can then be considered in terms of the dispositions.

Therefore, following Jonson's advice, this chapter is divided into three sections: provision, process and impact, which were consistent with both his recommendations and the original research questions.

The original research questions were:

- Is the programme providing an opportunity for positive development?
- Does the process support positive development?
- What is the impact of the programme in terms of the 5-14 National Guidelines for the curriculum?

Provision: is the programme providing an opportunity for positive development?

When the Aiming Higher with Outward Bound programme is considered in light of the framework for analysis, then clear opportunities for development across the full range of the dispositions can be seen. Following the observation of the students during the programme it became apparent that the course provided ample and adequate opportunity for personal and social development and that these opportunities were inherent in both the course design and delivery. For example students from different schools share dormitories, which provides an opportunity to develop social skills and tolerance as well as respect and care for others. The residential element of the programme also provides an opportunity for students, having removed themselves from their normal surroundings, to establish and develop a sense of their own self amongst their peer group. Therefore the residential element, which is an intrinsic part of the programme, provided a continual source of personal and social development opportunities throughout the five-day course. This continuity factor provided a further opportunity for development in itself as it allowed the

students to reinforce and build upon their positive feelings. For example social skills that they learnt during the day could be applied in a different situation in the evening, say in the dormitories.

The participant observation weeks and the individual interview sessions generated the most in-depth understanding of how the course was delivered at an individual level and how the students felt during the programme. These observation weeks considered the opportunities that the Outward Bound course provided for personal and social development in line with the concept of dispositions. The observation weeks suggested that a variety of opportunities were available covering all aspects of the dispositions. In further support of the programme the LEQ provided a broader understanding of the delivery of the programme by examining the consistency of the delivery by week of the programme and by year of the study. The findings suggested that the programme was consistent by week and by year.

Process: does the process support change?

The logistics chapter examined the process that the students go through before, during and after Outward Bound. It described the role of the Outward Bound Co-ordinator and the pre- and post-Outward Bound briefing sessions, the quality of which was largely dependent upon the timetable within each school and the workload of the Co-ordinator. In most cases the sessions were delivered during lunch or break time with the main aim being to complete the relevant parts of the learning journal before going to Outward Bound¹⁸. Sometimes if the Co-ordinators were unable to run the full

¹⁸ These comments are taken from interviews held with each of the Outward Bound Co-ordinators in each of the 26 mainstream secondary schools in North Lanarkshire. I conducted the interviews in 1998/1999 (see Chapter Four).

briefing session, the journals were completed on the bus on the way to Outward Bound. This meant that some students were not being given the opportunity to discuss the types of issues that they may encounter at Outward Bound, nor the chance to focus on areas for change. It must be borne in mind that this may have been the first time that some of the students had been away from home, and in some cases the first time that they had been out of North Lanarkshire. Therefore, in some cases not all of the students were prepared for their residential experience. It must be noted however that some students may have had a previous experience of outdoor experiential learning if they had attended Kilbowie (NLC's own residential outdoor centre) whilst in primary school. All sample students were surveyed to gauge how many students had prior 'outdoor experience'. This proved interesting as it showed that the majority of the students had some form of outdoor experience, the most consistently cited of which was Kilbowie. A detailed analysis was not carried out as the survey was conducted as a pilot at that stage and it was not taken any further.

Despite the poor preparation the quantitative analysis of the programme (Chapter Seven) suggests that no negative effects were found although the data were of limited significance. The results suggest that the programme was consistent by week and by year of the study and so provided a similar outcome for the students attending each session. The quantitative analysis also suggested that the individual school did not influence the effect of the programme. The issue of school influence is interesting as the school plays an integral role in the overall Aiming Higher with Outward Bound programme as they deliver both the pre- and post-Outward Bound sessions. In the case of the programme this effect is difficult to gauge as my observations suggest that there were fewer post-Outward Bound sessions than pre-Outward Bound sessions.

The post-Outward Bound sessions were provided in order that the students completed their learning journals and had a chance to talk about their experiences following the programme. However, this opportunity was influenced both by the ethos within the school and by the week that the students were away, as whilst some students came back to school following Outward Bound others went straight into study-leave, exams, work experience or holidays. These sessions were designed to become an integral part of the programme by providing the students with an opportunity to reflect upon their experience and make connections between the Aiming Higher programme, their home and their school environment.

Keough, Boud and Walker (1998:10) discuss the issue of reflection, whereby the student is encouraged to reflect on their experience at certain points during the learning process in order that they have a chance to make sense of it. They propose that “reflection is needed at various points: at the start in anticipation of the experience, during the experience, as a way of dealing with the vast array of inputs and coping with other feelings generated, and following the experience during the phase of writing and consolidation”. In this case the process of reflection, as described by Keough et al, may help the student to make connections between the experience, the curriculum and other areas of their life. In terms of the disposition model, this part of the programme may help to strengthen the outer and inner parts of the ‘wheel’ (introduced and illustrated in Chapter Six, see Figure 6.3), by providing the students with the opportunity to reflect upon the experience and see the connection to other areas of their social and academic life.

There were links between the way in which the overall programme was received within each school and the issue of ethos. Earlier the link between ethos and

achievement was highlighted and noted as a factor that should be investigated by NLC (Chapter Seven). Perhaps in this instance school ethos could have an influence upon the process of the programme in terms of the pre- and post-course delivery, especially in relation to the way in which the programme is received within the school.

To stimulate teachers to be committed to the programme and carry out both the pre- and post-course work as well as accompany the students to the centre, the aims and rationale of the programme must be made clear to them. Clearly, sufficient time and resources need to be allocated to allow these teachers to complete each part of the process including the pre- and post-course work. By giving increased time to the pre- and post- course sessions each student who was selected for the course can be given the opportunity to go through the whole process. This would help to ensure that the post –course sessions did not have to be compromised to allow for work experience or study leave.

Following the work with the sample schools over the course of the research it was clear that not all of the teachers within the schools were receptive to students being ‘taken out’ of lessons to complete the pre- and post- course elements. Some teachers were not receptive to the Aiming Higher with Outward Bound programme in its entirety and felt that the students’ time would be better spent in the classroom in the weeks preceding their exams. Whilst teachers who support the programme do so wholeheartedly, there are some members of staff who are not keen for their students to become involved. Therefore it would seem that work is needed in order to create a positive and supportive ethos around the Aiming Higher programme to ensure that

the staff who are involved in its implementation are given adequate time, resources and cover whilst they are away.

The LEQ results indicate that the programme was not statistically significant and this was borne out at one month and three months after the students return from Outward Bound. Perhaps if the post-test had been carried out sooner than one month after the experience then an effect may have been detected, however this may have introduced an element of post-group euphoria bias which could have masked the results.

Keough et al (1998) suggested earlier that any temporary effects (from a programme) could be increased if the students' momentum were harnessed and encouraged both before and after. Despite the lack of effect, the development of existing opportunities within the schools' curriculum could help to harness momentum by encouraging connections to be made to other areas of the students day-to-day lives. For example the Outward Bound experience could become a topic for a talk in English, or a project in Geography. This might allow student's to use and improve any skills that they had developed whilst they were at Outward Bound, which may begin to lead to changes in their overall disposition.

Impact: links between the programme and the 5-14 National Guidelines?

The LEQ analysis suggested that the Outward Bound programme was of no statistical significance. The results suggested that there was no difference between those students who went to Outward Bound and those students who did not, irrespective of their school. The Outward Bound course was revealed to be consistently delivering similar outcomes for the students attending during each week and over each year of the study (1999/2000 and 2000/2001). Despite the lack of statistically significant

results, the findings can be considered in terms of their 'real world significance' by triangulating them with the other research methods; participant observation and interviews.

The interviews generated a wealth of qualitative data detailing how the Outward Bound course had made a difference to the students in terms of social skills, confidence levels, and schoolwork. These findings were valuable as they provided a greater understanding of the impact of the programme. The individual student accounts of their experiences and incidents helped to make connections beyond the LEQ to the rest of the evaluation and the dispositions. Both the quantitative and qualitative analysis suggested that there were similarities between the programme and the concept of the dispositions.

The findings also suggested that the programme also had an impact in terms of the students' perceptions of their academic ability. The group interviews demonstrated that the students felt that they had improved in terms of their academic ability, for example they thought that they could perform better in speaking tests in both English and French. Speaking tests, working in groups and essay writing were the three most cited areas of academic improvement. Any link between the course and the speaking tests could be attributable to two reasons. Firstly, during the Outward Bound course there is an opportunity to do a short presentation in front of the rest of the students and staff (approximately 80 people). This happens every morning at a clan gathering session where one of the clans (made up of 12 students) presents news headlines, weather for the day, and any other notes of interest to the rest of the students and staff. At the clan gathering each student must present a section of the presentation on his or her own. This is a daunting task for some students. Some students suggested

that the process of having to speak in front of others in this kind of situation might have given them the confidence to be able to do this back in a classroom situation. Secondly the students explain this as being due in part to the very real experiences, which they can talk about (for those students Outward Bound was one of the most recent and vivid experiences that they could cite). This relates to the theory discussed earlier in the thesis whereby learning should become meaningful and relevant to students in order that they have a desire to succeed and to perform well.

The group interviews suggested that some students felt that they were better at working with others since they had returned from Outward Bound. They felt that they were more tolerant of, and better able to communicate with other students and teachers. Overall the students believed that the programme had improved their confidence levels, which in some cases had improved their perception of their academic ability.

Limitations of the study

Having reached this stage, the author was able to reflect on the overall study and consider what she would have done differently if she were about to embark on it again. Firstly, the programme (Aiming Higher with Outward Bound) was established before the research began. Therefore the first change relates to the creation and logistics of the programme.

The author would have liked to have had a greater influence on the numbers of students being sent to Outward Bound, the way in which the students were selected, the pre- and post-course work and the programme design. Given the number of students and schools involved and the external constraints such as the school timetable and curriculum it is unclear how feasible this would have been. However if

the research had begun at the start of the initiative it may have been able to make adjustments and refinements to the programme along the way, which could have provided greater flexibility in terms of the research design.

A further limitation to the study has been the inability to make a strong link between the programme and the academic performance of the students. Investigations this during the second year of the research by proposing to analyse the eventual Standard Grade results of those students who went to Outward Bound and compare them with their expected results from their prelims. However NLC explained that this would be impractical, as the students do not take a prelim exam immediately before their Standard Grades, they only have a mock exam in third year. So to calculate an expected grade from their third year exams would be tenuous, as they have only studied half of the Standard Grade course.

The year that the author proposed to conduct the academic study was blighted by the controversy with the Scottish Qualifications Agency, which led to a lack of confidence surrounding the eventual Standard Grade, and Higher results for that year (Wojatis, 2000). The advice from North Lanarkshire Council was that this type of study would neither be feasible nor reliable.

Finally, this study could have benefited from the inclusion of evidence from 'significant others' in the students' lives. The opinions of for example family members or teachers, about any changes in the students would have introduced a different perspective to the research process. Such opinions may of course have supported or contradicted the interview data. However, this idea was considered fully before it was rejected on the basis that it would have been impractical and difficult to co-ordinate successfully. A 'significant others' opinion would have steered the

research away from the student's perception of their development by introducing the issue of credibility. For example in the case of conflicting opinions the issue would become one of determining whose opinion was the most credible. This study has sought to evaluate the student's perception of their achievement and development and not an outsider's observation of it.

Summary of the evaluation

This chapter has a dual purpose; firstly it was an opportunity to evaluate an applied outdoor experiential learning programme and its application to the present education system within Scotland and secondly it has provided an opportunity to examine what links, if any, could be made between this type of programme and mainstream education using the concept of dispositions, taken from the 5-14 National Guidelines on the curriculum. The main research questions formed throughout the first half of the theoretical investigation and asked in terms of the case study evaluation were:

- Is the programme providing an opportunity for positive development?
- Does the process support positive development?
- What is the impact of the programme in terms of the 5-14 National Guidelines for the curriculum?

These questions were answered using a self-report instrument, interviews and participant observation, the results of which were analysed using the concept of dispositions as a broad framework for analysis.

The results were then drawn together in this chapter under the three headings, of provision, process and impact. Following this discussion it can be concluded that:

- The *programme* delivered by Outward Bound Scotland, as *part of the Aiming Higher with Outward Bound programme* provides an *opportunity* for personal and social development, consistent with the dispositions outlined in the 5-14 National Guidelines for the curriculum
- The *overall outdoor experiential learning process* from pre- to post – course work appears to *support positive development* in this case.
- The Aiming Higher with Outward Bound programme had *some overall positive effect* on those students who participated in the programme. This effect can be understood as consistent *with the dispositions* outlined in the 5-14 National Guidelines for the curriculum.

These findings relate specifically to the immediate Aiming Higher with Outward Bound programme. However, when they are considered in terms of the broader context of the study and the theoretical discussion from which they arose, it can be concluded that:

- The findings from the case study evaluation suggest that there is a link between an outdoor experiential approach to education and the rationale behind the structure and balance of the 5-14 National Guidelines for the curriculum, in terms of the dispositions.
- The findings suggest that the Aiming Higher with Outward Bound programme is one way in which outdoor experiential learning can, in practice, successfully compliment the current education system in Scotland.

The study was limited by certain external factors, however they did not have a serious impact on the reliability or validity of the findings. These findings will now be further discussed in terms of their implications for NLC, for the wider field of outdoor experiential learning and for future research.

Chapter Eleven

RECOMMENDATIONS AND CONCLUDING COMMENTS

Introduction

This chapter concludes the study by summarising the main findings from the research and considering their implications for both North Lanarkshire Council and the wider context in which the programme lies. The context implications and recommendations for the practice of outdoor experiential learning are then discussed. Finally, recommendations are given for future research in this field of study.

What does it all mean for North Lanarkshire Council?

Considering the case study evaluation the Aiming Higher with Outward Bound programme can be regarded as providing an opportunity for personal and social development, which is consistent with the concept of dispositions, taken from the 5-14 National Guidelines for the curriculum. The overall results from the case study evaluation can be related to the argument outlined within the literature review in the first part of the study, which has advocated an increased outdoor experiential approach to education.

The recommendations from this study for NLC are:

- *To use this study and its findings as a way of demonstrating the value of the programme and of outdoor experiential learning in general.* The findings can be used to promote the value of the programme and so encourage Head Teachers to fully support the programme and its aims. This would be done with the aim of instilling a positive ethos around the programme and within the school.

- *To introduce and provide sufficient resources for a comprehensive and rigorous pre- and post-course programme.* This would enable the students to be led through the experience from the preparatory work conducted before departure and the reflective, de-briefing work carried out when they return. Teachers need to be given adequate time and resources, such as classroom space in order to carry out this part of the programme.
- *To formally integrate the Aiming Higher with Outward Bound programme into the overall school timetable.* This would be done in order that an outdoor experiential learning programme becomes part of the school framework. Although the residential element of the programme runs from October to February each year, the selection process, pre- and post-course work could be extended throughout the academic year. Thus encouraging students and staff to regard the programme as an integral and important part of the school programme. This recommendation can be seen as associated with the issue of ethos.
- *To review the Outward Bound programme.* The Outward Bound course could be considered as the most important part of the entire programme, however can it be considered as successful given that the results suggest that it is only having a modest effect? In light of this study and the literature review the Outward Bound course should be reviewed with the aim of producing a programme with a clear emphasis on experiential learning. Clear links need to be made between the course and the students' everyday life to encourage the students to make connections back to their home and school environment.
- *To consider other outdoor providers.* Outward Bound is not the only provider of outdoor experiential learning. For example, Kilbowie the residential outdoor centre (owned by NLC) could develop a programme to run in conjunction with their current primary school service. Potentially this could provide a comprehensive and structured programme of outdoor experiential learning throughout primary and secondary education within schools in North Lanarkshire.
- *To investigate school ethos and its links to achievement.* It is vital that a positive ethos surrounds the programme, as this is likely to encourage others to participate. Therefore this area needs to be examined in order to establish the relationship between school ethos and achievement and its impact, if any, upon the programme.

What does it all mean for outdoor experiential learning?

When the case study evaluation is considered in relation to the theoretical foundations laid out in the first half of the study, connections can be made between an outdoor

experiential approach to education and its value in terms of mainstream education. It has provided an example of one way in which an outdoor experiential approach to teaching and learning can be successfully integrated into the current Scottish education system, therefore building upon current practice in schools by introducing another way in which students can bring their experience into the classroom and so benefit their overall education.

Reviewing past research, Hattie et al (1997: 85) noted that “research and adventure programs can provide many insights which might inform regular educational contexts, however they were conducted as though they operated in isolation from the educational world”. This study has provided the opportunity to go some way towards addressing this issue by conducting research that provides a valuable insight into the links that can exist between outdoor experiential learning and mainstream education.

The case study was possible because NLC believed that an increase in outdoor experiential learning would help to achieve their aims for current education provision. They believed that an increased outdoor experiential approach to education would allow their students to experience success in non-academic areas, which may increase their levels of achievement and may help them to succeed in other areas of the curriculum. This research has provided evidence which suggests that the students feel that they have developed as a result of the programme, in terms of increased confidence and social skills, and in some cases the students have reported that this has transferred into the classroom. For example some feel that they can now do better in speaking tests, they can speak out in class and ask for help from teachers and other students. In terms of the National Guidelines for the curriculum the Aiming Higher with Outward Bound programme can be understood as consistent with the aims of the

dispositions. These similarities can be seen when the findings from the case study evaluation are analysed using the dispositions as a broad framework.

In terms of the research design the author would build upon the recommendations from previous research which had suggested that previously used psychometric instruments were not always appropriate as they had produced results that were too specific to be of any use, and there was too heavy a reliance upon anecdotal evidence. Therefore a variety of approaches were combined to reduce the reliance upon anecdotal evidence and to examine the effectiveness of a self-report instrument, which had been designed for use in this field.

Having observed the students whilst at Outward Bound and having talked with them both individually and in groups following the experience it was clear that the programme did have a positive effect on their personal and social development and the results support this. The experience and the extent of its effect were specific to each student however the majority felt that they had developed in some way as a result of their involvement in the programme. The group interview results correlate with the participant observation and individual interview data, however the LEQ does not demonstrate such a positive effect. This could suggest that either the LEQ is not 'sensitive' enough to give positive results or that this type of study does not lend itself to quantitative analysis. Further investigation into both the LEQ and general quantitative analysis in this field is necessary in order to clarify this issue.

In summary this study has successfully combined approaches, drawing upon each technique individually, yet combining the findings through the dispositions and the discussion in this and the previous chapter. In other words this study has

demonstrated that triangulation can be used to produce effective, original and reliable results. This study also has implications for future research within the field of outdoor experiential learning and within the broader field of education. A link has been established between outdoor experiential learning and mainstream education; an area of research that has been given little previous attention (Cason and Gillis, 1994; Hattie et al, 1997).

Future research

Firstly, future research in this area should *focus on investigating the robustness of the link* between the Aiming Higher with Outward Bound programme and the concept of the dispositions in other settings, e.g. using other outdoor providers, different schools, varying age groups, and differing types of programme. It may be that this link has applications beyond NLC to other outdoor programmes and to other areas of the curriculum.

Secondly, future research should be conducted to *establish how far the development of dispositions translates into other areas of the curriculum*. This would be done to attempt to establish why and how a positive disposition is of benefit to a student during their time at school and for their life beyond formal education. In general, the area of dispositions has been understudied although it remains one of the core elements of the aims and objectives of mainstream education as outlined in the National Guidelines for the curriculum (LTS, 2000a; Jonson, 2002). As this study provides evidence of the value of outdoor educational experiences in terms of developing the dispositions, aspects of such future research should be directed towards understanding the way in which the concept of dispositions could be

developed through an outdoor experiential approach to learning within the mainstream education system.

Thirdly, future research should investigate a *triangulation of methods approach to research in this field*. For example, a self-report instrument or other form of psychometric instrument could be combined with group interviews or individual interviews. The quantitative aspect of this study has produced some interesting results, however the value of this type of approach lies in the opportunity to combine findings to produce an overall understanding of a situation. The results of this study were of greatest use when they were used in conjunction with the qualitative findings. Therefore future research should continue to use a multi-method approach to produce a better overall understanding of a given situation.

Fourthly, *further investigation should be carried out to determine the effectiveness of the LEQ as a sound instrument for measuring 'change' in this field*. The LEQ is fairly unknown in the UK and needs to be used in a variety of settings, and combined with other methods in order to determine its suitability for use in future studies.

Finally, future research should be directed towards, reviewing *the link between mainstream education and outdoor experiential learning*, specifically in terms of enhancing academic ability. Future research might build upon this study where the students had reported an increased perception in their ability to perform better in certain subject areas. This would help to clarify how well the students' perceptions of their abilities transfers into increased academic ability. For example, it could be done specifically in terms of English and French where students had reported increased ability in speaking tests. In this case it is not only the act of public speaking which is

important, it is the fact that the student has had a very powerful experience that they can talk about. This concept is in need of further investigation, specifically in terms of the Aiming Higher programme and also in terms of its application in a national context. This type of programme may help to widen the current concept of teaching and learning in the current education system in Scotland.

Closing comments

Having considered the Aiming Higher with Outward Bound programme and its role within the Scottish education system, the author has been able to consider the potential that this type of outdoor experiential learning holds in terms of adding an extra dimension to the current concept of teaching and learning. Local Authorities and Government have made visible commitments towards the use of outdoor experiential education as a way of broadening the current education system to provide increased opportunities for students to experience success and achievement, with the introduction of the Aiming Higher with Outward Bound programme and the Summer Activities for 16 Year Olds (SQW, 2001).

Outdoor experiential learning can offer a way to bring relevance into the classroom, by providing students with a powerful experience, which they can then use as the basis for a project, a talk, an essay or an experiment. The author believes that the students then have a desire to learn as they are motivated by their personal involvement with the subject matter, whether it is used as lead into a mathematics equation, a geography project or a piece of creative writing. Some of the students described their increased enthusiasm for a subject and their increased confidence in their ability to do well in it since the Outward Bound programme. This quote from Whittaker (1995: 23) summarises the role of desire and commitment in learning,

“unless pupils bring a desire and commitment with them into the classroom their achievements are likely to be partial and incomplete”. Following the authors observations, discussions and involvement with this research over the past four years there is evidence to suggest that outdoor experiential learning can help to foster that desire and commitment. It can do this by providing students with an opportunity to experience and develop success, confidence and motivation, which may in turn enable them to realise their capabilities both within and beyond the classroom.

References

Adelamn, C. (1981). *Uttering, muttering collecting, using and reporting talk for social and educational research*. London: Grant McIntyre Ltd.

Advisory Council for Scotland. (1963). *A report of the advisory council on education in Scotland*. London: HMSO.

Allison, P. (2000). Research from the ground up, post expedition adjustment. *Brathay Occasional Paper 1*. Ambleside: Brathay Trust.

Anderson, M. (Ed.).(1999). *The development of intelligence*. East Sussex: Psychology Press.

Atkinson, R,L., Atkinson, R,C., Smith, E,E. & Ben, D,J. (1993). *Introduction to psychology*. London: Harcourt Brace Jovanovich College Publishers.

Bacon, S. (1983). *The Conscious Use of Metaphor in Outward Bound*. Denver: Colorado Outward Bound Press.

Bakeman, R. (1992). *Understanding social science statistics: a spreadsheet approach*. London: Lawrence Erlbaum Associates.

Barrett, J. & Greenaway, R. (1995). *Why adventure? The role of outdoor adventure in young people's personal and social development*. Coventry: Foundation for Outdoor Adventure.

Bartlett, M.S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of Royal Statistical Society*, 16 (Series B), 296-298.

Beck, L.L. & Black, H. (1988). *The proof of the pudding: a study of the views of pupils in Lothian pilot TVEI schools*. Edinburgh: The Scottish Council for Research in education.

Bee, H. (1995). *The developing child* (7th ed.). New York: Harper Collins.

Bennett, N. (1976). *Teaching styles and pupil progress*. London: Open Books.

Bentley, T. (1998). *Learning beyond the classroom: education for a changing world*. London: Routledge.

Bernard, H. (2000). *Social research methods, qualitative and quantitative approaches*. London: Sage.

Berryman, J.C. (1991). *Developmental psychology and you*. London: The British Psychological Society and Routledge.

Black, T. (2002). *Understanding social science research*. London: Sage

Board of Education (1944), *Education Act*. London: HMSO.

Board of Education (1945). *Education (Scotland) Act*. London: HMSO.

Boersma, F.J. & Chapman, J.W. (1979). *Student's perception of ability scale manual*. University of Alberta, Edmonton, Canada.

Bound, D., Cohen, R. and Walker, D. (1993). *Using experience for learning*. Buckingham, UK: Open University Press.

Brand, D. (2001). Longitudinal aspects of the effect of a wilderness-enhanced program on behaviour disorder adolescents. *Australian Journal of Outdoor Education*, 6 (1), 40-53.

Brandes, D. & Ginnis, P. (1996). *A guide to student centred learning*. Great Britain: Stanley Thornes.

Brody, N. (1992). *Intelligence (2nd ed.)*. New York: Academic Press.

Bryman, A. (1988). *Quantity and quality in social research*. London: Allen & Unwin.

Bryman, A. (1989). *Research methods and organisation studies*. London: Routledge.

Bryman, A. & Cramer, D. (1992). *Quantitative data analysis for social scientists*. London: Routledge.

Bryman, A. & Cramer, D. (1999). *Quantitative data analysis with SPSS 8 release for windows: a guide for social scientists*. London: Routledge.

Burns, R. B. (1979). *The self-concept*. London: Longman.

Capra, F. (1982). *The turning point: science, society and the rising culture*. London: Wildwood House.

Carver, R. (1996). Theory for practice: a framework for thinking about experiential education. *The Journal of Experiential Education*, 91(1), 8-13.

Cason, D., & Gillis, H. L. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education*, 17(1), 40-47.

Cheesmond, J., & Yates, J. (1979). *Research report of the outdoor education programme in secondary schools in Lothian region secondary schools*. Edinburgh Dunfermline College of Physical Education.

Cheesmond, J. (1981). Outdoor pursuits in education – a case for inclusion. In Nicol, R. (2001) *Outdoor Education for Sustainable Living?: and investigation into the potential of Scottish local authority residential outdoor education centres to deliver programmes relating to sustainable living*. (pp.47) Unpublished PhD thesis. University of Edinburgh.

Clark, M. & Munn, P. (1997). *Education in Scotland: policy and practice from pre-school to secondary*. London: Routledge.

Clayne, J. (1995). *Outdoor recreation in America (5th ed.)*. London: Macmillan Publishing Company.

Cohen, L. & Manion, L. (1994). *Research methods in education (4th ed.)*. London: Routledge.

Cook, L. (1999). The 1944 education act and outdoor education: from policy to practice. *History of Education*, 28(2), 157-172.

Cook, L. (2001). Differential social and political influences on girls and boys through education out-of-doors in the United Kingdom. *Journal of Adventure Education and Outdoor Learning*, 1(2), 43-52.

Coopersmith, S. (1976). *The antecedents of self-esteem*. London: WH Freeman and Company.

Coopersmith, S. (1976a). The antecedents of self-esteem between yr2 and yr6: a longitudinal study. *Educational Psychology*, 15(2), 171-179.

Dale, R., Bowe, R., Harris, D., Loveys, M., Moore, R., Shilling, C., et al. (1990). *The TVEI story: policy, practice and preparation for the workforce*. Milton Keynes: Open University Press.

Darling, J. (1994). *Child-centred education and its critics*. London: Paul Chapman.

Davies, J. & Brember, I. (1999). Boys outperforming girls: an 8yr cross-sectional study of attainment and self-esteem in Yr6. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 19(1), 5-16.

Davis-Berman, J. & Berman, D.S. (1994). *Wilderness therapy: foundations, theories and research*. Dubuque, IA: Kendall/Hunt.

Delay, R. (1996). Forming Knowledge: constructivist learning and experiential education. *The Journal of Experiential Education*, 19(2), 76- 81.

Dennison, B. & Kirk, R. (1990). *Do, review, learn, apply: a simple guide to experiential learning*. Oxford: Basil Blackwell Ltd.

DES (1975). *Dartington conference report*. Department for Education and Schools.

Devine, M., Minguard, S., Black, H., & Fenwick, N. (1994). *Schools for Skills: vignette studies: a national survey of the development through TVEI of personal and transferable skills*. Scottish Council for Research in Education.

Dewey, J. (1925). *Democracy and education*. New York: Macmillan Company.

Dewey, J. (1938). *Experience and education*. New York: Collier Books.

Dey, I. (1993). *Qualitative design analysis, a user-friendly guide for social scientists*. London: Routledge.

Drasdo, H. (1973). *Education and the mountain centres*. Llanrwst: Tyddyn Gabriel.

- Duseck, J.B. & Flaherty, J.F. (1981). The development of self-concept during the adolescent years. *Monographs of the Society for Research in Child Development*. 46 (4 Serial No. 91)
- Dyson, B. (1996). Two physical education teachers' experience of Project Adventure. *Journal of Experiential Education*, 19(2), 90-97.
- Erikson, H.L. (2001). *Stirring the head, heart and soul (2nd ed.)*. London: Sage.
- Ewert, A. (1983). *Outdoor adventure and self-concepts: a research analysis*. Oregon: University of Oregon.
- Ewert, A. (1989). *Outdoor adventure pursuits: foundations, models and theories*. Southsdale: Arizona.
- Eysenck, M.W. (Ed.). (1994). *The Blackwell dictionary of cognitive psychology*. Cambridge, Massachusetts: Blackwell Publishers.
- Factor Analysis. (2003) Retrieved 15th July 2003 from <http://www.hawaii.edu/powerkills/UFA.HTM>
- Fenton, D. & Goldman, D. (1999). *Aiming Higher with Outward Bound year 1 evaluation: 1997-1998*. North Lanarkshire Council Department of Education. Unpublished Document.
- Fink, A. (1995). *How to Sample in Surveys*. London: Sage.

- Fitts, W, H. (1965). *The Tennessee self concept scale*. Nashville Tennessee: Tennessee Department of Mental Health
- Burns, R, B. (1979). *The self concept: in theory measurement, development and behaviour*. (pp. 57) London: Longman.
- Fleming, J,S. & Courtney, B,E. (1984) the dimensionality of self-esteem: II: Hierarchical facet model for revised measurement scales. *Journal of Personality and Social Psychology*. 46, 404-421.
- Fletcher, B. (1971). *The challenge of outward bound*. London: Heinemann.
- Fontana, D. (1995). *Psychology for teachers (3rd ed.)*. New York: Palgrave.
- Fox, K,R. & Corbin, C,B. (1989). The physical self perception profile: development and preliminary validation. *Journal of Sport and Exercise Psychology*, 11, 408-430.
- Freire, P. (1996). *Pedagogy of the oppressed*. London: Penguin Books.
- Gadotti, M. (1994). *Reading Paulo Freire: his life and work*. New York: New York University State Press.
- Gardner, H. (1984). *Frames of mind - the theory of multiple intelligences*. London: Heinman.
- Gardner, H. (1991). The tensions between education and development. *Journal of Moral Education*, 20(2), 113-125.

Gardner, H. (1993). *Multiple intelligences the theory in practice*. New York: Basic Books.

Gardner, H. (1999). Are there additional intelligences? The case for naturalist, spiritual, and existential intelligences. In J, Cain (Ed.), *Education: information and transformation* (pp.111-132). Englewood Cliffs NJ: Prentice-Hall.

Garforth, F,W. (1966). *John Dewey: selected writings*. London: Heinman.

Gass, M, A. Transfer of learning in adventure programming. In Miles, J,C. & Priest, S. (Ed) (1999). *Adventure programming*. (pp.227-233) Pennsylvania: Venture Publishing.

Gill, J,H. (1993). *Learning to learn: toward a philosophy of education*. Great Britain: Humanities Press.

Goleman, D. (1995). *Emotional Intelligence: why it can matter more than IQ*. London: Bloomsbury Publishing.

Greenaway, R. (2002) *Why Adventure? Research Review*. Retrieved 30th March 2002 from: <http://reviewing.co.uk>

Greenhalgh, T. (1997). Statistics for the non-statistician II: 'significant' relations and their pitfalls. *British Medical Journal*, 315, 422-425.

- Habermas, J. (1970). On systematically distorted communication. *Inquiry*, 13 205-218.
- Hainstock, E. (1978). *The essential Montessori*. New York: Mentor Books.
- Hakim, C. (1987). *Research design: strategies and choices in the design of social research*. London: Allen & Unwin.
- Halls, N. (1997a). The development of outdoor education in Strathclyde region (Part I). *Scottish Journal of Physical Education*, 25(1), 36-38.
- Halls, N. (1997b). The development of outdoor education in Strathclyde region (Part II). *Scottish Journal of Physical Education*, 25(2), 12-28.
- Hamm, M. (1993). *Philosophical issues in adventure education: an introduction*. London: The Falmer Press.
- Hammersley, M. (Ed). (1993). *Social research - philosophy politics & practice*. London: Sage Publications.
- Harter, S. (1982). The perceived competence scale for Children. *Child Development*, 53, 87-97.
- Hattie, J. A., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67 (1). 43-87.

Hay, I., Ashma, A & Van Kraayenoord, C. (1998). The influence of gender, academic achievement and non-school factors upon pre-adolescent self-concepts. *Educational Psychology*, 18 (4), 461-470.

Hendee, J. C., & Roggenbuck, J. (1984) *Wilderness-related education as a factor increasing demand for wilderness*. Paper presented at the International Forest Congress convention, Quebec City, Canada.

Henry, J. (1990). Meaning and practice in experiential learning. In Weil, S,W. & McGill, I. (Ed.). (1990). *Making sense of experiential learning: diversity in theory and practice*. (pp.25 -37). Buckingham: The Society for Research into Higher Education and the Open University.

Higgins, P. (1997). Why educate out of doors? In Higgins P., Loynes, C. & Crowther, N.(Eds.). (1997). *A guide for outdoor educators in Scotland*. (pp.9-14). Scottish Natural Heritage: Perth, Adventure Education: Penrith.

Higgins P., & Loynes, C. (1996/7). Towards consensus on the nature of outdoor education. *Far Out – Practial Informative Adventure Education*, 1 (4), 2-3.

Higgins, P., & Loynes, C. (1997). Safety and risk in outdoor education. In Higgins P., Loynes, C. & Crowther, N.(Eds.). (1997). *A guide for outdoor educators in Scotland*. (pp.6-8). Scottish Natural Heritage: Perth, Adventure Education: Penrith.

- Higgins P., Loynes, C. & Crowther, N. (Eds.). (1997). *A guide for outdoor educators in Scotland*. Scottish Natural Heritage: Perth, Adventure Education: Penrith.
- Hirsch, E. D. (1997). *The Schools we Need and Why we Don't Have Them*. New York: Double Day.
- Honey, P. & Mumford, A. (1986). *The manual of learning styles*. Berkshire: Peter Honey.
- Hopkins, D. (1985). Self concept and adventure: the process of change. *Adventure Education*, Jan/Feb, 7-13.
- Hopkins, D. (2001). *School improvement for real*. London: Routledge Falmer.
- Hopkins, D. & Putnam, R. (1993). *Personal growth through adventure*. London: David Fulton Publishers.
- Horowitz, L. (1990). Learner autonomy: a case study. In Weil, S.W. & McGill, I. (Eds.). (1990). *Making sense of experiential learning: diversity in theory and practice* (pp81 -80). Buckingham: the Society for Research into Higher Education and the Open University.
- Hovelynck, J. (2001). Beyond didactics: a reconnaissance of experiential learning. *Australian Journal of Outdoor Education*, 16 (1), 4-11.
- Hughes, J. (1990). *The philosophy of social research*. London: Longman.

Humberstone, B. (1997). Perspectives on research in outdoor education values and ethics. *Journal for Adventure Education and Outdoor Learning*, 14 (1).

Hunt, S. & Hilton, J. (1975). *Individual development and social experience*. London: Allen & Unwin Ltd.

Jamieson, C. (2002). *National debate on education - foreward*. Retrieved 4th November 2002. from Scottish Executive Website:
<http://www.scotland.gov.uk/education/nd-homepage.htm>.

Jary, D. & Jary, J. (1995). *Collin's dictionary of sociology*. Glasgow: Harpercollins

Jonson, D. (2002) Telephone Conversation. July 2002.

Joreskog, K.G. & Sorbom, D. (1986). *LISREL VI: analysis of linear structural relationships by maximum likelihood, instrumental variables and least square methods (4th ed.)*. Uppsula, Sweden: University of Uppsula, Department of Statistics.

Kaiser, H. (1970). A second generation little jiffy. *Psychometrika*, 35, 401-415.

Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.

Keeton, M.T. & Tate, P.J. (1978) (Eds.) Learning by experience: what, why, how? In Weil, S,W. & McGill, I. (Eds.). (1990). *Making sense of experiential learning:*

diversity in theory and practice, (pp.8) Buckingham: the Society for Research into Higher Education and the Open University.

Keighley, P. (1985). Using the potential of the outdoor education as a vehicle for learning. *Adventure Education*, Jan/Feb, 26-30.

Keough, R., Boud, D. & Walker, D. (1998). *Reflection: turning experience into learning*. London: Kogan Page.

Kiewa, J. (1994). Self-non-Outward Bound: the key to adventure? towards a model of the adventure experience. *Women and Therapy*, 15(3-4), 29-41.

Kim, J. & Mueller, C. (1978). *Factor analysis: statistical methods and practical issues*. London: Sage University Paper.

Koesler, R. (1994). *Factors influencing leadership development in wilderness education*. Paper presented at the International Conference on Outdoor Recreation, Colorado Spring, Colorado.

Kolb, D. (1984). *Experiential learning: experience as a source of learning and development*. New Jersey: Prentice Hall.

Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*. London: Sage Publications.

Lane, D. (2002). *Introduction to ANOVA*. Retrieved 11th December, 2002 from <http://davidmlane.com/hyperstat/intro-ANOVA.html>

Lawrence, D. (1980). The development of a self-esteem questionnaire. *British Journal of Psychology*, (51), 245-249.

Layder, D. (1994). *Understanding social theory*. London: Sage.

Learning and Teaching Scotland (2000a). *The Structure and balance of the curriculum: 5-14 national guidelines*. LTS.

Learning and Teaching Scotland (2000b). *Personal and social development: 5-14 national guidelines*. LTS.

Lee, V. (Ed.). (1990). *Children's learning in school*. London: Hodder and Staughton.

Lemmey, R. (1998). The Picos project: a unique collaboration between environmental research and outdoor education . In Higgins, P. & Humberstone, B. (Eds.). *Celebrating cultural diversity*. (pp20-23) Proceedings of the 3rd Euro Congress, University of Edinburgh, Edinburgh.

Lewis-Beck, M. (Ed.) (1994). *Factor analysis and related techniques*. London: Sage Publications and Toppan Publishing.

Lillard, P.P. (1972). *Montessori*. New York: Schocken Books.

Mackenzie R,F. (1963). *Question of living*. London: Collins.

Marsh, H, W. (1993). The multidimensional structure of academic self- concept: invariance over gender and age. *American Educational Research Journal* , 30, 841-860.

Marsh, H,W., & Richards, G. (1988). The Outward Bound bridging course for low-achieving high school males: effect on academic achievement & multidimensional self-concepts. *Australian Journal of Psychology*, 40 (3), 281-298.

Marsh, H,W., Richards, G. & Barnes, J. (1986). Multidimensional self- concepts: the effect of participation in an Outward Bound programme. *Journal of Personality and Social Psychology*, 50 (1),195-204.

Maruyama, G., Rubin, R,A., & Kingsbury, G,G. (1981). Self-esteem and educational achievement: independent constructs with a common cause? *Journal of Personality and Social Psychology*, 40 (5), 962-975.

May, T. (1997). *Social Research – Issues, Methods and Processes*. Buckingham: Open University Press.

McGhie, M. (1998). *Newsletter, issue 10 - Winter 1998*. Edinburgh: Scottish Schools Ethos Network.

Miles, M,B. & Huberman, M,A. (1994). *An expanded sourcebook; qualitative data analysis*. London: Sage Publications.

Miner, J. & Boldt, J. (1981). *Outward Bound U.S.A.: learning through experience in adventure-based education*. New York: William Morrow.

Montessori, M. (1912). *The Montessori method*. London: Heinman.

Montessori, M. (1965). *Dr. Montessori's own handbook*. New York: Schocken Books.

Montessori, M. (1978). Comparison of Montessori and traditional pre-school education. In Hainstock, E. (1978). *The Essential Montessori*. (pp34) New York: Mentor Books.

Morris, C. (2002). *Some critiques of Howard Gardner's multiple intelligence theory*
Retrieved 20th September 2002 from <http://www.igs.net/~cmorris/critiques.html>.

Mortlock, C. (1984). *The adventure alternative*. Milnthorpe: Cicerone Press.

Mualik, S.A. (1987). A brief history of the philosophical foundations of exploratory factor analysis. *Multivariate Behavioural Research*, 22, 267-305.

Munn, P. (2002a). *Interim report – national debate on education, pupils, parents, teachers responses*. Retrieved 4th November 2002 from Scottish Executive Website:
<http://www.communicata.co.uk/scottish-executive/ftp-reports.html>

Munn, P. (2002b). *Interim report – national debate on education, organisational responses*. Retrieved 4th November 2002 from Scottish Executive Website:
<http://www.communicata.co.uk/scottish-executive/orgs-reports.html>

Munn, P. (2002c). *Summary report – national debate on education*. Retrieved 4th November 2002, from Scottish Executive Website
<http://www.communicata.co.uk/scottish-executive/summary.html>

Murray, J. & Closs, A. (Eds.). (2000). *Ethos of achievement: whole school approaches to improving performance and celebrating success*. Retrieved 4th November 2002, from Scottish schools Ethos Network Website:
<http://www.scotland.gov.uk/structure/hmi/ea2.htm>.

National Association for Outdoor Education. (1970). Steering Group Statement.

Neill, J. T. (1997). *Outdoor education in schools, what can it achieve?* Paper presented to the 10th National Outdoor Education Conference, Sydney, Australia, 20-24 January.

Neill, J. T. (1999). *The melting pot of outdoor education effects: testing the flavours of the programme type, distribution and participant age*. Paper presented at the 10th National Outdoor Education conference, Sydney, Australia, 11-15 January.

Neill, J. T. (2002). *Life effectiveness questionnaire*. Retrieved 10th September 2000 from <http://www.unh.edu/outdoor-education/leq.html>.

Neill, J, T. (2003). Instructor effectiveness in outdoor education. Retrieved 10th March 2003 from [http://www.wilderdom.com/Instructor Effectiveness.htm](http://www.wilderdom.com/Instructor%20Effectiveness.htm).

Neill, J, T. (2003a). *Meta-Analytic research on the outcomes of outdoor education*. Paper presented to the 6th Biennial Coalition for Education in the Outdoors Research Symposium, Bradford Woods, IN, 11-13th January.

Neill, J, T. (2003b). Why use effect sizes instead of significance testing in program evaluation. Retrieved 9th July 2003 from <http://www.wilderdom.com/effectsizes.html>

Neill, J, T. & Flory, M. (1999). "*Girlz in the wood*": a pilot study of the effects of courses on adolescents' personal effectiveness and self-esteem. Boulder, Colorado: The Women's Wilderness Institute.

Neill, J, T. & Gray, T. (2001). The Australian journal of outdoor education: a review of the first five years. *Australian Journal of Outdoor Education*, 6 (1), 57-63.

Neill, J, T., Marsh, H,W. & Richards, G,E. (1997). *The Life Effectiveness Questionnaire: development and psychometrics*. Sydney, Australia: University of Western Sydney.

Neill, J, T. & Richards, G,E. (1998). Does outdoor education really work? a summary of recent meta-analyses. *Australian Journal of Outdoor Education*, 3(1), 2-9.

Nicol, R. (1999). A Survey of Scottish outdoor centres. *Horizons*, 6, 14-16.

Nicol, R. (2001). *Outdoor education for sustainable living?: an investigation into the potential of Scottish local authority residential outdoor education centres to deliver programmes relating to sustainable living*. Unpublished PhD thesis. University of Edinburgh.

Nicol, R. (2002). Outdoor education: research topic or universal value? part one. *Journal of Adventure Education and Outdoor Leadership*, 2(1), 29-41.

Nolan, T. & Priest, S. (1993). Outdoor programmes for women only? *Journal of Adventure Education and Outdoor Leadership*, 10(1), 14-17.

North Lanarkshire Council (1998a). *Raising achievement for all: a draft policy framework* (Amended Version Following Consultation). Unpublished Document.

North Lanarkshire Council (1998b). *Aiming Higher with Outward Bound: co-ordinators file 1998/99*. Unpublished Document.

Outward Bound (2002). Retrieved 10th September 2002 from

<http://www.outwardbound-uk.org/>

Pallant, J. (2001). *SPSS survival manual: a step by step guide to data analysis using SPSS*. Buckinghamshire: Open University Press.

Parker, T., & Meldrum, K. (1973). *Outdoor education*. London: J.M. Dent & Sons Ltd.

Paterson, L. (1993). Local variation in the Scottish pilot projects of the technical, vocational, education initiative. *Research Papers in Education*, 8 (1), 47-71.

Phipps, M.L. & Claxton, D.B. (1997). An investigation into instructor effectiveness. *Journal of Experiential Education*. 20 (1) 40- 46.

Preist, S. & Gass, M.A. (1997). *Effective leadership in adventure programming*. Champaign, IL. Human Kinetics.

Project Sumit (2002). *School Using Multiple Intelligence Theory*. Retrieved 11th October 2002 from Project Sumit Website:
<http://pzweb.harvard.edu/sumit/MISUMIT.HTM>.

Ravitch, D. (2000). *Left Back: a century of failed school reforms*. New York: Simon & Schuster.

Riggins, R.D. (1985). The Colorado Outward Bound school: biographical and personality factors contributing to leadership effectiveness of instructors. *Journal of Environmental Education*. 16 (3) 6-11.

Riggins, R.D. (1986). Effective leadership in adventure-based education: setting directions for future research. *Journal of Environmental Education*. 18 (1) 1-6.

Rist, R. (1977). On the relations among educational research paradigms: From disdain to détente. *Anthropology and Education Quarterly*. VIII(2). 42-44

Roberts, K., White, G. & Parker, H. (1974). *The character training industry: adventure training schemes in Britain*. Newton Abbot: David and Charles.

Robson, C. (1984). *Real world research: a resource for social scientists and practitioner-researchers*. Oxford: Blackwell.

Rogers, C. (1982). *A social psychology of schooling*. London: Routledge and Kegan Paul.

Rogers, C. (1993). *Freedom to learn*. London: Merrill Publishing Company.

Ross, W,A. (2000). Scottish education - the future? *Education in the North*, 8, 67.

Rotter, J, B. (1966). Generalised expectancies for internal versus external control of reinforcement. *Psychological Monographs*. 80 (Whole No.609)

Rubin, H, J. & Rubin, I,S. (1995). *Qualitative interviewing - the art of hearing data*. London: Sage Publications.

Salkind, N, J. (2000). *Statistics for people who (think they) hate statistics*. London: Sage.

Sapsford, R,J., & Jupp, V. (1996). *Data Collection and Analysis*. London: Sage.

Scarr, S. (1985). An author's frame of mind [Review of Frames of Mind: the theory of multiple intelligences]. *New Ideas in Psychology*, 3 (1), 95-100.

Schreyer, R., Williams, D.R. & Haggard, L. (1990). Episodic versus continued wilderness participation? implications for self-concept enhancement. In A.T. Easley, J.F. Passineau, & B.L. Driver. *The Use of Wilderness for Personal Growth, Therapy, and Education*. (pp.193) USDA Forest Service, General Technical Report.

Scottish Consultative Council for the Curriculum, (1995). *The heart of the matter: a paper for discussion and development*. Edinburgh: SCCC.

Segal, Quincy & Wicksteed. (2001). *Evaluation of the summer activities for 16 year olds: summer 2000*. Norwich: HMSO.

Shull, P. (1996) Foreward. In Freire, P. (1996). *Pedagogy of the oppressed*. (pp.ii) London: Penguin Books.

Shavelson, R.J., Hubner, J. J., & Stanton, G.C. (1976). Self- concept: validation of construct interpretations. *Review of Educational Research*, 46 (3), 407-441.

Silverman, D. (1993). *Interpreting qualitative data - methods for analysing talk, text and interaction*. London: Sage Publications.

Silverman, D. (2000). *Doing qualitative research a practical handbook*. London: Sage Publications.

Soares, L.M. & Soares, A.T. (1982). *Convergence and discrimination in academic self-concepts*. Paper presented at the 20th Congress of the international Association of Applied Psychology, Edinburgh, Scotland.

Sternberg, R.J. (1983). How much gall is too much gall? review of frames of mind: the theory of multiple intelligences]. [Electronic version] *Contemporary Education Review*, 2(3), 215-224.

Sternberg, R.J. (1991). Death, taxes, and bad intelligence tests.[Electronic version] *Intelligence*, 15(3), 257-270.

Sternberg, R.J. & Kolligan, J. (1990). (Eds.). *Competence considered*. London: Yale University Press.

Sternberg, R.J. & Williams, W.M. (1998). *Intelligence, instruction and assessment - theory into practice*. New Jersey: Lawrence Erlbaum Association.

The Survey System (1998). *Statistical significance*. Retrieved 26th November 2002 from The Survey Systems Website: www.chartwellsystems.com/signif.htm.

Torbert, W. (1972). *Learning from experience: towards consciousness*. New York: Columbia University Press.

Traub, J. (1998). Multiple Intelligence Disorder. *New Republic*. October 26.

Triarchic Theories (2002). *Triarchic Theories (R. Sternberg.)*. Retrieved 11th October 2002 from Triarchic Theories Website: <http://tip.psychology.org/stern.html>

Vogt, W, P. (1993). *Dictionary of statistics and methodology: a non-technical guide for the social sciences*. London: Sage.

Waitzkin, H., Britt, H. & Williams, C. (1994). Narratives of aging and social problems in medical encounters with older persons. *Journal of Health and Social Behaviour*. (35), 322-348.

Walter, G,A. & Marks S,E. (1981). *Experiential learning and change: theory, design and practice*. Toronto, Canada: John Wiley and Sons.

Weil, S,W. & McGill, I. (1980). *Making sense of experiential learning: diversity in theory and practice*. The Society for Research into Higher Education and Open University Press.

Wetmore, R,C. (1972). The influence of Outward Bound school experience on the self concept of adolescent boys (Doctoral Dissertation, Boston University). In Hattie, J. et al. (1997). Adventure education and Outward Bound: out-of-class experiences that make a lasting difference. (pp 55) *Review of Educational Research*, 67 (1), 43-87.

White, J. (1998). *Do Howard Gardner's multiple intelligences add up?* Great Britain: Institute of Education.

Whittaker, P. (1995). *Managing to learn: aspects of reflective and experiential learning in schools*. London: Cassell.

Williamson, J, B., Karp, D,A. & Dalphin, J, R. (1977). *The research craft*. Boston: Little, Brown & Company.

Wilson, R. (1992). *Inside Outward Bound*. Vancouver: Douglas and McIntyre.

Wojatis, O. (2000). *Patience runs out in Scotland*. Retrieved June 6th 2003 from The Times Higher Education Supplement Website: <http://www.thes.co.uk>

Wright, D, B. (1997). *Understanding statistics: an introduction for the social sciences*. London: Sage.

Yates, J. (1981). Outdoor pursuits in education: an enigma. In Nicol, R. (2001) *Outdoor education for sustainable living?: and investigation into the potential of Scottish local authority residential outdoor education centres to deliver programmes relating to sustainable living*. (pp.47). Unpublished PhD thesis. University of Edinburgh.

Glossary of Activities

Abseiling - The mountaineers way of using the rope to get back to the bottom of the crag.

Icebreaker – Activities commonly used to bring a group of strangers together, often involving elements of trust and co-operation. For example, throwing a ball to one another whilst calling out the recipients name.

Jacob's Ladder - This is a wide ladder of poles which it is almost impossible to climb without the assistance of other members of your group. Trust and support are essential to complete this activity successfully.

Minor Dynamics - Short exercises which clearly demonstrate the importance of critical skills such as planning and co-operating.

Trapeze - Climb to the top of the 4m pole, stand on the top and jump for the trapeze bar.

Zip wire - From the platform at the top end of the wire, hold onto the bar and speed down to the rest of the group waiting at the bottom.

Research Diary

Day One - Monday - 22/11/99 - Female A

Day Plan

- Introduction, Clan allocation, Dorm allocation

Lunch

- Group dynamics/ i.e. ice breakers, Kit allocation/ Kit Cage

Tea

- Night Line, Night Expedition, Review Room, Hopes and Fears, Chat / Review

Weather: Cold, Overcast Showers. Ground was very muddy.

Observations: - Monday - Female A - 22/11/99

The clan had its first dynamic together on the front lawn. The aim of the afternoon activity was to act as an icebreaker. The use of ice-breaking activities was a good way for everyone to get introduced to one another and to feel relaxed around other members of the clan. Female A did not appear to be any less or more shy than any other members of the group. She involved herself fully in the activities and participated confidently. The group on the whole participated well together on each of the activities.

Female A was quick to speak out when a question was put to the group giving sensible answers. She did not speak out of turn nor did she behave inappropriately. She was confident and participated well and acted responsibly. When asked whether they should increase the level of difficulty of the activity (adding another ball into the game - juggling in a group), she was keen to increase the number of balls in the game. However the females refuted this initial sign of confidence by squealing and proclaiming that it was 'impossible' and that they 'couldn't do it'.

The group didn't get a night activity as one member arrived late therefore the clans activity was jeopardised. This received a mixed reaction, Female A was relieved, as she didn't want to do it anyway...however when juxtaposed with favourite activity absieling she had a different reaction; she was very annoyed.

Interview - Female A - PM - 22/11/99

- Very quick & very short answers.

Quite shy and nervous not keen to share any experiences or stories. Very hard not to prompt the answers and therefore compromise the credibility of the responses. TO overcome this I tried to keep the questions as open as possible and to word the questions in such a way that one-word answers were not sufficient.

Female A appears to be having a good time, she is looking forward to the rest of the week, she sees it as a good opportunity to bond with the other clan members and to make new friends. Originally she was not keen to come up to Loch Eil, as she didn't know why she had been selected to go. On reflection she thinks that the reason why she was chosen to go to Outward Bound may have something to do with 'Communication skills'.

One of the aims of Female A was to make new friends during the week and to try abseiling. She was keen to be sharing a dorm and mixed in with the other students in the clan. She appeared to be settling in fine and looking forward to the rest of the week. She felt that the week would go too quickly.

Agreed to chat again on Friday morning.

Issues for Friday

- Clan - bonding - Time keeping
- Confidence
- Made new friends
- Mixing with other students

Day Two - Tuesday - 23/11/99 - Male A

Day Plan

- Dynamics - Major Dynamics, Boot Lace - (tying a large lace without removing hands), Wheel Barrow Race x3 x4 x12, Beam (pass-over)

Lunch

- Parachute Jump, Jacobs Ladder

Tea

- Raft Planning, Presentation, Build Model of Raft, Discussion , Planning

Weather: Rain, Very Cold all day. Students becoming cold quickly, therefore not very keen to sit around and review, preferring to keep moving.

Observations - Tuesday- Male A - 23/11/99

Male A joined in with all of the dynamics in the morning. He was very keen, but kept himself back from the group. When it came to planning activities he was slow to get involved but when he did he had very good suggestions and ideas. He managed to 'come out of his shell' towards then end of the morning activities by being the first person to shout out the answers and to become involved. He was very aware of others in his group keen to help others out and to offer support on the tasks.

He was very shy when spoken to directly but when given enough of his own time to contribute he was able to do so confidently.

There was a marked change in the behaviour of Male A throughout the day: from the morning, when he didn't want to be involved to mid-morning when he was taking control of the situation and offering intelligent solutions.

Parachute Jump - He was very keen to do this, going first and laughing whilst at the top and giving a 'thumbs up' to the rest of the clan on his way down.

Jacob's Ladder - He coped very well with the physical aspect of the activity. He was also very aware of the other students and helped them both physically and mentally by offering encouragement and support. When he was belaying he was offering other clan members constructive advice and encouragement from the ground.

Interview - Tuesday - Male A - 23/11/99

Male A spoke very quickly and briefly he was not keen to chat or discuss issues with me. He communicated with one-word answers and nods. Male A was happy to be at Outward Bound and appeared to be happy with everything and looking forward to the rest of the week and participating in all of the activities. Nothing appeared to be bothering him, or at least he was not willing to tell me that anything was. From my observations I would say that he appears reasonably settled and at ease with his peers and happy with the activities.

Agreed to have a chat again on Friday

Issues for Friday:

- See how the rest of his week went...activities
- Wants to work on making new friends and mixing them with others, so check how this went.

Thoughts

It is very hard to get the students to speak as they are very shy and not very forthcoming, especially the males. I wanted to keep the interview as relaxed, emergent and informal as possible. However I feel that it is very hard to maintain that environment whilst encouraging the students to speak openly without making the interview into an interrogation. I feel that it is necessary to keep that atmosphere however it is hard to gain the students trust in a matter of days or in the case of the interviews on day 1 and 2, in a matter of hours.

General Thoughts

Overall the students are not mixing very well with one another in their clans. The students are still mixing with other students from their own schools and are not mixing with students from other schools.

There is a definite mixture of students at Outward Bound this week. There are students that are very confident and outspoken which tend to dominate the clans and compromise the behaviour of the less confident and quieter students, as a result they are feeling as though they are not part of the clan.

Day Three - Wednesday - 24/11/99 - Female B

Day Plan

- Rock Climbing

Lunch

- Abseiling

Tea

- Pack and preparation for the hill day.

Weather: Rainy, miserable, cold and windy at times.

Observations - Wednesday - Female B - 24/11/99

Today I observed Female B as well as watching the whole group. Female B was very quiet and did not appear keen to join in. She managed the rock climbing well however she did get into difficulties on the way down which knocked her confidence slightly. She attempted the abseiling, hooking into the karabiner and leaning backwards however she did not want to commit herself and would not step backwards. She walked down the side of the abseil instead. After the morning session (rock climbing/abseiling) was over she was more confident and seemed keen to be involved fully in the afternoon activities. I think the abseil was one of her 'fears' and she had attempted more than she had expected she would have, without actually completing the activity.

The weather was driving rain (at times) which made the students very cold very quickly; this caused some of them who were sitting around, unable to participate to become miserable. The mood of the clan was affected by the weather. The motivation levels within the clan were not particularly high which does not allow some of the members who are perhaps less confident to join in and attempt things or develop their confidence. There is not a supportive, learning environment whereby students feel relaxed and able to attempt things that they would not otherwise do and to push themselves.

There was a different tutor in the late morning/ afternoon activities and this had a major effect on the mood of the group and the confidence levels of the group. They worked together and displayed support for each other.

Interview - Wednesday - Female B - 24/11/99

I decided to interview two students together in order to create a more relaxed atmosphere and encourage the students to speak more freely with each other and me. I selected the student under observation and someone that they appeared comfortable and relaxed around. This worked quite well and the students were more relaxed and more open, therefore more willing to share stories, talk about other students and to share their experiences with me. Having another student involved in the interview process allowed the pressure to be removed from the individual student under observation.

The interview went well with both of the students talking openly about feeling homesick on the first night, but feeling really keen now and willing to try things out now.

Both of the students were looking forward to various activities. They talked about sharing a dormitory with other people that they didn't know, however by this third day they were all very good friends with one another. They felt that there were one or two girls in the dorms that were not happy, but they were aware of this and were responding to it. One of the girl's friends had not been selected to go to Outward Bound and so she felt slightly isolated and slept as soon as it was 'lights out'. Another girl was always negative about everything and didn't want to be involved in anything. The students recounted the story of how this girl had laughed all of the way down the zip line yet once she got to the bottom and stepped off she said "I am not enjoying this", "I hated it". The other members of the clan justified her negative behaviour by saying that she, "hates everything". She doesn't even like Christmas!

Both of the students are happy with their clan and the amount of support received and given by each member. One of the girls discussed the 'Spiders Web' and the fact that they had to touch each other and 'guys' whom they hardly knew had been touching them in order to help them complete the activity. However they said that they trusted each member now and that if they had to do a Spiders web again it would not be a problem, and the 'touching' aspect would neither be a problem nor an issue.

The weather all day was miserable and cold. The students were freezing on the rock climb. This must have affected their motivation levels and their morale. There were one or two females that were complaining about everything and I feel that they would have complained regardless of the weather.

Day Four - Thursday - 25/11/99 - Male B

Day Plan

- Raft Planning, Presentation, Build Model of Raft, Discussion , Planning

Lunch

- Building / Launching Raft

Tea

Weather: The weather was terrible today, very rainy and cold although not as cold as it has been. The rain was consistent yet there were some heavy showers throughout the day. The students were very cold during the rafting session however they were not complaining too much and they worked very well together as a team.

Observations - Thursday - Male B - 25/11/99

The morning was spent designing the raft. Once the raft design had been agreed upon the clan went down to the slipway where they built and launched the rafts. During the design stage Male B was fairly active and alert and willing to take control of the group. I thought that he displayed good leadership qualities and appeared to enjoy being in control of the situation and the clan.

He was able to encourage others and give orders to the rest of the clan in a way that was supportive and encouraging. The clan was extremely motivated during the first part of the morning. The raft design was a huge success however shortly after the raft was launched it sunk. The team morale and spirit was considerably lower after this incident. Especially when the opposing clan floated their raft successfully and then offered them a go on their raft.

After a warm shower and lunch the clan went to do the high ropes course. This worked very well and most of the group attempted it to some extent. Male B worked very well on this activity, however he was very keen to be involved and to race ahead of the group, which left his partner floundering slightly. His partner appeared to be struggling on some parts and sometimes Male B would not acknowledge this and offer support.

Male B was very confident throughout the day and was not afraid to speak out in front of the clan. He was very enthusiastic and keen to be involved in all of the activities and at some points this over zealousness cause his behaviour to be misinterpreted as exhibitionistic. He appears to be an intelligent boy and

aware of others, however he handles confrontation badly and does not take kindly to being told what to do and when to do it.

Interview - Thursday - Male B - 25/11/99

An interview was not conducted with this student, as by the end of evening activities and their free time, he was extremely hyperactive. The free time activity was a quiz game involving all of the clans and the teachers, which succeeded in winding up all of the students; this was also the last night at Loch Eil. I made the decision not to interview him, as I did not think that I would gain very much from a discussion with him.

Interview - Friday - All students interviewed - 26/11/99

The students had mixed feelings about the week based on a mixture of experiences. They had all had different tutors and felt that this had affected their experience of the week. On the whole the group had not felt that this was a lasting experience, that it would not effect their life they felt and that they had not changed in any way.

They had enjoyed the fact that they were participating in new activities and having new experiences. The students felt that different tutors had affected the dynamics of the clans in various ways and subsequently each of the students had favourite tutors for varying reasons. Some of the students suggested that the tutors were not strict enough and should have 'shouted more'. The students felt that they needed more discipline and direction which was interesting as you would expect that they would want less discipline and would enjoy the fact that they could do as they wanted and be treated more like adults.

There were definite strong tutors throughout the week and the students had a definite experience as a result of this. Overall they felt that their clans had come together over the week and that they had made new friends.

Day One 22/01/00 - Monday

Day Plan

- Introduction, Clan Allocation, Dorm Allocation

Lunch

- Group Dynamics/ i.e.ice breakers, Kit allocation/ Kit Cage

Tea

- Night Line, Night Expedition, Review Room, Hopes and Fears, Chat / Review

Weather: Cold / overcast/ foggy/ misty

Observations:

I arrived at Loch Eil at lunchtime. The students had already been given an introduction talk and were being shown around by their clan leader and moving into their dormitories.

I joined the teachers and went along for the introduction talk from the Course Director. We went through each clan pointing out individual students who may pose a problem or had an issue that all of the teachers should be made aware of such as medical issues and behavioural issues.

I observed the evening activities. I didn't watch any particular student today. Instead I tried to observe all of the clans and view them from the teacher's perspective. I haven't followed the teacher's role that closely before, so it was very interesting to see their role in the week and to hear their views on the programme and the students.

Day Two - Tuesday - 23/01/00

Day Plan

- Dynamics, Parachute Jump, Beam

Lunch

- Wall, Climbing/ Abseil

Tea

- Orienteering, Diaries, Clan Gathering

Weather: clear, very cold, low-level cloud with breaks of blue sky.

Observations - Tuesday - Male A- 23/01/00

Very Good day today, the tutor explained the history of the clan and informed me about their effort or lack of effort the day before.

Bearing this in mind their first activity, the Parachute Jump, brought the group together. The clan bonded after this activity and really began to open up and trust each other more. Their performance for the rest of the day improved as a result of the skills of the tutor and her ability to match the activities to the needs of the group.

The tasks got progressively harder and complicated as the morning progressed. The clan realised the need to plan, co-operate and work team build as a result of this. This progressed into the PM activities the rock climbing and abseiling session where they worked together, encouraged and supported each other.

The night activity saw them win the orienteering competition and which really boosted their confidence a lot.

The 2 students that I spoke to were genuinely nice boys. I watched one during the course of the day; he was a joker at points. However when it was necessary, he was helpful and considerate, and aware of others. He was apprehensive when it came to the abseil however he managed it fine. This saw him very happy.

Interview - 2 Males - Tuesday - 25/01/00

Male A appears to be enjoying the course and he does not seem anxious about any aspect of it. He is not looking forward to the hill-walk as he believes that it will be boring.

The other boy was amazingly honest and open with me. He told me how he had been selected because he didn't do well in the 1st and 2nd year but now he is really trying to improve himself. He believes that this Outward Bound course will help him to achieve this. He shared the feelings of apprehension that he had experienced whilst on the bus journey to the centre however he thinks that the journey was made easier by the amazing scenery. He talked openly about his worries concerning sharing dormitories, he was anxious as he had never shared a room before. However he was able to say that he thinks it is fine and he likes it apart from the guy that snores!

So far they have both really enjoyed the course and they both get on well with everyone in their group.

Issues for Friday:

- See how the rest of the week went... activities
- Hill-walking.

Day Three - Wednesday - 26/01/00

Day Plan

- Major dynamics, Jacob's ladder, Raft

Lunch

- Hill Pack / prep

Tea

Weather: cloudy miserable, cold, rainy

Observations - Wednesday - Female A- 26/01/00

The group has a major split between the males and the females. The males tend to dominate and to be very loud and dictatorial whilst the females tend to sit back and make up their own minds.

This was seen in the raft building session where the students were given a model to design their raft and they choose to make two versions male v female. The males believed their version of the raft was better and vice versa for the females. It was decided that the male version of the raft was to be built. However, once they got to the water edge they decided to abandon the original design and go with the female version.

Thankfully the raft floated and performed well enough to beat the opposing. This amused the clan and the males happily admitted that the female's design was better.

In the evening the activities were pack and prep for the hill day and a quiz. The team worked well overall throughout the evening.

The attention span of the group is very short and not held long enough to see any results. The problem lies in the fact that the clan is quite happy to be doing nothing. They have no motivation to be busy so they don't see the need to be. They are good and quick once they have put their minds to something but the problem lies in getting them motivated to do this.

Interview - 2 Females - Wednesday - 26 / 01/00

The two girls talked very openly about their situation. They were from different schools and have very different opinions about the week.

Female A

Female A was very keen to come up to Outward Bound and to be on the course. Her school had selected her to go however she did not know anyone else that had been on the course before. As a result she was unsure of what to expect but looking forward to it nonetheless.

She was most looking forward to mixing with other people and making new friends however it has transpired that within her clan 4 of the 6 females are very close and she had been put with female B.

Female A is finding it difficult to speak to the other girls but easy to chat to the boys. Her dormitory situation is similar as none of the females chat to her or each other and subsequently she is not very happy. She had been quite relaxed and looking forward to mixing with others however she has since changed her mind and is not keen to mix with others. She is enjoying the activities and feels that she has challenged herself and done a lot more than she expected. She is neither homesick nor anxious about anything else in the course.

Female B

Female B appears to be fairly happy with everything. She appears to be happier than the other girl and is making the effort to chat to people from other clans. She had heard about Outward Bound from the other students at the school and had asked to come up to Loch Eil. All of the students had put their name into a hat and chosen at random.

She was looking forward to meeting others however she seems to have experienced the same difficulties as Female A in the dorm and clan situation.

I think female B is handling the situation better as she appears to be getting a lot more male attention to compensate and boost her confidence and self esteem.

The two girls have befriended each other so they are able to go around with each other and not feel left out and they can support each other throughout the week. Both of the females are enjoying the week and having a good time. They think that their instructor has so much patience and that she is an action woman. They really like her. Which is different from the attitude of other groups who had the same instructor in November and thought that she was too quiet and not strict enough.

Day Four - Thursday - 24/01/00

- Hill Walking (including Lunch)

Tea

- Kit In, Review, Presentation

Weather: Cold Rainy Dull Overcast

Note:

No interview on Thursday night as a inter-clan quiz was held to celebrate the last night and the students were hyperactive. It was felt that the students in question was too boisterous to consider holding a civilised conversation with and that conducting an interview at this stage would prove to be pointless.

The Group interview to be held on Friday was cancelled. I had to step in and assume the role of a teacher for the morning as one of the teachers was unwell. Therefore the opportunity did not arise to organise and hold a group interview.

APPENDIX C

L.E.Q. - H[®]

PLEASE DO NOT TURN OVER YET - READ THESE
INSTRUCTIONS

This is a chance for you to consider how you think and feel about yourself in some ways. This is not a test - there are no right or wrong answers, and everyone will have different responses. It is important that you give your own views and that you be honest in your answers and do not talk to others while you think about your answers. They will be used only for research purposes and will in no way be used to refer to you as an individual at any time.

Over the page are a number of statements that are more or less true (that is like you) or more or less false (that is unlike you). Please use the eight point scale to indicate how true (like you) or how false (unlike you), each statement is as a description of you. Answer the statements as you feel now, even if you have felt differently at some other time in your life. Please do not leave any statements blank.

FALSE **TRUE**
NOT LIKE ME **LIKE ME**

1	2	3	4	5	6	7	8
This doesn't describe me at all; it isn't like me at all		More false than true		More true than false		This describes me very well; it is like me very much	

SOME EXAMPLES

A. I am a fast thinker.

1 2 3 4 5 6 7 8

(The 6 has been circled because the person answering believes the statement "I am a fast thinker" is sometimes true. That is, the statement is sometimes like him/her.)

B. I am a good storyteller.

1 2 3 4 5 6 7 8

(The 2 has been circled because the person answering believes that the statement is mostly false as far as he/she is concerned. That is, he/she feels he/she does not tell good stories.)

C I enjoy working on puzzles.

1 2 3 4 5 6 7 8

(The 8 has been circled because the person really enjoys working on puzzles a great deal, therefore the statement is definitely true about him/her.)

**** ARE YOU SURE WHAT TO DO? ****

If yes, then please turn the page over, write your name, today's date, and circle your answers for all the statements.

If still unsure about what to do, ASK FOR HELP.

PLEASE GIVE HONEST, PRIVATE ANSWERS

Rotated component matrix – Follow Up

Factor Loadings (Varimax normalized) Extraction: Principal components

Item	Achievement motivation	Emotional control	Active initiative	Social competence	Self confidence	Task leadership	Time management	Intellectual flexibility
06	0.846							
22	0.842							
14	0.738							
11		0.721						
19		0.712			0.309			
03		0.665			0.336			
12		0.555						0.504
15			0.845					
23			0.783					
07			0.706					
13				0.761				
05				0.718				
21				0.715				
01					0.748			
09					0.735			
17					0.729			
08						0.786		
24						0.744		
16						0.681		
02							0.809	
10							0.692	
18		0.311		0.319			0.617	
04								0.877
20	0.308	0.430						0.570

Rotated component matrix – Follow Up

	Factor Loadings (Varimax normalized) Extraction: Principal components								
Item	Achievement motivation	Emotional control	Active initiative	Social competence	Self confidence	Task leadership	Time management	Intellectual flexibility	
06	0.846								
22	0.842								
14	0.738								
11		0.721							
19		0.712			0.309				
03		0.665			0.336				
12		0.555						0.504	
15			0.845						
23			0.783						
07			0.706						
13				0.761					
05				0.718					
21				0.715					
01					0.748				
09					0.735				
17					0.729				
08						0.786			
24						0.744			
16						0.681			
02							0.809		
10							0.692		
18		0.311			0.319		0.617		
04								0.877	
20	0.308	0.430							0.570