DO OVERNIGHT FIELD TRIPS MAKE A DIFFERENCE?
PERSPECTIVES FROM WOMEN WHO KNOW

By

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Abstract

This research project illuminates the ideas and personal experiences of seven female, secondary school graduates who participated in experiential learning field trips while attending high school. Its purpose is to attempt to understand how overnight field trips of different durations have impacted former students and determine the meaning of their experience. This report identifies five significant categories arising from a modified grounded theory analysis of the students’ perspectives on their field trip experience: Organization, Educational Opportunities, Relationships, Environment and Experiences which lead to one significant conclusion: field trips are transformational to female high school students. The data also reflects the impact field trip participation has had on the environmental awareness, values and attitudes of participants. I conclude with recommendations that may prove useful for teachers planning overnight field trips, TCDSB staff responsible for field trip approval and for Royal Roads MEEC staff responsible for organizing similar experiences for their students.
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CHAPTER ONE: INTRODUCTION

Background

Environmental education encompasses activities designed to instill knowledge and values, for and about the natural and human world (Raffan, 1990) and was once the domain of schools and families (Raffan, 1990). However, the importance of environmental curriculum declined during the late 1980s and 1990s in Ontario schools (Raffan, 1990). Many educators saw environmental education as a secondary science that held little potential to save the world (Raffan, 1990) and consisted of filling out worksheets while walking around (Raffan, 1990). However, the media has turned its attention to endangered species, disappearing glaciers, increased frequency and severity of hurricanes and extreme weather, and with the help of scientists, have linked these problems to anthropogenic induced climate changed (Intergovernmental Panel On Climate Change, 2007). In addition, the media has also spent an inordinate amount of time reporting on human over-population, pollution, declining fish stocks, oil depletion, water shortages and ecosystem disruptions (Stern, 2006). While many feel that the state of the world has never appeared worse (Lovelock, 2006), increased awareness of environmental issues driven by industry, television and other forms of mass media instead of schools has resulted.

However, as a result of increased media attention and population awareness, environmental education has returned to Ontario schools, albeit not necessarily inside the four walls of classrooms. For example, environmental clubs based in school are leading whole communities into more responsible behaviour. I currently work at Loretto Abbey Catholic Secondary School for girls in Toronto and the number of students in its
environmental club has risen from about ten students in 2002-2003 to over one hundred in 2008-2009. Furthermore, teacher moderators for this club have also risen from one in 2002 to five in 2009. This new number amounts to over ten percent of school students and ten percent of staff actively engaging in environmental issues. Increased environmental awareness has also led to increased geography course selections for students despite significant staff turnover rates over the last five years. This has occurred at the same time that the Ontario Ministry of Education has increased its attention to environmental education. To assist classroom teachers in delivering environmental curriculum in a meaningful way, the Ministry of Education in Ontario has recently published a document entitled: Shaping Our Schools, Shaping Our Future: Environmental Education In Ontario Schools (2007) designed to help teachers in all curricula infuse environmental sustainability into daily teaching practice.

My social science department currently includes lessons about the environment in each of our geography classes and focuses on themes of sustainability. However, increasing environmental awareness and promotion of significant life experiences in female secondary school students requires more than a classroom and club based approach. Scholars suggest using experiential learning methodologies such as field trips and travel excursions within the confines of classroom courses to promote environmental awareness (Palmer, Suggate, Bajd et al., 1998). These field trips can be local or international, day or overnight and can be included in geographical, scientific, or environmentally based curriculums.

However, field trips require significant planning time and financial resources, and often expose participating teachers to increased legal liability (Flannery, 2007).
Additionally, while there is no directive from the Ontario Ministry of Education for the elimination of field trips taken abroad, there is little direct mention of field trip participation in course expectations from the Canadian and World Studies secondary school curriculum documents, or where or when such a field trip would be valuable (Ministry of Education, 2005). Furthermore, my employer, the Toronto Catholic District School Board, places restrictions on where a teacher-led class or group can travel to, as well as identifies non-permitted activities for participants. Despite these barriers, I have engaged in experiential learning through field trips for over a decade.

The Research Problem and Subsequent Opportunity

My direct experience and observation as a secondary school teacher of geography and environmental studies has informed my teaching practice and I have come to the belief that field trips with an environmental focus are worth the extra effort because they result in positive long-term consequences for participating students.

The purpose of this thesis is to provide empirical evidence for outcomes of experiential learning through the environmental field trips I have conducted. In this study, I investigate the impact of overnight field trips on recently graduated, female, secondary school students and determine outcomes of their experiences. For example, students who had previously participated in overnight field trips in my school have often stated that it changed their life and veered them towards pursuing environmental studies in their post secondary education. Staff and students have also noted that day trips taken to Niagara Falls and the Niagara Gorge have represented many memorable and exciting learning opportunities for students.
Research Question and Objectives

Through the examination of scholarly research focusing on field trips, significant life experiences (SLE) and environmental awareness in adolescents, I will design a study to determine the long-term impact of overnight trips on secondary school students. I will explore the following research question:

What do high school graduates remember and value about the field trips they participated in during their time at school?

To tackle the complexities of the responses to this question, I will employ a qualitative research methodology that combines grounded theory and phenomenology. These methods are chosen in consultation with the former Royal Roads Program Head of the MEEC program, Dr. Rick Kool. I feel they will give the best answers to my research questions as well as construct an argument to show if and how the experience of participating in field trips contributes to the environmental awareness in the lives of students who have participated in them.

The students participating in the research will be asked to design field trips to promote experiential learning. Their responses will be analyzed to elicit which features of field trips were important to them. In addition, by analyzing data collected through interviews, I will highlight the various impacts that resulted from their past overnight field trip experiences.

My related secondary research questions are practical in nature. The answers to these questions will aid teachers and boards of education to construct meaningful experiential learning opportunities for high school students.
1. What aspect of field trips produced significant positive and negative outcomes?

2. If and how field trip participation influenced environmental awareness and values in adolescent females.

I expect that the data gathered from their trip designs, as well as interviews, will also help me answer these questions.

Study Setting and Limitations

It is important to understand if there is any lasting impact on students as a result of field trips they attended during high school. To elicit this information, without directly posing the question as this may lead to biased answers of students looking to give socially pleasing answers to their ex-teacher, I will invite students to design a model field trip for future students at Loretto Abbey. I will incorporate their suggestions into follow up interviews where I will probe what students positively or negatively recall from their previous trips.

The field trips that case studies participants will be reporting on include:

1. Lake St. George – 2002
2. Scotland – 2004
3. Sicily – 2005
4. Iceland & Scotland – 2006
The first six trips were based on expectations from Canadian & World Studies curriculum documents and were made up of students consisting of all secondary school grades.

This study, like many qualitative studies is limited by its sample size and composition. The sample size, albeit small, is seven, but interviews and data requirements were extensive and hence were a barrier in obtaining more participants. Furthermore, scholarly guidelines for determining purposive samples rely on the concept of "saturation," or the point at which the data gathered shows no new information or themes (Guest, Bunce, & Johnson, 2006). Based on the data gathered, I found that saturation occurred within the first five interviews.

Since the trips were limited to former secondary school students who attended the same school and are also all female, it is difficult to conclude that it is applicable to all jurisdictions uniformly or to males as well. Finally, all of the above trips were led by one person, namely the author, and this could also bias the nature of the experience and hence limit the range of responses.

Need & Significance

When Herbert Simon stated (as cited in Bransford, Brown, & Cocking, 1999) that the meaning of “knowing” has shifted from being able to remember and repeat information to being able to find and use it, I quickly identified with this simple, yet effective, sentence that currently defines the changing nature of education (Orr, 1993). As a professional teacher who takes pride in designing curriculum that helps students, I found it refreshing that there are others who share my sentiments.
Students often complain that they need to “memorize” information for a test they must write. Alternatively, experiential learning that occurs in outside environments as a result of travel, provide students with realistic and memorable learning experiences (Kola-Olusanya, 2005). Travel teaches lessons that will pay off in the future for young people and it also has an immediate impact on student achievement. Travel can put lesson plans into context, spark students’ interest, and motivate them to want to learn more (Patterson, 2005). These powerful learning experiences originate within the planned activities of short or long-term field trips and travel excursions.

There is presently a significant amount of research that has been done on the usefulness of field trips. However, Farmer, Knapp and Benton (2007) suggest that many researchers have investigated the immediate effect of short-duration field experiences, but few have studied the long-term effect of such programs and even less research has been carried out on the significance of long-duration field trips. This is reason alone to undertake such a study. I would hope that educators who read this thesis will be able to use its findings as justification for incorporating experiential field trips into the curriculum that they teach. By doing this, they will help make the world a better place by creating lasting and powerful memories for students that will be remembered and valued long after the experience. In doing so, my hope is that each field trip will help improve environmental awareness in these same young people.

Researcher’s Perspective

Before undertaking this endeavour, I believe it is necessary to declare my bias to those reading this body of work. I have long believed that field trips are a requirement in
environmental and geographic education. I enrolled in a class called GGR219H in my second year of undergraduate university. It was a week long field camp to Hart House Farms; a parcel of land that the university owned located north of Toronto, where undergraduate geographers spent the week working together, including our professors, to gather data about the environment we were in. To this point, I was undecided if my major would be history or geography but after spending this week in a remote part of Ontario I decided that geography must be my major. This trip was my first overnight field trip and it transformed my life. I was experiencing difficulty finding my niche as an undergraduate, but the skills and knowledge that I gained during this week ignited a passion for geography that remains to this day. In fact, plane-table mapping, Brunson compass activities, the use of Mylar paper for mapping exercises and walks in the forest remain the most memorable experiences of my undergraduate degree. I also met a great group of people who remain my friends to this day.

The trip to Hart House Farms inspired my next “field trip”. This time I enrolled in an Italian history and geography summer course situated in Siena, Italy. We examined both the culture of Italy and its beautiful geography within a one hour radius of the city of Siena. This part of Italy is especially beautiful, a gently rolling landscape with close access to the Mediterranean Sea. It was on this field trip that I met the woman who is now my wife.

While not a field trip, I did leave Canada to study in another country. It was a one year program in Scotland to obtain my teaching certificate. I was situated in Edinburgh, Scotland and my flat backed onto Arthur’s Seat, an extinct volcano. I often climbed this extinct volcano, took walks into its covered caldera and visited Hutton’s Rock, a
significant geological site that commemorates Hutton’s discovery of the Law of Uniformitarianism.

I realized once I arrived in Scotland that I had much to learn in terms of my geographic background. I was mentored by Tony Shallcross, my geography teaching instructor who believed geography comes alive for students when they are taken into the outdoors. He believed that, if it was possible, a teacher should take students hiking in the Pentland Hills or a walk through Holyrood Park to study geography. If you were not able to take your class away from school, an alternative would be to spend a period or two on the school grounds taking measurements that could be used inside the classroom at a later date. This teaching style proved inspirational and I decided that I too would employ field trips in my teaching practice.

The last transformative experience related to travel or field work resulted from a wilderness experience I had while studying at Royal Roads in 2007. We traveled to Cougar Annie’s Garden on Vancouver Island. There was no road to the location and we had to take a jet boat. For seven days I used an outhouse for the first time and lived without lights, a shower or electronic technology. It was both humbling and exhilarating and it changed the way I view the world. I used this experience as a model for the Ecuador field trip I designed for students in 2009.

I have been teaching for eleven years and I have taken many local and international field trips with students. Over the years, I have noticed that students paid much more attention when outdoors than they ever did inside a classroom. This is what has inspired this thesis. I wanted to formally validate my initial hunches and provide students with the same opportunities that I had; ones that eventually transformed my life.
I believe overnight, international field trips represent significant life experiences and this may bias this thesis because I strongly believe what I plan to study. As a result, I will employ grounded theory to help minimize issues surrounding bias, reliability and validity. I will go into these issues in greater depth in Chapter Three: Research Methodology.
CHAPTER 2: LITERATURE REVIEW

This literature review will examine sequentially the existing research relating to environmental education, the significance of field trips, free-choice learning, place-based and experiential learning, the role field trips play at improving environmental awareness and attitudes, what children and adults recall from their past and significant life experience research (SLE). This literature review, which relies on the work of Cappadocia, World, Young, Matthias, & Stevenson (2008), suggests an overall paradigm of qualitative research methods that are appropriate for my research questions. Hence, the literature review is followed by a methods section in which I begin by briefly reviewing the qualitative research traditions I use; phenomenology and grounded theory.

Environmental Education

Environmental education is not a new educational concept. Nature lessons have been taught for as long as schooling has been provided for the masses. This began in Scotland in the 1600s when young children were sent to government paid schools. Schooling had previously only been enjoyed by the wealthy. However, students in Scotland were taught how to keep records to help them become effective farmers. They were also taught how to farm in a sustainable and environmentally conscious manner (Herman, 2001). However, the term environmental education was not used frequently until 1972 when it was used at the 1972 United Nations Conference on the Human Environment (Raffan, 1990).

Since then, the aim of environmental education is to change the behaviour of individual citizens toward the environment by constructing literate and responsible
people (D. Knapp, 2000). Furthermore, environmental education is a sequential process that aims to increase environmental understanding and promote positive environmental values. The ultimate goal of environmental education is to motivate citizens to act individually and collectively in an environmentally conscious manner (Farmer et al., 2007). In other words, environmental education promotes the theme of sustainability. Here, individuals and groups balance the social, economic, and ecological needs of today in a manner that that does not compromise the same aspects in the future (United States Environmental Protection Agency, 2006).

In recent years, citizens have purchased hybrid vehicles, moved towards the use of reusable bags, purchased locally grown and organic foods, etc. But what role has school played in the environmental education of these citizens? Evidence reveals that environmental education in school is not a predictor of such behaviour; only one in a hundred people have said that school is the most important source of information on environmental issues (Raffan, 1990). By this definition, school based environmental education is a grand failure and it has required the media to fill in the gaps for people (Raffan, 1990). The real question to ask is why has school based environmental education failed? Raffan (1990) suggests that environmental education has failed because what occurs outdoors is often throw away schooling – it may have an impact on students who visit, but it is never catalogued, evaluated or even valued by curriculum planners. While scientifically derived knowledge is important, it is not the only way of knowing. Educational researchers such as Bloom (1956) and Gardner (Gardner, 2006) define knowledge and learning as more sophisticated than merely cognitive knowledge.
The problem here lies in how environmental education is evaluated. Traditionally it has been evaluated using quantitative techniques (Hart, 2003). This is supported by Rickinson (2001) who suggests that the bulk of environmental education evidence is quantitative in nature and that the qualitative evidence that is available is interpretivist and constructivist. Rickinson (2001) also suggests that environmental education researchers must broaden the range of theoretical and epistemological frameworks which would enhance the extent of qualitative evaluation and inquiry, and continue the development of conceptions of learners as active agents rather than passive subjects. It is through change in evaluating environmental education that a renewal of general education will occur that supports change in critical areas of social consciousness and social responsibility (Hart, 2003).

To ensure that an environmental education program is successful, one must develop a set of criteria to measure it against. The North American Association of Environmental Educators (as cited in Thomson & Hoffman, 2003, p. 11) defines successful environmental education programs as:

1. Credible, reputable and based on solid facts, traditional knowledge or on science. Values, biases and assumptions are made explicit.
2. Involving a cycle of continual improvement that includes the process of design, delivery, evaluation and redesign.
3. Examining environmental problems and issues in an all inclusive manner that includes social, moral and ethical dimensions, promotes values clarification, and is respectful of the diversity of values that exist in our society.
In short, an environmental education program should really be doing the right activities to bring about the outcomes that are desired and not just a series of busy activities that seem reasonable at the time (Thomson & Hoffman, 2003).

The Field Trip

Field trips to zoos, aquariums, museums and science centres are part of many elementary and secondary school programs and are considered by many to be an essential part of schooling. The value of these experiences are often measured by knowledge gained, the social interactions achieved, what students say, questions asked, discussions participated in and their test scores when they return to the classroom (Carlisle, 1985). Teachers also judge the quality of the experience as it is going on. Teachers look for student involvement, excitement, curiosity and their completion of activities. These are informal observations and subjective, but since they are based on particular individuals, one may also say they are very specific (Carlisle, 1985). Other research goes further and suggests that field trips to natural settings are essential for healthy child development (Louv, 2005) and often lead to adult environmentalism (Wells & Lekies, 2006).

Productive field trips that focus on learning objectives enable students to make connections with real world science and more abstract classroom learning (Ramey-Gassert, 1997). These types of trips assist students in the comprehension of patterns that connect, which means looking beyond the boxes we call disciplines to see things in their larger context (Orr, 1993) and ultimately helps students recognize that learning and awareness are not isolated to particular subjects, teachers, or timeframes. Field trips keep students alert, and students are excited to be out of school and learning in natural
environments (Spronken-Smith, 2005). According to Spronken-Smith (2005) 76% of students enjoyed field trips as a learning opportunity compared to 21% who enjoyed lectures.

Other researchers, however, suggest that there are many limitations to field trips. One issue that limits the effectiveness of a field trip is the environmental novelty factor (J. Falk, 1983b; J. Falk, Martin, & Balling, 1978). The novelty factor is the newness of a field trip location. The more unfamiliar a setting is for a student, the more time a student will spend on the trip familiarizing themselves with their surroundings and ultimately the less they will learn (Balling & Falk, 1980).

Another issue involves the teacher set up and use of the field trip. According to a study by Jeffery Gottfried (1980), 62% of teachers whose classes participated in this study viewed a trip to the science centre as an enrichment activity. These teachers did not plan preparatory or follow-up activities for the field trip and viewed the trip as a social experience and not necessarily a science lesson. Furthermore, another 38% of teachers used the trip as an introduction to a course and did not prepare the children with introductory lessons.

Orion and Hofstein (1994) confirmed that teaching factors such as the place of the field trip in the curriculum structure, didactic methods, teaching and learning aids, and the quality of the teacher play a role in the effectiveness of the field trip. They also found that student factors such as knowledge of trip topics, previous acquaintance with the trip area, previous experience with field trips, previous attitudes to subject matter, previous attitudes to field trips and class characteristics such grade, size and subject mattered. However, Orion and Hofstein (1994) also found that field trip factors themselves
impacted student learning on field trips. These include learning conditions at each station or site, duration and attractiveness of the stop as well as the weather conditions during the field trip.

The field trip is one of the most complex and expensive activities in the educational system and it is important to achieve optimal educational results that will justify the investment. Since there are many issues surrounding the effectiveness of a field trip, it is important to minimize both the contributing student and teacher factors that act as barriers to learning on field trips. Studies do show that some cognitive learning takes place on field trips, but Falk (1983a) suggests that in order to maximize learning, one must increase the familiarity of the students with their field trip location through the use of pre and post activities and through repeated visits. Orion and Hofstein (1994) believe that this is very important to the psychological readiness of students attending the field trip. This can be accomplished by working with materials students will encounter in the field, showing slides and films, working with maps of the area, and through discussion of the location itself. This includes discussion of expected weather, purpose, learning method and the length of time with field trip students (Orion & Hofstein, 1994). The field trip should be placed early in the concrete part of the total learning activity and should be focused on the interaction between the students and the environment. The pre and post learning activities, in addition to the field trip, should serve as a bridge to more abstract learning levels. In short, a field trip should be viewed as an integral part of the curriculum and not as an isolated activity (Orion & Hofstein, 1994). Falk goes further (1983b, p. 137) suggesting “educators need to be aware of the effects of settings on
learning in planning their lessons. In this way they can capitalize on the location of learning, rather than be penalized by it”.

Free Choice Learning

Free choice learning refers to the type of learning that occurs when individuals exercise significant choice and control over their learning. It typically, but not necessarily, occurs outside of school; in particular learning facilitated by museums, science centers, community based organizations, parks, ecotourism locations, and media (J. Falk, 2001; J. Falk, 2005). This type of learning is often independent from formal schooling, but can take place on field trips and through extra-curricular activities when students participate for self-interest. Some destinations students go to when adults take them on field trips include national parks, aquariums, museums and nature centres. These settings are designed to satisfy their curiosity and fulfill their needs for relaxation, enjoyment, intellectual stimulation and even spiritual fulfillment (Brody, Tomkiewicz, & Graves, 2002; J. Falk, 2005) and because adults view them as worthwhile, educational and fun (J. Falk, 2005).

However, students do not necessarily engage in free-choice learning opportunities to become an expert, despite intentions of the trip designer. Yet, the outcome for these experiences often lead to more knowledgeable individuals possessing an incrementally enhanced motivation and capacity to learn more in future opportunities (J. Falk, 2005). Others suggest that people participate in free choice learning opportunities to satisfy a personal sense of identity and to create a sense of value within the world and fulfill intellectual and emotional needs (Dirkx, 2001; J. Falk, 2005). Additional research has
shown that the more the separate influential spheres of family, school, work and elective learning overlap in a person’s life, the more likely they are to become a lifelong learner. The more each sphere works together, the more likely that environmental learning will occur (J. Falk, 2005). Other research has shown that conceptual knowledge presented in school is built upon, reinforced, and altered by experiences occurring outside of school (Anderson, 1999). Field trips and free-choice activities are examples of such activities.

The use of free-choice learning has many benefits. Firstly, free-choice learning emerges as a way to effectively describe, and distinguish from the learners’ perspective, the nature of the learning experience that occurs in a variety of settings and contexts. Secondly, it is a positive term that can stand by itself, despite positive and negative biases that currently surround schooling. Lastly, free-choice learning represents a bottom-up, individual-driven way to think about learning compared to the traditional top-down institution driven way to learn (J. Falk, 2005). Ultimately, free-choice learning which occurs during a field trip focuses attention on an individual’s unique needs, lifelong journey and the social context of the role that each individual plays in determining the direction of that journey. This is quite different than curriculum driven educational agendas of institutions and public authorities typical of formal settings.

Criticism of the term free-choice learning also exists. Some argue complex topics such as the environment require subjects to be taught in formal and semi-formal settings. However, a well designed free-choice opportunity involves carefully crafted and designed educational goals. The teacher in this instance is not necessarily an “in front of the class” teacher, but facilitated instruction is required (J. Falk, 2005). This may come in the form of the teacher as a co-participant in activities as opposed to the authority
Another criticism involves the idea that free-choice learning is not really “free” at all. This really is a relative question. Free choice learning exists in relation to what the options are. To qualify as free-choice learning, the learner must perceive that there are reasonable and desirable learning choices available and that they possess the freedom to select or not select from amongst the choices (J. Falk, 2005). However, what one person sees as free choice, another might view as compulsory. Therefore, free-choice learning is simply a psychological construct and therefore cannot be defined unless in context (J. Falk, 2005).

Experiential Learning & Place-based Education

Place-based education is a new label applied to curricular strategies designed to help students learn about their immediate surroundings by capitalizing on their lived experience, including learning in nature (C. Knapp, 2005). Learning through direct and personal experience remains one of the best and most natural ways to learn (Zoldosova & Prokop, 2006). Current evidence suggests that human physical and mental development depend on the personal experience of the natural world (Ballantyne & Packer, 2002; Ewert, Place, & Sibthorp, 2005; Kellert, 2005; Malone & Tranter, 2003) and also found that engaging students in fieldwork in out-of-school settings is highly valuable in influencing environmental learning by those students. Ballantyne and Packer (2002) also found that learning through fieldwork assists students in assuming the role they play as key players of environmental change in their homes and communities. The greatest advantage of place-based education and experiential learning is that learners are not limited in their acceptance of information from a perceived environment, which
ultimately results in greater interest and understanding (Zoldosova & Prokop, 2006).

Ideally, students should observe their wild neighbours, such as animals and plants, in their natural habitats (Zoldosova & Prokop, 2006) and direct experience with nature may contribute significantly to healthy childhood growth and development (Kellert, 2005). Brody (2005) found that an out-of-school informal learning experience nurtures curiosity, improves motivation and attitudes, and engages audiences through participation and social interaction. Encouraging children to engage with the natural world through direct experience, preserving habitats where they can do so, and creating programs for this to occur, is critical to the future of healthy adults and a healthy planet also (Wells & Lekies, 2006).

Learning by doing in nature is a very effective way to help a student understand how life on earth works (Zoldosova & Prokop, 2006). However, many of today’s urban students have lost their connection to the natural environment and rarely have an opportunity to study natural organisms in outdoor settings or view natural landscapes free of human influences despite research demonstrating its importance (Ballantyne & Packer, 2002). Kellert (2005) attributes the decline in direct experience with nature to pollution, replacement of natural spaces with concrete and asphalt, habitat fragmentation, increased mechanized transport and declining parental involvement. The challenge now is to find a way to increase the lived experience of children with nature and provide improved access to such opportunities. This responsibility lies with educators, designers, developers, political leaders and ordinary citizens (Kellert, 2005). Ballantyne and Packer (2002) suggest that educators act upon the interest of students in environmental issues and incorporate encounters with wildlife into their curricula at school.
Environmental Knowledge, Awareness, Attitudes & Values

There are many sources for environmental knowledge. These include the media, family, school and direct observation (Walker & Loughland, 2003). According to Rickinson (2001) television is the most important source for environmental knowledge and attitudes; however, it is not necessarily the most effective. School places second as a source for environmental knowledge and attitudes (Walker & Loughland, 2003) but it is more influential and effective due to its interactive nature. School has the capacity to shape an individual’s values in a powerful way. A person’s values serve as the basis for organizing an individual’s beliefs and attitudes and guiding their behaviour (Dutcher, 2007). In this context, environmental values are those related to nature or that have been found to correlate to environmental attitudes (Dutcher, 2007). One of the goals for environmental education should be to assist students in connecting with nature. This helps young people understand that not only is the environment a part of us but that we are part of the environment (Dutcher, 2007). Since environmental education is a sequential process that attempts to increase understandings of the environment and promote pro-environmental attitudes, its ultimate aim is motivate citizens to act individually and collectively in an environmentally conscious manner that balances the social, economic and ecological needs of today without compromising those of the future (Farmer et al., 2007, p. 33). School can play an important role in achieving the aforementioned goals through traditional teaching and the use of field trips and other place-based educational activities.

Long term changes in environmental knowledge, attitudes, values and behaviours do occur as a result of field trips. Research clearly demonstrates that one of the most
effective ways of promoting school students with pro-environmental messages is to connect them to experiences “in” the environment, in particular, experiences which enable students to observe the evidence of environmental problems and the impacts on wildlife, habitats and human beings (Ballantyne, Fien, & Packer, 2001a). Nature-based learning experiences allow students to apply theoretical knowledge “in the field”, discover real life examples of principles, problems and issues, view things in new perspectives, promote problem-solving and decision making within real world settings, and engage emotionally with environmental issues (Ballantyne, Fien, & Packer, 2001b). Field trips also lead to first hand experiences in various ecosystems and have the capacity to contribute to a deeper understanding of the relationships between animals, plants and human beings. These experiences and knowledge affect attitudes and influence behaviour. Field trips are an effective way to increase students’ awareness towards nature protection (Prokop, Tuncer, & Kvasnicak, 2007) and often result in increased motivation for learning (Lai, 1999). Furthermore, positive attitudes towards the environment will continue if activities introduced during the field trip experience are also continued (Linowska & Disinger, 1991).

What Do Children Remember?

Much of what is known about global features of society, such as environmental values, attitudes and awareness depend on large-scale quantitative surveys. However, this method for collecting information is limited by the way the human brain works (Bradburn, Rips, & Shevell, 1987). Research has demonstrated that memory recall is not dependable. The ability to inference is important because it helps respondents fill in the
details that they cannot recall (Bradburn et al., 1987). Understanding this occurs can help a researcher improve the accuracy of an interview through the careful design of questions. Research on autobiographical memory suggests that people often recall incidents as parts of autobiographical sequences that have taken place (Bradburn et al., 1987). Since this type of memory organization is central to how the human brain recalls information, it may be better to design autobiographical questions that focus less on time occurrences and abstract descriptions of events. Rather, the researcher should focus on particular sequences or use sequences as references points for locating other facts of interest (Bradburn et al., 1987).

When adults reflect back on childhood experiences, almost all adults identify the outdoors as the most significant place. Children experience the natural environment in a deep and direct manner, not as a background for events, but rather as a stimulator (Sebba, 1991). There is also a connection between the quality of a child’s experience and the way it is fixed into memory as he or she matures. This is usually dependant on the level of activity the child is engaged in. In this case, how involved with their body, senses and awareness (Sebba, 1991) are they on field trip activities? If this is the case, the memory should last for a long time and easily recalled (Sebba, 1991). Furthermore, the sympathetic attitude a child displays toward nature is likely to accompany the experience even when recalled in memory (Sebba, 1991). This suggests that the environment an adult remembers as important was more than likely personally experienced without mediation from adults and that the experience first took place in childhood. This often occurs because memories first experienced as children are at their peak during developmental stages of life (Sebba, 1991). Data suggest that activities, feelings and
perception factors are important to the memory of children (Sebba, 1991). As an adult, research shows that a particular memory is not identical to the actual experience of the child. Rather it is condensed and selective, but important nonetheless (Sebba, 1991). Research also shows that the part of the world that awakens the original memories of children and adults are those taken from the natural world and natural environment, not those that are built by humans (Sebba, 1991).

**Significant Life Experience**

There are many perspectives on what SLE research is. According to Tanner (1998), SLE research contributes to saving the world, whereas Palmer, Suggate and Bajd (1998) see SLE research as trying to discover learning experiences and influences that lead to the development of environmental awareness and adoption of pro-environmental behaviors. Payne (1999) contends that the most important part of SLE research is its emphasis on experience since it is at the root of individual, socio-environmental existence. Furthermore, SLE research is significant for environmental education in two fundamental ways. Its findings provide solid ground for operating at the “grassroots” of curriculum and pedagogical development. Secondly, its emphasis on the starting point of experience is significant because it paves the way for exploring human experience which is lacking in much of the current environmental research (Payne, 1999). In short, SLE research has many different directions and its many experts do not agree universally on its purpose or role in environmental education research (Gough, 1999). This is evident by examining Figure 1: What Is Actually Being Studied In SLE Research where many different perspectives are shown.
FIGURE 1 – What Is Actually Being Studied In SLE Research?


SLE research is also a form of applied teacher education. For example, SLE researchers have noted that teachers are important contributors to significant experiences of learners (Chalwa, 1998a; Palmer, Suggate, Bajd et al., 1998). When things work the way that they are designed, it is useful at generating enthusiasm and motivation among teachers and can be subsequently transferred to learners by helping them find their own significant life experiences within the context of the significant life experiences of their
peers (Gough, 1999). This suggests that environmental education can produce significance and experience for learners (Gough, 1999).

One criticism of SLE research is that its findings run the risk of being too generalized to be of significant value for future curriculum and pedagogical development (Payne, 1999). Further research needs to address the how and why participants attach certain experiential values to outdoor experiences and how these personal values can or should have educational legitimacy attached to them as a recipe for other and all learners (Payne, 1999). Unfortunately, despite some useful gains furnished by richer, qualitative research methods, there are few, if any, detailed accounts in SLE research that record the characteristics, qualities and influential offerings of categories such as teacher, book, friend, family, etc. (Payne, 1999). Furthermore, Chawla (1998b) suggests that autobiographical memory studies used in life span studies can enhance research methods in SLE research but are often fallible. Past realities often become distorted; therefore, Chawla (1998b) suggests that longitudinal studies use forms of inquiry that are “grounded” and narrative (Payne, 1999). In short, as environmental educators and SLE researchers draw more selectively from related fields of study to supplement their inquiries, they become more effective. If SLE researchers remain close to this option, they run the risk of being accused of self referential and partial (Payne, 1999).

Qualitative Approach

When one examines the contents of this literature review, it becomes clear that questions related to field trips, environmental attitudes, experiential and free choice learning point to a methodology that is qualitative and requires a grounded theory and
phenomenological analysis to come up with answers for the research questions posed. Understanding the impact that environmental education programs [with overnight trips] have on students is complex and nuanced and requires open-ended questions that probe the respondent’s memory and recall of field trips undertaken. This is best addressed through in-depth interviews and ensures the quality of the qualitative data necessary for my analysis.
CHAPTER 3: RESEARCH METHODOLOGY

Review of Research Methods

This section introduces the research methods used in this study, and I begin with a review of qualitative research methods which focus on grounded theory and phenomenology.

Qualitative research is a broad research tradition. Within this tradition there are many different qualitative approaches for data collection and analysis including ethnography, phenomenology, and field research, among others. The aforementioned approaches can be defined in the following manner:

1. Ethnography emphasizes studying entire cultures and includes examining in detail any group or individual (Trochim, 2006).

2. Phenomenology emphasizes a focus on people’s subjective experiences and interpretations of the world (Trochim, 2006).

3. Field research instructs researchers to go “into the field” to observe phenomena in their natural state.

However, as the positivist tradition of quantitative research grew in popularity, qualitative research was critiqued sharply, and its use fell out of favour (Charmaz, 2006). Quantitative research was preferred because its findings are verifiable, measurable and produce laws or law-like generalizations (Cohen, Manion, & Morrison, 2005). Essentially, quantitative theorists stressed that the “scientific method and knowledge stressed objectivity, generality, replication of research, and falsification of competing hypotheses and theories” (Charmaz, 2006, p. 33). Nevertheless, in the search for universal laws of human behaviour, quantitative methods failed to answer the how and
why of decision making of people relating to certain phenomena. To gain a deeper and richer understanding of human behaviour, social science research examines the subjective as a means of dealing directly with the immediate experience of people in specific environments, backgrounds and situations (Cohen et al., 2005).

Qualitative research is effective at helping a researcher become more experienced with phenomena by examining direct experiences. It helps achieve a deep understanding of the variety of issues that surround various subjects and is especially effective at investigating complex and sensitive issues. Furthermore, it excels at developing ideas and generating information that is extremely detailed (Trochim, 2006). In addition, qualitative research often includes four different types of data collection. They include participation in the experience, observation, interviews and analysis (Marshall & Rossman, 1998).

**Phenomenology**

Phenomenology can be described as a qualitative research technique that attempts to make explicit the implicit structure and meaning of human experience (Sanders, 1982). In other words, phenomenology is one of many types of qualitative research that attempts to examine the lived experiences of human beings and gain understanding of the essential truths of their lived experience (Byrne, 2001b). However, it is distinguishable from other qualitative traditions because it suggests:

1. A belief in the importance, and in a sense the primacy, of subjective consciousness.
2. An understanding of consciousness as active and bestowing meaning.
3. A claim that there are certain essential structures to consciousness of which we gain direct knowledge by a certain kind of reflection (Cohen et al., 2005, p. 23).

The use of phenomenology is often confusing since it has been used to describe a philosophy, methodology and method. When phenomenology is referred to as a philosophy, it is believed that knowledge and understanding is embedded in our everyday world. Those who espouse phenomenological philosophy do not believe that knowledge can be quantified and reduced solely to numbers or statistics, but believe rather, that the truth and understanding of life can emerge from a person’s life experience (Byrne, 2001b). When phenomenology is employed as a methodology it suggests that its employer should participate in bracketing (Osborne, 1994). In bracketing, the researcher is called to set aside or “suspend” their beliefs in order to discover the “truth”. It does this by allowing the researcher to identify information free of his/her own prior experiences. Bracketing assumes that a researcher can separate their personal knowledge from their own life experience (Byrne, 2001b).

When Phenomenology is employed as a qualitative research method it must follow an organized approach to answering a research question. First, a question must be devised and developed. Secondly, a sampling plan must follow ensuring that appropriate subjects are available and willing to participate in interviews. Thirdly, information or data should be obtained by interviews, observation and/or written descriptions. Fourthly, data is analyzed using a process of coding and categorizing the information. Lastly, the findings are confirmed by others to ensure credibility of the researcher’s conclusions (Byrne, 2001b).
A way of simplifying the above research method description would be to combine its aspects into three fundamental components. These include:

- Determining the limits of what and who is to be investigated.
- Data collection.
- Phenomenological analysis of data (Sanders, 1982).

**Grounded Theory**

Grounded theory is a systematic, yet flexible approach to collecting and analyzing qualitative data to construct theories that are “grounded” in the data themselves (Charmaz, 2006). The suggestions offered by grounded theory act as a set of general principles and tools rather than rigid rules. Consequently, data forms the foundation of a theory and the analysis of this data generates concepts that the researcher constructs (Charmaz, 2006). A researcher employing grounded theory collects data from the beginning of a project to develop an analysis. It also attempts to learn what occurs in the various research settings and what the life of a participant is like (Charmaz, 2006).

Grounded theory research studies how participants explain their statements and actions and also asks what analytic sense can be made of these statements.

A grounded theory researcher must be open to what is happening in their studied scenes and interviews so that they can learn about a participants’ life, the lenses through which participants view events and objects, and the meaning participants construct based on these experiences. It is important for this type of researcher to attend to what is heard, seen and sensed during an interview. Grounded theorists construct data through
observations, interactions and materials gathered during a study and often pursue hunches and ideas by following them up with further data collection (Charmaz, 2006).

Furthermore, grounded theory is separated from other qualitative traditions because it not only shows you how to code data but includes explicit guidelines that show researchers how to follow up on interesting data (Charmaz, 2006).

The method used to reach a grounded theory is termed the constant comparative method (Byrne, 2001a). This means that during data collection, data is analyzed concurrently and the researcher searches for a core variable that will eventually serve as the foundation of theory generation (Byrne, 2001a). Byrne (2001a) suggests the core variable often has the following characteristics:

1. Recurs frequently
2. Links various data
3. Has an explanatory function
4. Has implications for formal theory
5. Becomes more detailed
6. Permits maximum variation

In grounded theory, data is usually coded at three levels. The first level has the researcher code data line by line and is known as initial and open coding. However, initial and open coding can also be accomplished by dividing the data question by question into key words that emerged during each question asked. Key point identification helps concepts and themes emerge, as opposed to line-by-line coding, which often hinders analysis and can cause theory to disappear within the details of the data (Moghaddam, 2006). The next step is to compare and contrast data to create
categories or clusters and is known as focused coding. In focused coding, a researcher uses the most significant and/or frequent earlier codes to sift through large amounts of data. By moving to focused coding, some respondents or events will trigger an “Aha” moment that will cause the researcher to review earlier data once more. The researcher may return to earlier respondents to go over information that had been glossed over or require new attention and ask follow up questions. This is the strength of grounded theory coding. The researcher is asked to act upon the data rather than passively read it. Furthermore, focused coding helps you check your preconceived notions at the door (Charmaz, 2006). The last step in coding is known as axial and selective coding where the researcher moves from data analysis to concept and theory development (Byrne, 2001a). In this stage, the researcher creates one central category that unites all other categories (Moghaddam, 2006) and will reduce much of the open code into fewer phrases and/or themes relating each one to the categories created and finally to a central theme emergent from the data. Data is collected until no new information is found. This occurs when saturation takes place (Byrne, 2001a).

Research design

A modified phenomenological and grounded theory approach was taken for this qualitative thesis project because I have an interest in discovering the lived experiences of my research participants. In this case, the lived experience they had with overnight, environmentally focused field trips while enrolled as a student at Loretto Abbey Catholic Secondary School. To the best of my ability, I suspended my own ideas about the importance of field trips and as well as my own field trip experience I had with these
participants. This was done so that I could better understand the importance of field trips for these informants. This phenomenological data collection included analyzing a pre-interview written response and in-depth, semi-structured oral history interview. According to McClaren and Morton (2003), semi-structured interviews are best when collecting attitudeal data, as is the case in this thesis.

I initially asked a series of opening questions designed to inform us about our research participants. Understanding the parameters that influence an informant’s opinion is important for accurate analysis (Charmaz, 2006). For this project, I developed three main topics: informant information, field trip experience, and concluding thoughts that were designed to reveal the lived experience of informants with respect to their field trip experience as well as their own designed field trip experience for future Loretto Abbey students. Each of these topics was supported by a series of questions during their interviews.

However, these interviews focused on fewer questions and emphasized quality rather than quantity. It is better to ask fewer questions and to probe them in-depth than to ask too many questions assuming more questions will yield more data, which is not the case (Sanders, 1982). These interviews were also tape recorded and transcribed because this is essential for phenomenological interviews and provides the narratives that provide the data to be analyzed (Sanders, 1982). Furthermore, tape recording of an interview permits the interviewer to probe systematically and in depth without losing focus while taking notes (Sanders, 1982).

For this thesis project, I proceeded as follows:
1. Using aspects of phenomenological and grounded theory methodologies, I employed observation and interviewing techniques in order to probe deeply and intensively as well as analyze the phenomena that constitutes the impact of field trips with a view to establishing generalizations about the wider population, such as the educational community to which field trips belong (Cohen et al., 2005).

2. Conducted qualitative, semi-structured but open-ended interviews with informants to get information regarding their field trip experiences to help reshape the conventional thinking about such field trips.

3. Asked participants to individually design a model field trip, through the completion of a pre-interview activity that would benefit and impact future students. Participants designed this trip based on their own previous field trip experiences and was reviewed by myself prior to their interview to help generate discussion questions for the interview as well as to see if it conformed to expectations within the Canadian and World Studies Ontario Curriculum document and the Toronto Catholic Secondary School Excursions Policy document.

4. By employing a qualitative methodology and drawing from appropriate literature, I analyzed the data to answer the research questions posed in the Research Question and Objectives section of this thesis.
Research Site

In-depth interviews were conducted with female secondary school graduates of Loretto Abbey who have participated in an environmentally focused trip with free choice learning as embedded curriculum.

Loretto Abbey is a Catholic Secondary school for girls located in Toronto. It was founded by the Loretto Sisters who are interested in the education of young women. It is currently a school which approximately 950 students attend and its mission is to provide a Catholic education to young women grounded in the teachings of Mary Ward, the patroness of this teaching order of Catholic nuns. My choice of Loretto Abbey is based on convenience and the ease of accessing participants. For eight years, Loretto Abbey has involved its Canadian and World Studies students in multiple environmentally focused field trips, and hence offered a good sample of alumni with experience in environmentally based field trips.

Data Collection & Analysis

Before embarking on data collection, I submitted a ‘Request for Ethical Review Form’ for research being conducted on human participants to the Research Ethics Board of Royal Roads University. I was given permission to continue with this study. I followed a strict adherence to the ethical polices outlined in the Royal Roads University Research Ethics Policy.

My sample criterion is as follows: Each participant graduated from Loretto Abbey in the last eight years and participated in at least one such field trip. To encompass
various modalities of experiences, I included participants from various years and trips. Using email contact lists available from the school Principal and Social Sciences department at Loretto Abbey, I invited graduated students by e-mail to participate in this study. My e-mail outlined the purpose of the study and offered them confidentiality. I ensured that they understood that non-participation does not carry any penalty, and that they may withdraw from the process at any time. In this case, if they responded in large numbers, I would use a stratified sample to ensure variability in the year of graduation so that the sample included a variety of field trip participation, and would continue with the interviews until no new information was gathered. In other words, I will determine the sample size by using a saturation sample.

Participation in this project would require each individual to create a model field trip. This, it is argued, will encompass their varied experiences and elicit those aspects of previous field trips that have impacted them. Using the criteria mentioned above, I generated a list of twenty high school graduate students that formed the basis of my case study. After selection, my informants received a copy of the Letter of Invitation and pre-interview activity to complete as described below. Not all twenty students provided an immediate response and required follow-up emails.

The Pre-Interview Activity

The first step in finding out the answers to the research questions listed above was to design a pre-interview activity for informants to complete prior to being interviewed. The pre-interview activity is shown in Figure 2:
Figure 2: Pre-Interview Activity

<table>
<thead>
<tr>
<th>Pre-Interview Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions:</td>
</tr>
<tr>
<td>This pre-interview activity is designed to have you recall your Loretto Abbey and other related field trip experiences. Using your varied experiences as a guide, suggest what an overnight, nine to eleven day field trip would look like if you design it. There is no need to identify the country that would be visited (it doesn’t matter), cost, flights or any other logistical parameters. I am simply interested in what activities you would include in your model field trip. This activity and its follow up interview will help me design more effective field trips in the future for Loretto Abbey students.</td>
</tr>
<tr>
<td>Please fill in the worksheet using the space provided. You can use point form and subheadings. Please include activity types, not the specific names of any one activity.</td>
</tr>
</tbody>
</table>

The purpose of this activity was to have students reflect on their field trip experiences during high school, study the answers, and use this information in the design of their interview.

I invited those who responded with a completed pre-interview activity sheet to a personal interview. I continued invitations and interviews until there was no new information gathered. In this case, there was a high degree of repetition by the fifth interview and no new information gathered. I stopped the process after the seventh interview, thus ending with a small albeit highly saturated sample size of seven. The interviews were conducted at locations suitable to the interviewees and lasted from 25-45 minutes.

Immediately after each interview, time was allocated for transcribing from the recording. This was done following the advice of Trochim (2006) who suggests that note creation should occur as soon as possible after the interview to complete the information.
gathering activity. Initial coding techniques were also employed to help move towards later decisions about core conceptual categories as suggested by (Charmaz, 2006). For example, the coding of data took place according to the constant comparative method. This helped identify preliminary patterns until themes began to emerge suggesting what informants valued about the field trips they participated in during their time at school. The patterns also identified what should and should not be included in future field trips and determined if field trip participation positively or negatively influences environmental awareness in adolescent females. After initial coding, focused coding was employed where codes are more directed, selective and conceptual, rather than incident-by-incident coding which helped relate categories to subcategories of data, again following the advice of Charmaz (2006).

At all times during the completion of this thesis study, I adhered to Royal Roads University’s Research Ethics policy and Thesis/Major Project Handbook 2006. Informants were provided and signed a copy of the Letter of Invitation, which can be examined in Appendix 3. It clearly detailed the rights of informants, explains that all data will be held in confidence and that privacy will be ensured during the reporting process. Interviews were recorded and each research participant was reminded of this prior to the interview. The recordings will be stored on my personal recording device and computer where they will be securely kept for six months after the results of this thesis project have been approved. Thereafter, the interviews will be destroyed and erased in a non-retrievable manner. Transcribed interviews will identify my informant by alias only. Transcripts of the interviews may be viewed by other Royal Roads University students,
staff, faculty, and my school Principal. At all times careful attention was paid to balance
the responsibilities of both academic integrity and the welfare of informants.

Issues of Reliability, Validity and Trustworthiness

When conducting a thesis study, there are many reliability and validity issues that
develop as well as the trustworthiness of the process. Using a proven methodology that
has already been employed in similar research projects, (e.g. methodologies used in the
scholarly research cited in my literature review) can help avoid any pitfalls of reliability,
validity, and trustworthiness issues that may develop in the process of this research and
its analysis.

For this research, phenomenology is an existing methodology that is appropriate.
One aspect of phenomenology requires studying the transcribed interview in order to
derive meaning from it (Sanders, 1982), and this was completed for this study. By tape
recording and transcribing interviews, it allows the researcher to study the exact words of
informants and consequently lessens reliability and validity issues (Sanders, 1982).

However, phenomenology often includes participant observation (Sanders, 1982)
which was not possible for this study, other than observing each participant during the
interview stage and commenting on body language, apparent attitudes, etc. In the initial
design of this study, I intended to invite participants to meet collectively to design a
model field trip. This collectively designed model trip would have been analyzed to
determine the value students attached to their own field trip experience. However, my
participants currently attend university in various locations across the country as well as
work in locations around the world. It was not possible to bring them all together at the
same time in order to design the model trip in a collective manner. However, it was possible to meet with them individually and on separate occasions, but never all together at the same time. In consultation with my thesis advisor, Dr. Femida Handy, we decided that the most appropriate course of action was to issue each participant a worksheet designed to allow them to create their own model field trip. Each worksheet was analyzed prior to the interview and I used its contents to inform my interview questions.

In addition, to improve my findings I combined phenomenological data collection with another research methodology called grounded theory analysis. This combination will be referred to as modified grounded theory in this report. In grounded theory, various coding techniques and constant comparison is employed. Allowing the data to inform the development of a theoretical analysis through successive iterations is the strength of grounded theory. This will help control the research process and increase the analytic power of my work (Charmaz, 2006).

In pure grounded theory, leading questions should be avoided in order to allow the data and theory to emerge unencumbered by the bias of the question and researcher. However, after consultation with my thesis advisor, I decided to ask direct questions within the modified grounded theory interviews in order to address the environmental awareness aspects of the field trip experience. I also acknowledge that this may have biased my results.

I employed the remainder of grounded theory techniques to minimize any further reliability and validity issues associated with this thesis project. According to Glaser and Strauss (1967) it was necessary to do the following in this research process:
1. Include simultaneous involvement in data collection and analysis during the case study process.

2. Construct analytic codes and categories from data, not from preconceived logically deduced hypotheses.

3. Use the constant comparative method, which involves making comparisons during each stage of the case study analysis.

4. Advance theory development during each step of data collection and analysis.

5. Conduct memo-writing to elaborate categories, specify their properties, define relationships between categories, and identify gaps.

6. Generate sampling that was aimed at theory construction and not for population representativeness.

7. Conduct the literature review after developing an independent analysis.

8. Follow and leads provided during coding and memo writing.

There are four issues of trustworthiness that require attention. These include credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985).

Firstly, credibility refers to an evaluation of whether or not research findings represent a “credible” interpretation of data from the original data collected (Lincoln & Guba, 1985). For this research report, credibility of transcription was addressed by gaining feedback from research participants who were sent the transcripts of their interviews for comments and or corrections. After this process no significant issues arose. For reliability of coding, the coded materials were sent to participants and my thesis advisor for review. I did not receive any information suggesting that my codes
were misleading nor was there any significant disagreement in the way they were delineated. This feedback was necessary to establish the accuracy of initial perceptions and conclusions (Kovan & Dirkx, 2003).

Secondly, transferability refers to the degree to which the research can apply or transfer beyond the project undertaking (Lincoln & Guba, 1985). Transferability was addressed by giving a final copy of this thesis to the Loretto Abbey school principal for review. The purpose of this was to increase her awareness of the benefits of field trips for students and encourage her to approve another field trip that included suggested activities from former students.

Thirdly, dependability is an assessment of the quality of the processes of data collection, analysis and generation of theory (Lincoln & Guba, 1985). Dependability was addressed by conducting an ethics review prior to conducting this research. In addition, each informant completed the same pre-interview activity and was interviewed using a structured interview guide.

Lastly, confirmability measures how well the research inquiry’s findings are supported by the collected data (Lincoln & Guba, 1985). Confirmability was addressed by using direct quotation and the exact words of informants in the results chapter of this research project. This was done to minimize variations in interpretation.
CHAPTER 4: FINDINGS

This research process generated data that was analyzed to answer the following questions:

1. What do high school graduates remember and value about the field trips they participated in during their time at school?
2. What aspect of field trips produced significant positive and negative outcomes?
3. If and how field trip participation influenced environmental awareness and values in adolescent females.

Background Information

For confidentiality purposes, informants, all females, will be referred to as Informant and given an interview number (i.e. Informant #1). Each informant attended high school at Loretto Abbey Catholic Secondary School in Toronto. Their declared majors reflected a wide range of interests from Social Sciences and Humanities to Sciences and Engineering.

Pre-Interview Activity Analysis

From the information on the pre-interview activity described earlier, I gathered data on what should be included on potential field trips. This allowed for determining what informants valued from their individual field trip experience, and validated during the interview. Depending on the answers given, I was also able to estimate each
informant’s environmental attitudes using a thorough analysis that I crossed checked with my thesis supervisor. Furthermore, each informant’s ideas and suggestions were probed more intensively during the subsequent interview. As each pre-interview activity was analyzed, it became apparent that the suggested activities by informants for a future trip were indeed based on their own experiences from high school. Many of the activities and embedded learning strategies were variations of those that they experienced during their secondary school field trips and are summarized in Table 1 shown below. By wishing to replicate these experiences, informant’s revealed the positive values attached to these activities and learning strategies.

Table 1: Activities & Strategies Revealed by Students from Pre-Interview Activities

<table>
<thead>
<tr>
<th>Recommended Activities</th>
<th>Learning Strategies Revealed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain and Volcano Climbing</td>
<td>Improve Environmental Awareness</td>
</tr>
<tr>
<td>Hiking</td>
<td>Field Work</td>
</tr>
<tr>
<td>Camping</td>
<td>Local Experts</td>
</tr>
<tr>
<td>Stay In Locally Situated Hotels</td>
<td>Independent Sightseeing/Participation</td>
</tr>
<tr>
<td>Rock Climbing</td>
<td>Guided Tours</td>
</tr>
<tr>
<td>Canoeing</td>
<td>Environmental Action – Cleanup</td>
</tr>
<tr>
<td>Cultural Attractions &amp; Community Service</td>
<td>Volunteering</td>
</tr>
<tr>
<td>Local Restaurants, Foods &amp; Shopping</td>
<td>Field Experts</td>
</tr>
<tr>
<td>Zip Lining</td>
<td>Active Learning Experiences</td>
</tr>
<tr>
<td>Visit Hot Spring &amp; Geological Activities</td>
<td>Comparing Human &amp; Physical World</td>
</tr>
<tr>
<td>Natural Attractions – Plants &amp; Animals</td>
<td></td>
</tr>
<tr>
<td>Water Activities</td>
<td></td>
</tr>
</tbody>
</table>
Each informant indicated that a proposed trip absolutely required a hiking and/or climbing opportunity to a natural or geological feature. Since this was a pre-requisite for each past trip design, they obviously valued it and decided to include it in their trip proposal. The only aspect of the hiking component that varied was where they were hiking. Informant #1 felt that hiking to a lake and through a forest was important, whereas Informant #2, #3, #4, #5, #6 and #7 indicated that the climbing of a mountain or volcano was necessary.

Some of the informants also indicated that food was a crucial component to any overnight field trip and remembered that it be incorporated into the overall design of the trip. Informant #1, #3, #4 and #5 indicated just that, but informant #5 went further and suggested that food was an appropriate way to promote cultural understanding.

Other informants specifically indicated that the trip activities include fieldwork opportunities. Informant #3, #4 and #6 suggested fieldwork and Informant #4 and #6 indicated that the fieldwork should link with prior knowledge gained before going on the trip. Informant #6 went further indicating that the fieldwork should be lead by a local expert that can better facilitate understanding and reinforce prior learning. This is evident by examining the following response from informant #6:

> Exploration of a lake, river, volcano, forest, glacier, cave, geyser, plate boundary or any other physical landform in the area with a field expert will give students an opportunity to compare and apply information acquired in the classroom to the actual physical landform. The field expert will give more in-depth explanations that help cement this knowledge, as well as forming the first obvious link of people associated
with physical geography on a daily basis for the students. The field expert will also give students an understanding of what and how measurements are done to monitor the quality of the landform, or the experiments done to better understand it. This is important as students need to grasp the importance of these activities in light of the ever expanding impact of society and technology; natural landforms need to be protected and the means are as important as the methods. To create a learning experience that is as active as possible, students will experiment with the equipment used in these fields to take simple measurements under the guidance of the field expert. This cements the theoretical knowledge picked up from previous days on the trip, and the participatory nature of the activity distinguishes the experience in the student’s mind.

Camping was another activity suggested by my informants. Informant #2, #3 and #5 felt that camping in a wilderness setting would be a memorable experience for participating students and that camping should engage participants in physical and participatory activities designed to challenge.

Most informants also indicated that cultural activities were important. Informant #3 suggested, “shopping at a local market and encourage students to avoid malls” and Informant #5 indicated students “participating in traditional customs” would be valuable to participating students.

Another reoccurring activity that was suggested by my informants was to have participating students “volunteer…give back…work with NGO’s…make
donations…pick up litter…work in a school” while on their field trip. These comments reflect an understanding of the importance of social justice and the recognition of the importance of volunteering while on a school field trip is encouraging.

The travel agent that helps design these trips suggested inclusion of social justice volunteering opportunities, but, initially I believed that having students allocate time from one or more of their days from their “bought and paid for” field trip might discourage students from participating or bring about “loud complaints”. However, to the contrary, the informants suggested that volunteering should be included. Chawla (1998a) also suggested this in her significant life experience research where 25% of respondents indicated that a sense of social justice influenced their commitment to environmental protection. Therefore, one can deduce from this inclusion that they were significant life experiences for each informant.

These informants raised one other interesting aspect of field trips in their written responses to the pre-interview activity. Informant # 2, #3, #5 and # 7 all indicated that adventurous activities such as “white-water rafting…zip-lining…and rock rappelling” should be included. However, theses activities are banned by the Toronto Catholic District School Board (TCDSB) in their policy document entitled Toronto Catholic District School Board Excursion Policy, despite the fact that they view school excursions as interdisciplinary, an extension and enrichment of the curriculum, spiritual, a vehicle for citizenship training, experimental, experiential and recreational (Toronto Catholic District School Board, 2002). Figure 3 shows what activities are banned by the TCDSB.
4.5 Activities Not Allowed at the Secondary Level

The following activities are not allowed at the secondary level at any time:

- WHITE WATER CANOEING
- WHITE WATER KAYAKING,
- DIVING TANKS
- SCUBA DIVING
- SKYDIVING
- PARA-SAILING
- HANG GLIDING
- BUNGEE JUMPING
- DOWNHILL MOUNTAIN BIKING
- HOT-AIR BALLOON RIDES
- SNOW BLADING
- CLIFF RAPELLING
- FIRING RANGES
- PAINT-BALL WARFARE GAMES
- ‘SWIMMING PARTIES’ AT PRIVATE OR NON-REGULATED POOLS, RIVERS OR LAKES
- USE OF FIREWORKS OR OTHER PYROTECHNIC DEVICES

For these informants, some of the banned activities would be beneficial for students in a future field trip experience. I wanted to know why these activities are banned by the TCDSB so I decided to contact a school Principal and Superintendent from the TCDSB via e-mail for an official response. The Principal indicated that it had “something to do with safety and liability” and referred me to someone else at the school board. The Superintendent responded by stating that he was “not certain of the history, but there were probably incidents that happened in our Board or others which made those activities too great a health and safety risk”. He too referred me to another person within the school board.

I contacted the person with the TCDSB that I was referred to, the Supervisor of Outdoor Education, but I had to wait a few weeks for a reply. When he responded he informed me that:

The activities you are asking about were not banned by TCDSB but were prohibited by The Ontario Physical Education Association who wrote the
Safety Guidelines for school boards around the province. The action was not taken lightly as much research was done to determine if the activities were worth the risks involved. If you contact OPHEA they may be able to explain why these two activities were considered too dangerous to include.

Following grounded theory, I followed up with OPHEA, as instructed but was never able to get a response. To conclude, the TCDSB and other school boards have been instructed not to allow certain activities that are deemed excessively risky for reasons of student safety and legal reprisal. It is good to know, however, that trips are still permitted as long as the activities are deemed safe. From studying the proposed activities from informants, I can conclude that the trip would still have meaning for its participants and risky activities are not necessary to create lasting memories for students.

The Interviews

Seven 25-45 minute long semi-structured interviews were conducted. After their completion, interview transcripts were sent back to informants for approval. The transcripts were then constantly compared, coded, and sent to informants and my thesis advisor for approval. Finally, the coded data was studied for emergent theory in an attempt to answer the aforementioned research questions.

First Impressions

At the end of each interview, I went home and wrote a memo for this research study. My intention was to capture first impressions of the interviews before I started
coding data. What became apparent as soon as I wrote each and every memo was the enthusiasm that each informant conveyed when discussing the various field trips that they participated in at Loretto Abbey. This included tone and body language. For example, I noticed, without formally analyzing my data that each informant enjoyed their field trip experience and indicated that it has helped them make connections out of content learned in school and had increased their environmental awareness.

What Did The Interviews Reveal?

After the interviews were transcribed and studied initial coding techniques were employed. Data were first read for the initial development of key words and ideas. Then the data were sorted into clusters of related information, using prescribed techniques of axial coding. On careful deliberation the data were then sorted into emergent themes. There were natural cluster among these categories from which emerged five dominant categories. These categories were Organization, Educational Opportunities, Relationships, Environment and Experiences. Each these categories had several themes ranging from three to six in number. For example, the first category, Organization, had a natural cluster of the following themes that I call: Design and Planning, Experts, Experiential Activities, and More Trips; details of which are described later in this section. Table 2 gives the information for the other categories as well as indicates the number of data points for search theme.

I then sent the coded interview transcripts and five emergent categories to my informants and my thesis advisor so as to address reliability, validity and trustworthiness of the results and process. As no major disagreements arose, I kept the categories as they
are presented in Table 2. A study of the overall categories for a central theory was quite self evident. The central theory that emerged from my data analysis using grounded theory is that overnight field trips of three days or longer are transformational for participants.

Table 2: Emerging Themes & Categories

<table>
<thead>
<tr>
<th>Organization</th>
<th>Educational Opportunities</th>
<th>Relationships</th>
<th>Environment</th>
<th>Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experts (6)</td>
<td>Learn &amp; Make Connections (55)</td>
<td>Strengthen (16)</td>
<td>Increased Awareness (30)</td>
<td>Activities (16)</td>
</tr>
<tr>
<td>Experiential Activities (13)</td>
<td>Attitude (8)</td>
<td>Community (4)</td>
<td>Worldview (5)</td>
<td>Culture (18)</td>
</tr>
<tr>
<td>More Trips (16)</td>
<td>Learning Style (9)</td>
<td>Actions &amp; Protection (44)</td>
<td>Location (10)</td>
<td>Natural &amp; Human World (16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Life Highlight (40)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Influences (32)</td>
</tr>
</tbody>
</table>

One problem that did arise was where to place certain key ideas. Some statements could fit into multiple categories. For example, experiential activities could fit into the organization category and it could also fit into the experiences category. In the end, I looked at each individual idea and decided to place it into one category or another based on a re-reading of the entire transcript and the context that the statement was made in. Clearly there were subjective decisions made to the best of my ability. As no major
disagreements arose in the verification process, I am reasonably confident on the coding
the process followed.

Category 1: Organization

Theme 1 developed around the idea that a field trip is valuable and memorable to
a participant when it is organized well. Responses in the data connect to the theme of
organization in the following way; informants referred to key aspects of organization
including the importance of ‘design and planning’, the use of ‘experts’, inclusion of
‘experiential activities’ and that ‘more trips’ should be planned.

Design & Planning

One aspect of organization includes the successful design and proper planning of
a field trip. This was mentioned at least twenty times during the recorded interviews.
Informant #1 suggested that she would not change anything about the trips she attended
because they were “pretty well planned, because we always had something to do and it
was fun”.

Effective field trips require the planning of pre-trip lessons that help students take
in more information once they arrive and participate in activities. This requires preparing
students prior to the field trip by clearly outlining its stated goals and function. Informant
#6 suggested that “it’s good to give students a clear goal and what they should expect on
the trips”. In addition, Informant #4 indicated in her pre-interview activity that she would
include pre-trip educational lessons. The interview probed this suggestion in more detail
when she was asked why a field trip requires pre-trip education. She responded by stating:

   It’s like university when you do summary readings. It really connects everything together. For example, when you go to a place, you realize that this is what I studied and this is what your professor is talking about. It helps you understand better as opposed to just being there and be thrown right in. In this case you can’t really take anything in.

Informant #3 took this idea even further. She suggested that trip organization needs to be cyclical when planned to maximize effectiveness. This was suggested in her pre-interview activity and followed up in her interview. She stated:

   So I designed this trip hoping it would be a cycle; the beginnings of the trip would include understanding and by the end of the trip, after understanding the history and richness of a country, that appreciation would hopefully be applied and cultivated in a healthy and positive way by giving back to a community. That’s so important to any person’s development because we take so much from the natural world, and by no means will giving back to a community erase all the wrongs that we do as humans on the environment, but it’s something; it’s a step.

Experts

   Good field trip organization should also include expertise, especially from local experts. Local experts have detailed knowledge of the area that participants are in and
would be able to provide a depth of understanding a classroom teacher would not necessarily possess. Local expertise would allow for more interaction and therefore a better experience. Informant #5 suggested that local guides “really know what they are talking about; they can tell you stories and stuff like that”. Informant #6 went further in her interview and revealed that she would have liked more local expertise on her field trip to Mt. Etna in Sicily, Italy. She stated:

I would have liked to have talked to people who worked at observation stations on Mt. Etna and observe them working in these observation stations. I would have liked to see what they do and see what types of measurements they did.

Experiential Activities

Planning an effective field trip also requires the inclusion of active activities that are experiential in nature. When participants are active as opposed to passive recipients of information, informants tell us of its value. They consequently learn, enjoy and remember the experience in deeper and more meaningful ways. Informant #7 suggests that trips should have participants “doing things outside and not stuck in a museum somewhere looking at the past all the time”. Informant #5 went further by suggesting that she would have enjoyed her experience more if she had participated in more day-long adventure activities like the one she took with her family this year in Mexico. For example:

I think that the one thing we probably should include are more physical activities that you can do; be it mountain-climbing or canoeing, rappelling
or flying. I know the place we were at didn’t really allow for it, but if we
had the opportunity to do more adventurous activities, I think that would
be more beneficial.

Hiking is an experiential learning activity that was mentioned by all of the
informants as being memorable. Informant #1 suggested that seeing memorable scenery
occurs when you hike: “we did hikes within that area too, and it was a conservation area,
so there was a lot of beautiful scenery and everything like that. It was just a really good
experience” and also suggested that a trip to Niagara Falls must include a “hike in the
Niagara Gorge”. Informant # 2 suggested the inclusion of hiking, trekking and mountain
climbing in her pre-interview activity as well. When she was asked about this in her
interview she responded by stating:

Those are the things that I enjoyed the most. I don’t think that many
students get to hike much around here and I definitely have never done
that before. I remember that a lot and most of my memories come from
doing those things.

More Trips

From the interview data it is clear that trip organization is a pre-requisite for a
memorable experience. In fact, it was mentioned numerous times in the interviews that
more trips should be organized and planned to local and international destinations for
students. Informant #3 suggested that day trips to local places “like Niagara Falls”
should continue to be offered at Loretto Abbey CSS and the experience for Informant #5
was so memorable that despite being in her third year at university asked “when is the next one, so I can go”.

Category 2: Educational Opportunities

Another aspect requiring consideration for field trips surrounds the idea of education itself. A field trip designed by a school must have educational merit and is a necessary component. The more effective at helping students learn, the more memorable it is for field trip participants. Therefore, education and learning must be a central focus of a school field trip. This becomes evident when you examine the coded data from the informant interviews. Themes arising from the data that reflect the ‘Educational Opportunity’ category includes ‘schooling’, ‘learning and making connections’, ‘educational attitude’, ‘learning style’ and ‘educational improvement’.

Schooling

The theme of schooling is referenced by Informant # 7 who reported remembering “the atmosphere and putting what you learn in a classroom into everyday life” and Informant #6, who indicated that “there has to be a connection to class and field trips. Otherwise, it’s like vacation with parents. I think that kind of defeats the purpose”.

Learn & Make Connections

Informants recalled making connections to course material learned at school from their field trip experience. This prior knowledge was cemented by examining material first hand. Informant # 6 stated:
I remember seeing geysers and thought that was particularly cool because
I did a project on geysers and I saw how a real geyser worked. I also saw
where the plates were pulling apart…that trip was more comparing
knowledge gained from class and kind of checking almost to see if it’s
true or whether it was too ‘textbookie’ [sic] to be true; in the back of your
head whenever you’re in a class and you’re just kind of thinking [sic],
“really, is this true?”

Informant #2 also felt that first hand experience helped her connect to material that she
studied previously at school. She recalled as a grade nine student going to “Iceland and
Scotland, which was definitely a highlight. We climbed mountains - Ben Nevis and
Arthur’s Seat, went and saw geysers, and basically saw everything that we were learning
at the time, which seriously helps”.

These interviews also revealed that field trips are more effective than a textbook
at helping students make connections. Informant #5 indicated this when she said:

Well, I do think it’s important to get out of this school, just for number
one [sic]. And I think you kind of lose a real world application of a lot of
what you’re learning by staying in a classroom [sic], especially if in a
class like geography. I probably would’ve benefited more if I had taken
more external trips in grade nine, to see what I’m actually learning versus
what I’m reading out of a textbook.
Attitude & Learning Style

A positive attitude has a lot to do with how well someone learns something and how memorable it turns out to be. When a learner enjoys an educational experience it is deemed as positive and reflects a willingness on the part of the learner to fully engage in the activity. For these informants, field trips are positive educational experiences and each informant had a positive attitude during their interview. For example, informant #5 loved her day trip to the zoo. She said “that was fun, because ecology scientifically isn’t my favourite so I like to see the animals more hands on. I’m a very kind of hands on person”. This positive attitude is also related in her learning style and some students learn best from hands-on activities of which they do not necessarily get enough of in a traditional secondary school setting. Informant #7 reflected this when she stated “design a trip for a certain type of student and not try and make everyone accommodated for, like generally try to have the right type of people go on the right trip”. Field trips meet some students learning styles better than others and this leaves participants with increased knowledge and understanding and more likely, an improved attitude towards their education.

Category 3: Relationships

A field trip experience also helps participants ‘develop’ and ‘strengthen’ relationships. This was identified by informants as a very important, valuable and memorable component of their field trip experience. The data suggests that relationship building provides a sense of ‘community’ which made the participants’ learning easier.
Development

For Informant #1, making and developing friendships was something that she remembered fondly from her time in secondary school and credits the field trips she attended. She stated:

They were amazing because you really got to see another side of your teachers and even make more friends because you’re a group of students sharing the same interests… I just remember most of the memories that I made with friends there and just everything [sic].

The relationship category is also connected to change. For example, learning becomes easier when it is with the “right friends” and the student-teacher relationship changes too. Informant #5 stated “the friendships that we built were incredible and I think the relationships with my teachers kind of changed a bit. I kind of appreciated them more on a personal level”.

Strengthen

The activities that were selected also have a critical role in the strengthening of friends and relationships. The more active the activity, the more you struggle, the more likely that the bond between those participating strengthens. Informant #3 captures this perfectly when she stated:

The one thing that tied everything together on each field trip was the bond between each participant. Going on a field trip in grade nine was crucial to my development as a student at the Abbey because here was an
opportunity for me to develop relationships with students older than me.

These students helped guide me throughout my four years at the school and that was important. I guess the bond between each participant on a trip would not have been possible without activities like hiking, adventurous activities or other bonding activities designed to connect each student together; and that bond is crucial for any student.

Overall, the idea of making friends and developing relationships was important to the overall field trip experience. The experiential activities selected contributed to the bonding experience for participants and the field trip experience acted as an agent for change. It built community by modifying relationships between students, student-teachers which resulted in easier learning for trip participants.

Category 4: Environment

The environment was an area of interest that emerged from the pre-interview activity. Hence the interview probed questions related to the environment. Naturally, the participant responses frequently addressed their awareness and attitudes towards the environment. Coding the data revealed many different aspects of the environment. These include reference to: ‘attitudes’, ‘increased environmental awareness’, ‘worldviews’, ‘protection and action’, and ‘natural and human built world’. Informants also suggested that much of their environmental ethics and awareness have been influenced by family, schooling, the media, geographic locations, activities and work, but
it was the field trips themselves that increased awareness and changed the way they view
and interact with the environment.

**Attitudes**

Most of the informants had positive and hopeful environmental points of view.

For Informant #1, geography classes helped shape her environmental ethic and the field
trip to Ecuador led to a desire to protect fragile systems in the future. She stated this
when she said:

> When we hiked through the rainforest, we learned about the different
> species and what happened to the species. For example, some of them are
> being captured and sold on the black market. By being aware of this, you
> can try and help the problem…but the Amazon rainforest in general is
> being cut down a lot, so if you see the natural beauty and you realize how
> important the rainforest is through learning and guided tours, then you’ll
> be more readily able to help because you have seen and understand the
> problem.

**Increased Environmental Awareness**

Environmental awareness also changed for the informants. They became more
aware of the natural world as well as the human world. For Informant #2, seeing animals
in the wild changes your perspective and “why protecting things is really important” and
for Informant #7 “you become more aware of what’s happening around you”. For
Informant #4, becoming aware of the environmental reality of Europeans changed her
attitude and perspective. This also resulted in her questioning her way of life. She explained “we were in Europe and they are more environmentally aware and conscious than us. Just like their smaller cars, their dual flush toilets, stuff like that. And it makes you think, why aren’t we doing that?” For Informant #6 seeing the glaciers in Iceland and having it explained that they are disappearing was pivotal in her changed environmental awareness:

In Iceland, you can see the glaciers in the distance, you can see kind of like a field of a barren land where the lava was…newly formed. And then you hear stuff like all glaciers are melting [sic] and you saw a glacier so you definitely want your kids to be able to experience it, you want other people to know what you’re talking about in ten years time when you say ‘glacier’.

Furthermore, Informant #5 even suggested she was environmentally ignorant but a family trip to the Azores changed this. This is evident when she describes her trip to the Azores Islands in Portugal:

I wasn’t really very environmentally involved or aware for that matter. I really didn’t have an appreciation for it, but I think what changed the most for me was when I was sixteen years old; we went on a family trip to the Azores Island in Portugal and I guess I realized how different the land is there, how different of a life they lived because they lived off of the land so much, and I think it kind of brought me to the fact that ‘this is all we’ve got and if we’re not going to make it work, then we don’t really have
much of a future”. I guess I became a lot more environmentally conscious after that, about how far we’ve come and how much signs you see that take advantage of the environment. I now try to be environmentally-aware. I don’t think I’m necessarily the most environmentally friendly person, but I think I try to be.

**Worldview**

For other informants, the field trip experience precipitated a change in worldview. For them, the field trip experience the way in which they viewed the world. Informant #3 said:

Oh, it was fantastic! To learn about all the things that are around the world, to know about…well this actually ties in with the field trips, all the stuff you learn in the physical geography course. I got to apply it and actually see it in real life. So the link between the field trips and that one course really shaped how you look at the world and how you view it.

**Protection & Action**

The words protect and restore were also used during interview sessions. These are powerful words because they reflect a deep desire to change the world in which we live in. These significant feelings are for some, the direct result of the field trips which took place in high school and for others, the result of field trips or work that took place during university. For informant # 6, seeing hurricane Katrina damage in Louisiana had a significant affect on her life plans:
We went on a hike along the Don River for a geomorphology class but that really impressed upon me in the need to do something and to do it right because the river was right beside the highway and there were sheet metal and pylons that stopped it…and it was just straight…and I thought, why would the river be straight?...It was really depressing. On the other hand, in Louisiana, I saw…how much engineering was put towards restoration. I had no idea that engineering could be used in such a way.

Natural & Human Built World

These informants also suggested that they became more aware of the natural and human world as a result of the field trip experience. Informant #1 refers to this when she states “I definitely remember going to the Amazon, and seeing the different plants and animals. Also, I remember all the fun things that we did – like the excursion to the butterfly conservatory”.

Category 5: Experiences

The experiences category which emerged from the coding of data process is very important to the impact that field trip experiences had on these informants. Experiences are what participants remember. Significant experiences resulted because of trip design, connected the stimuli and transferred it to learning, helped develop relationships and directly and indirectly improved environmental awareness. The data revealed themes that suggest that experiences are vital to a memorable and worthwhile field trip. They include ‘learning by doing’, specific ‘activities’, ‘culture’ components, the ‘locations’ traveled to
and that each trip was in many ways a ‘life highlight’. In fact, the experiences category helps support everything informants remembered and said. Overall, their experiences were varied but positive.

*Learning by Doing*

In one way or another, every informant felt that trip participation was a positive experience because they “learned by doing”. This was referenced more than any other phrase in the coding process. Therefore, it would be appropriate to suggest that learning by doing is important for field trips and promoted significant experiences for informants. Remembering and referencing it many times during the pre-interview activity and interview makes it significant.

Field work is one way that a participant learns by doing. In field work, students are asked to conduct their own study in the field as opposed to reading about it from a textbook. Informant #4 suggested in her pre-interview activity that digging soil on a field trip was memorable and should be included. In her interview she also said:

Well you actually have some hands-on things. Some people, like me prefer to be lazy and sleep. However, if you’re forced to do field work, not necessarily for a mark, but for application purposes, you can better apply your knowledge and get your hands dirty.

Informant # 6 felt the same way also. To her, fieldwork and learning by doing was memorable, significant and formative. On her three day overnight grade nine trip to Lake St. George, in Richmond Hill, Ontario she stated:
I went canoeing and we mapped the lake, that was pretty cool; and we got to test the pH of the water and ran all these tests. That was my first real exposure to what a geographer would do so that was really neat and that was the one most memorable thing for me.

**Activities**

Learning by doing is also closely related to the activities that a field trip participant does. For Informant # 4 and #6 it was field work. For others, it was experiential activities such as camping and hiking that were significant experiences that they remembered. Informant #3 suggested that hiking and camping are the two activities that must be included:

I think hiking is a must because hiking really tested everybody’s ability to work together and to really see where your physical ability is at. More importantly, it enhances your social ability and helps create bonds...I would say it is a highlight. Camping is also a highlight.

Informant #3 went further by suggesting the importance of choice and independent learning in other field trip activities because it improves the experience of a participant:

In Iceland, what stuck out, though it wasn’t on the itinerary, was that we went on a local trip and it was great! So, going beyond your basic itinerary is important because a lot of these times you work with a big tour company and sometimes the company have pre-outlined itineraries that
sometimes don’t include things you may actually want to see. In short, looking beyond the standard itinerary given is important.

For Informant #2 the volunteering activity was a very significant:

The first experience that I really had was in Ecuador and just seeing the smile on little kids’ faces, you actually feel like you’re doing something important, something substantial, and you’re actually helping them. They were so excited to get little pencils and playing little games with them even though you couldn’t understand what they were saying, but you kind of made connections. It’s like you’re actually making a physical and emotional connection with the places you went and the people there. It’s a good feeling.

Culture

Culture also played a significant role in the field trip experience for informants. Cultural participation and experience comes in many forms. According to these informants, shopping at local markets was identified as a significant experience as was eating in local restaurants. In fact, food was identified many times as something that must be considered when planning a field trip and can consequently affect the experience. Informant # 1 and #4 made numerous references to dinner and “yummy food” in their interviews.


Locations

The destinations and locations themselves also had a significant impact on the field trip experience. For Informant #7 it was Ben Nevis in Scotland, for Informant #3 it was Mt. Etna in Sicily and for Informant #2 it was the Amazon rainforest in Ecuador. The destination itself was a memorable experience but going there also helped raise her environmental awareness and affect her actions. I asked her if she thought that her overnight field trip experience was valuable to her experience as a student and to her environmental attitudes. She responded by stating:

I think they have because now I know. You hear about the rainforest, you hear about the Amazon, about things that need saving and protecting; and when you actually go there, you get to see why, you get to see the animals. When you learn that there is not many left of a certain type of monkey that you can see, it provides more initiative to change my habits, to take the bus more, just because it would help in some little way. When you see different plants, you don’t want those things to disappear, you want them to be there for the next person to come and see them, for the next generation.

Life Highlight

Most importantly, for these informants, their field trip experiences were their life highlight. Throughout the coding process, references were continually made to thinking about their trip. These ranged from “being the best ever”, wanting to “attend another”
and “eye opening”. However, Informant #5 summed up what impact that these types of field trips had on her life best when she stated:

Iceland and Scotland is [are] probably like the best thing that I’ve ever done. I wanted so badly to do it again in grade twelve, but I didn’t really have the opportunities to; but if I could do it again, I would in a heartbeat. I remember probably having the most fun in the whole world and I was scared to go when I was initially planning it. But once I got there, it was a whole different, different things to see, things that I have never seen before. I was just so excited.
CHAPTER 5: DISCUSSION AND RECOMMENDATIONS

According to the former students of Loretto Abbey CSS who participated in this research project, long-term, overnight field trips are unambiguously valuable experiences for a student in high school. It helps foster fond and long term memories that have a lasting impact on how they view their environment and their positive attitudes towards their environment. However, for a field trip to have a significant and long lasting impact, students were quite clear on the organization of the trips and what was to be included and excluded. Thus the data reveal that trips must be organized correctly and has certain implications for its organizer. Using the parameters set forth in this research, successful, overnight, long-term field trips also required the inclusion of certain types of experiential activities designed to help students learn and make connections to school work, as well as foster relationships. Consideration, it was argued must also be given to the structure of a field trip which includes pre-trip classes and information sessions as well as the inclusion of free-choice and independent learning opportunities within the structure of the field trip. In addition, each field-trip should also include educational components in order to produce deep and significant experiences for participants. Furthermore, a field trip if set up correctly has the power to make a deep and lasting impact on its participants.

These five distinct categories, namely: Organization, Educational Opportunities, Relationships, Environment and Experiences emerged during the data analysis in this research. Furthermore, when these emergent categories were examined in combination with each other, a powerful grounded theory emerged that indicated overnight field trips are transformative experiences for participants.
Each of these five categories is now discussed within the context of the current literature and within the perspective of the theory generated by the analysis of transformative learning and experiences. I will then compare the student recommendations from the pre-interview activity and make connections to the existing Ontario curriculum. Finally, I will conclude with recommendations for those wishing to plan field trips, or approving field trips and to discuss the implications of my findings for the designers of the MAEEC program at Royal Roads.

**Category 1: Organization**

For participating informants, organization is a critical component that must be considered when planning an overnight, long-term field trip for high school students and is supported by current research. Corroborating my findings are Nabors, Edwards & Murray (2009) who suggest that planning and organization are critical components in the success of a field trip. This organization must also include pre-trip lessons and this is also backed up by current literature.

Orion and Hofstein (1994) also suggest that a successful field trip should include and incorporate knowledge about field trip topics and one way of ensuring this is through pre-trip education. A pre-field trip class should also decrease the novelty factor suggested by J. Falk, et al. (1978) which means that students should feel comfortable in their new surroundings. The more comfortable participants are, both prior to and during the trip, the more they will learn.

If a field trip does not have experts leading it, it can lose effectiveness. The quality of teachers and experts was identified by these informants as an important
component of a successful field trip and according to Orion and Hoffstein (1994) it is indeed a significant factor in the effectiveness of a trip.

Particular attention should also be paid to the types of activities that are included on a field trip. Experiential activities such as hiking were identified as very important for the creation of lasting memories. Hiking and mountain climbing experienced on these field trips exposed participants to particular cases of environmental degradation which consequently raised their environmental awareness. This is also reflected in the literature and has been suggested by Ferreira (1998).

Category 2: Educational Opportunities

For these informants, a field trip must be about learning and represents a significant life experience in their development. Research demonstrates that a field trip is a type of experiential learning that gets students away from traditional classroom settings and into a new mode of learning (Nabors et al., 2009; Orion & Hofstein, 1994). For learning science it can lead to greater interest in the subject and a more positive attitude towards science and ecology (Prokop et al., 2007). Furthermore, field trips not only expand student learning and experience by providing them with hands-on experience but they also increase knowledge and understanding of the world in which a student lives (Nabors et al., 2009). In addition, when a student learns in the field, the activities demand that they become active participants in the learning process. This active participation is a deep learning experience (Bradbeer & Livingstone, 1996). These are important aspects to consider when planning a field trip. For an educator, a field trip can help address numerous curriculum expectations that would be difficult to cover in allotted
classroom time. For the student, field trips connect classroom material with real world situations and, in the words of these informants, “help you make connections”. Making connections becomes easier when the learning materials, structure, and teaching and learning strategies are sufficient (Orion & Hofstein, 1994).

Category 3: Relationships

Relationships are significant results of the field trip experience. Informants suggested that the bond between participants strengthened as they struggled during experiential and active activities. To them, the greater the struggle the greater the collective bond becomes, a bond that that continues today for these young women. Furthermore, for many of these informants, the friends that they made on these field trip experiences are still their closest friends. Informant #3 stated that:

> When you’re in a group with friends and teachers for literally twenty four hours a day, seven-days as week, the resulting bond is indescribable. I think fifty years after the experience that I’ll still be talking to some participants from these trips. We’ll pass our time talking about what we did in Ecuador, Iceland, Spain and Austria.

There is little mention of friendship or relationship building in the field trip literature. However, it does exist within outdoor education literature. According to Quay, Dickinson, & Nettleton (2002/2003), when students are in outdoor education, they experience caring for, or being cared for by students who are not necessarily their friends at school. The level to which this caring is occurring is similar to that experienced by
close friends. In their study, Quay et al. (2002/2003) found that students actively developed close friendships in outdoor education, whereas in classes at school this friendship development was relatively static, or at least, less prevalent.

Another aspect of the friendship development and outdoor experiences involves the idea that a challenge and struggle has the capacity to bring people closer together. Mortlock (1994) states that a challenging wilderness journey has the capacity to not only assist in developing friendships, but to emphasize the need for people to work together. There are examples that demonstrate that lives may be at risk through selfish and thoughtless actions, and that success will best be achieved by efficient teamwork.

*Category 4: Environment*

For these informants, the theme of environment was discussed. They referenced and suggested many influences that ranged from their schooling to the media. However, they all agreed that their international field trip experience affected their environmental perspective. For some, it helped improve their environmental awareness and attitudes. For others, it has led to increased environmental actions. They also indicated that because of their experience they wanted to do more to protect the environment. For them, the international field trip experience was a significant life experience.

The research is far from settled. Some researchers such as Tanner (1998) suggests that some current SLE research was incorrectly done because there is a strong need to study the right people for the right reasons and for him, this was not done. To other such as Palmer et al. (1998), research clearly shows that significant life experiences do influence environmental awareness and behaviour. Her research studied
autobiographical accounts of the pro-environmental behaviour of people from around the world to see what experiences may have affected them.

According to this research there are some commonalities to my research. Her informants suggested that significant events that occurred during childhood and were related to outdoor experiences had played a significant role in the formation of their pro-environmental behaviour. These included climbing trees, mountain climbing, hiking, and being exposed to the beauty of the world. In addition, other informants also suggested that schooling played a role in their pro-environmental behaviour. This schooling included further understandings of the intricacies of living systems, geography classes and school activities. Informants also suggested that increased awareness of the negative effect of human activities played a role in the adoption of pro-environmental behaviour. Each of my informants stated that they saw themselves as having pro-environmental behaviour and they suggested that it had much to do with their field trip experiences and other outdoor activities while growing up. For example: Informant #3 suggested that “on the weekends mum and dad would take me to trails and, we would go camping …all of this has definitely impacted the way I see the world”. Informant #2 also suggested climbing trees was important. They also suggested that the increased awareness of the negative aspects of human activity changed their attitudes. As previously stated, Informant #3 was deeply affected by a walk along the Don River in Toronto.

Additional research from Chawla (1998a) found that natural area experiences, education, and sense of social justice such as a volunteer experience, lead to environmental protection. Research from Palmer (1993) also found that outdoor education and travel abroad influenced a practical concern for the environment. These
two examples give further credibility to my similar findings. Furthermore, “learning in natural environments is attractive to students and has an important impact on their attitudes towards the environment, their desire to look after the environment, their behaviour in natural areas and their household environmental practices (Ballantyne & Packer, 2002).

*Category 5: Experiences*

What students do on the actual field trips they participate in plays a role in what they remember and consequently value. For them, these field trips and the activities they did represented a significant life highlight and by “doing” they were able to more effectively learn. These ideas are also suggested in field trip and other research. For example, when a young person is involved in an education program, such as the field trip experience, it can be seen as an arena to gain increased knowledge about environmental issues and learn environmental action skills (Chalwa & Flanders-Cushing, 2007). Experiential activities such as hiking, camping, mountain climbing, volunteering with a cleanup at a school, at home or abroad, and other events that take place during field trips help students “learn by doing”. This type of learning provides opportunities for direct experience with real objects, people and places and is often called free-choice education (Kola-Olusanya, 2005). The inclusion of free-choice activities in their field trip experience, such as learning in wilderness also played a role in their significant experiences.

Furthermore, Brody (2005) put forth and tested a theory of learning in nature that suggests meaningful learning occurs as a result of direct experience over time in which
personal and social knowledge and value systems are created through complex cognitive and affective processes. This meaningful learning must include interaction with nature directly, an awareness of events leading up to, during and after the learning occurred, experiencing it with the senses, assimilating new ideas into existing understanding, reflection on the learning, and awareness of their own feelings and those of others. When you compare this model to the responses from these informants it gives them a stronger voice. For them, their learning as a result of the field trip experience was meaningful, significant and a life high point.

Emergent Grounded Theory Results

From the emergent categories and themes discussed above comes the resulting grounded theory discussed below.

*Transformational Learning: A Grounded Theory*

The data provided by informants presented in the five categories outlined in this research clearly demonstrated that long-term duration field trips are transformational educational experiences. The field trips are both creators of life long memories as well as contributors to environmental awareness if properly planned, executed and designed to include experiential and active learning opportunities. The learning which occurred as a result was deep and the experience was transformational. Informant #3 exemplifies this when she stated that:

You can learn only so much about a topic in a class. But when you actually see it, you appreciate it a little bit more than you would if you
read about it from a textbook. For me, the learning was much deeper in a sense.

Informant #3 goes further later on in the interview when she explains that field trips have made her a “changed” person. She states this when she says “I think I’m changed, every time I go on a field trip I’m changed in a positive way”.

When this occurs, it is formally known as transformational learning. The fundamental premise of transformational learning is that people engage by incremental learning or in a deeper learning that challenges their understanding of the world (Laird, Naquin, & Holton, 2003). Informant #6 reflects this when she states that the field trip experience is “a once in a lifetime kind of thing. Just going to different places and seeing what’s out there, broadening and deepening my understanding of what I know about the world. I think that was quite valuable”.

For O’Sullivan (2003), transformative learning “involves experiencing a deep structural shift in the basic premise of thought, feelings and emotions”. He also states that:

It is a shift of consciousness that dramatically and irreversibly alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world.

Dirkx (2006) also states that transformational learning is “a profound shift in awareness or consciousness of being in the world”. For Informant #5 this means:
It’s just a different experience altogether. You really feel that you’re becoming a part of it and when you’re talking to someone who’s seen it, done it, lived it and you feel that much closer to it. So for me, that was really important and knowing the difference has made a huge change and impact.

The idea that overnight, international field trips are transformative learning opportunities for participants was found through the data analysis phase and represents a grounded theory. This was unexpected but it emerged nonetheless. A similar finding was also discovered by a colleague of mine using a grounded theory coding approach in researching the value to volunteers of an environmental program. Daniella Rubeling (2008) in her thesis for the MEEC program found that volunteers in the Wildlife Ambassador Program experienced transformational learning as a result of active participation in the program. Informant #2 well summarizes this when she states:

I think they [the participants] would come back a lot different and with a new sense of perspective on things, and I think they would spend more time outside. Like I do that now….I really think they’re a worthwhile activity and they’ve been pretty much the highlight of my high school experience and I think that anybody who gets a chance to do them should do them because you come back at least a little bit different and have a different perspective on things.
Practical Recommendations from Findings

Each field trip discussed within this research was designed with Ministry of Ontario curriculum expectations embedded. I wanted each trip to be meaningful and it worked for these students. I also wanted each trip to reinforce their learning and the data reflects this. Students are able to make observations and collect data in the field as a result of their experience. More specifically, through a comparison of informant responses and the Ontario Curriculum Grades 11 & 12: Canadian & World Studies documents (Ministry of Education, 2005), I noticed that many more specific curriculum expectations can be addressed through field trips. In fact, many specific expectations (see APPENDIX 4) from the following classes could be covered by a field trip; CGF3M1, Physical Geography: Patterns, Processes and Interactions, CGW4U1, Canadian and World Issues: A Geographic Analysis, and CGC1D1: Geography of Canada.

It is also clear that participation on the suggested field trip designed by each informant would help students meet curriculum and learning expectations and often do a more effective job than typical textbooks do in a standards-based curriculum (Flannery, 2007). It would also help students scaffold and make connections to prior learning. Participation in an overnight field trip has the capacity to reinforce curriculum expectations covered in a previous grade. This connection to prior learning is powerful for a student and field trip participation can help a student make this important educational step. According to Brody (2005, p. 606) “prior conceptions can help form a type of cognitive anchor from new information acquired. The new associations then help build cognitive bridges for future understanding”. In addition, “personal context suggests
that learning requires building upon prior experience with additional information and experience” (Brody, 2005, p. 606) such as those that come from connection class and field trips.

The connection to the Ontario Curriculum mentioned above are a result of the link between the Canadian and World Studies and what these informants suggested in their pre-interview activities. The first and second recommendation in this section is directly related to the five categories and the resulting grounded theory that emerged as a result of this research. The third and last recommendation in this section is the result of my own participation in this Masters Degree program at Royal Roads University, Victoria, BC.

- Teachers who are considering designing a field trip for their students should consider including experiential, active, adventurous, free-choice activities.

- The Toronto Catholic School Board should continue to approve field trips that are designed to fulfill Ministry of Education curriculum expectations.

- Dr. Rick Kool and Dr. Milton McClaren, program designers of the Masters of Environmental Education and Communication, should continue to inspire environmental educators through a transformational learning program and include more experiential, outdoor experiences for their graduate students.
CHAPTER 6: CONCLUSIONS

The following chapter is meant to comment on my personal Masters journey. However, before I begin this, a short note on what my findings imply for future research is appropriate.

Future Research

This research paves the way for further research by providing other researchers insights and valuable information about what might make overnight fieldtrips worthwhile as an educational tool. The sampling was aimed at theory construction and not for population representativeness. Clearly further research requires a larger input of data to validate the results gleaned in this modified grounded theory study, and make the parameters of overnight field trips generalizable to different cohorts of students in different contexts.

The qualitative nature of this research has allowed for the idea that there is more than one perspective of the same type of experience (Lincoln & Guba, 1985) and more than one way of interpreting these results. For these reasons there is an opportunity for future research.

Future research on the impact of overnight field trips should examine:

1. Are there differences between males and females in how they view, remember and value their field trips experiences?

2. Does socio-economic status or education level affect the field trip experience for a participant?
3. Do students who graduate from other schools in Canada (or other countries) remember their field trip experiences in quite the same way as my informants? Is it the location of the trips, or from where students originate and the difference between the point of origin and the destinations, in terms of culture and natural environment etc. that make for the greatest impact?

Personal Learning & Self Discovery

My research competencies and writing abilities have significantly improved which have made me a more successful environmental educator. I have become more confident and a more effective practitioner in the classroom, bringing to bear newly learned materials. I have tried to act as a role model for my students as well. I want them to see that it is possible to balance a career and family and still be a lifelong learner.

The next two sections outline what I think worked well during my learning process and in the research project I undertook. Finally, I indicate what could have worked better in the process of my learning and doing research.

What Worked Well

The Interviews

The interview process worked well. I was able to effectively learn about the impact of field trips using information analyzed using a modified version of phenomenology and grounded theory. I believe that this success can be traced to my experience in MEEC 620: Research Methods. In this class I was able to perform a trial
run employing the same interviewing style with similar questions. I took this format and adapted it for this research project.

I am also still amazed at the depth and richness of informant answers. They were very candid and did not seem to mind the personal nature of the interview.

The Coding

The coding process was not as daunting as first anticipated. Initially, I was hesitant to employ phenomenology or grounded theory because of the coding process. I was more interested in a simple mixed methods project where informants completed surveys, statistical analysis was employed and interviews were conducted with an unstructured coding analysis. I am amazed that the coding process actually worked. Once I started the process, the coding came easily but it required significant deliberation.

Supervisor Relationship

I am extremely pleased with my supervisor relationship that developed during this process. Prof. Femida Handy allowed me the freedom to take risks and explore what I wanted to understand as opposed to what she wanted to supervise. At the same time, she was always willing to listen, lend a hand, offer a suggestion and even physically make a correction. The student-supervisor relationship is a critical one and I am lucky that I had one of the best.
What Could Have Worked Better

The Interviews

At the same time, I believe that were some aspects of the interview process that could have worked better. I believe that I could have discovered the impact that field trips had on participant environmental values and awareness without employing direct or leading questions.

More Informants

I could have more successfully recruited participants for this study as I was only able to find seven. More informants may have led to more data and enriched these findings. This would have required additional effort in finding informants including following up on participation invitations that were not responded to. I believe that I left finding informants too long and always assumed that it would be easy to find as many informants as required.

Life-School Balance

I also believe that I could have balanced the demands of this research project and the demands of being a husband and new father more effectively. In order to write this report, I had to spend time away from my family and isolated at our family cottage. This meant many weekends away from the people I love. While it was an effective and efficient strategy for writing and completion, it was a painful experience for me and my family. This is time that I will never get back but I hope that in the future my son will feel a sense of pride in the fact that his dad has a Master’s Degree.
References

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APPENDICES

Appendix 1

Pre-Interview Activity

Instructions:

This pre-interview activity is designed to have you recall your Loretto Abbey and other related field trip experiences. Using your varied experiences as a guide, suggest what an overnight, nine to eleven day field trip would look like if you design it. There is no need to identify the country that would be visited (it doesn’t matter), cost, flights or any other logistical parameters. I am simply interested in what activities you would include in your model field trip. This activity and its follow up interview will help me design more effective field trips in the future for Loretto Abbey students.

Please fill in the worksheet using the space provided. You can use point form and subheadings. Please include activity types, not the specific names of any one activity (i.e. do not suggest day trip to Lake Whatchmacallit. It is better to suggest day trip to lake).
Do Overnight Field Trips Make A Difference

Appendix 2

Interview Questions Guide

1. Please tell me about yourself.

2. What was your childhood like? What do you remember?

3. Where did you go to high school?

4. Where are you currently enrolled? What are you doing?

5. What type of program are you in? What job?

6. What do you find challenging about your current student life/professional life?

7. When you think back on your life as a high school student, what are some of the things that stand out from your experience?

8. Do you have any experience with environment courses or programming?

9. And you mentioned ___________. What was that experience like?

10. You mentioned ______________. What is your attitude towards the natural world? What is your overall ethos in terms of your environmental ethic? Those types of things. How would you describe yourself environmentally? So how would you describe your environmental attitude?

11. And where did this come from? Where did you develop your attitudes from?

12. So I take it then the outdoors was important to you growing up. Did anything or anyone influence this attitude?

13. Thank you for sharing that information with me. I’m going to switch direction here for a little bit and get to the essence of the answers that I am trying to figure out for this project. But first, I would like some philosophical questions answered. Do you think that high school classes should include field trips to natural environments?

14. If yes, why? If no, why?

15. Did you attend any field trips in high school? If so, where did you go?

16. What do remember about the trips that you attended?
17. Okay, for each trip, identify one memorable experience that stuck out. Something that is a must for a field trip.

18. Is there anything that you think should have been included on the field trips that you went on that were not that would have improved your experience?

19. I’m going to prompt you here. You know there are many trips that Loretto Abbey took. Some of them are positive, some not so positive. Of the ones that you went on and enjoyed what made them valuable?

20. So __________________ are important things to students attending field trips.

21. In the pre survey I gave you prior to this interview, you identified that __________, ____________, and __________ are activities that you would include on an overnight field trip. Why did you include these activities?

22. Now, the trip that we attended together, is there something from that trip that you want to discuss? Looking back on this experience, is there something that popped out, that’s stuck in your mind?

23. Why?

24. Anything else?

25. Okay, so you then see that ____________________ very valuable, right?

26. Do you think that overnight field trips are valuable and memorable experience for students? Do you think that they contribute to environmental awareness? Improved environmental attitudes? Why/Why not?

27. Do you think that your overnight field trip experience was valuable to your experience as a student? To your environmental attitudes?

28. Do you ever think about this experience today? Has your attitude changed over the years?

29. If you were in an ideal world, and you were able to design your own overnight field trip for students what would you include?

30. If students attended this “fictional” trip, what do you think their impressions of it would be? What would you want them to remember about their experience?
31. Okay, good. Do you have any additional thoughts or ideas or commentary about overnight field trips and high school students?

32. Okay, do you have any questions for me?
Appendix 3

Letter of Invitation

6/12/09

Dear Graduate of Loretto Abbey,

I would like to invite you to be part of a research project entitled “DO INTERNATIONAL FIELDTRIPS MAKE DIFFERENCE? PERSPECTIVES FROM WOMEN WHO KNOW” that I am conducting. This project is part of the requirement for my Thesis class which is part of my Master’s Degrees at Royal Roads University. My name is Howard Cappadocia and my credentials with Royal Roads University can be established by calling Dr. Richard Kool at 250 391-2523 or e-mailing him at rick.kool@royalroads.ca

The objective of my research project is determine what longer term impact field trips abroad had on female graduates of Loretto Abbey. You will complete a pre-interview activity first. In this activity you will suggest to me what a field trip would consist of if you designed it. In subsequent interviews, I will examine your experience so that I can determine what former students remember and value about their own field trip experience. This will assist in designing field trips for future students. I will be submitting my final report to Royal Roads University.

My research project will consist of one written pre-service activity and at least one follow up in-depth but unstructured interview lasting at least thirty minutes.

Your name was chosen because you participated in at least one Loretto Abbey field trip designed by members of the Loretto Abbey Social Science Department. There is no foreseeable harm to you, the participant, no associated costs but a benefit might include gaining insight into the activities associated with the teaching profession.

Information will be recorded through the use of voice recordings and journal entries. Your permission will be sought for the destruction of the voice recordings immediately after the report is submitted.

There will be a loss of anonymity during the written and interview components of this case study, however, your contribution will be summarized in the body of the final report in anonymous format. At no time will any specific comments be attributed to any specific individual and your name will not appear in any documentation, unless you give written permission to do so. My thesis advisors and I will be the only people who have access to the raw data and identifying information. All documentation will be kept strictly confidential and kept in a locked cabinet. Once the study is complete, all forms of records will be archived and destroyed after five years.
Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes. You will get an additional note from me once the project is over and you are free to review the final report submission before grading. Since I no longer teach you, there is no conflict of interest for this study.

You are not compelled to participate in this research project. If you do choose to participate, you are free to withdraw at any time without prejudice and your individual contribution will be immediately destroyed.

If you would like to participate in my research project, please complete this form and send it back to me at:

Howard Cappadocia  
16 B Terrace Ave  
Toronto, Ontario  
Canada  
M2R 1E9  
416-227-0767  
h.cappadocia@rogers.com

If you intend to participate, please respond by signing this form and submit it before the end of Friday June, 26th. A digital signature will suffice.

Name: ____________________________

Email: ____________________________

Telephone: ________________________
Specific Curriculum Expectations

A student who attended a field trip that incorporated informant suggestions would cover the following expectations in CGF3M1:

- Describe the rates at which different physical processes occur (e.g., continental erosion, soil formation, tectonic uplift).
- Describe the rates at which different physical processes occur (e.g., continental erosion, soil formation, tectonic uplift).
- Interpret the spatial relationships between mountain ranges, occurrences of earthquakes, and tectonic plate boundaries and explain the processes believed to be at work.
- Explain the role that oceans and ocean currents play in moderating climate, using examples of major cities at similar latitudes (e.g., Edmonton and Edinburgh).
- Compare global distribution patterns of climate, soils, and vegetation with patterns in their local bioregion.
- Demonstrate an understanding that the world’s surface is dynamic, in that it is constantly being reshaped (e.g., mountain building, erosion).
- Demonstrate an understanding of the cycle of glacial advance and retreat and its relationship to natural variations in global climate.
- Explain the potential effects of long-term climate change (e.g., global warming) on different parts of the world.
- Demonstrate an ability to make observations and collect data in the field.
A student who attended a field trip that incorporated informant suggestions would cover the following expectations in GGW4U1:

- Explain why places and regions are important to the identities of selected human groups.
- Identify ways in which countries and regions of the world are becoming increasingly interdependent.
- Identify the social, economic, cultural, and political components of selected geographic issues.
- Identify similarities and differences in the economic and political aspirations of selected regional or cultural groups within different countries.
- Analyse the impact of urbanization and urban growth (e.g., destruction of wildlife habitat, traffic congestion, land use conflicts) on natural and human systems.
- If you were to look at CHW3M1, World History you would also see that these curriculum expectations are covered:
  - Identify the factors that tend to differentiate societies (e.g., external pressures, decisions of leaders, geography).
  - Demonstrate an understanding of the effects of isolation on a community (e.g., linguistic uniformity, cultural entrenchment, insulation from benefits of external innovative ideas, ethnic homogeneity).
• Demonstrate an understanding of the roles of selected individuals and groups in the process of change.

• Evaluate the contributions of selected individuals and groups to significant political events.

• Evaluate the role and importance of a variety of legends, myths, and traditions in the context of the diverse communities that produced them.

• Analyze the factors that influenced the development of a variety of forms of social structure.

• Evaluate the influence of religion on political structures in selected societies.

A student who attended a field trip that incorporated informant suggestions would cover the following expectations in CGC1D1:

• Recognize the similarities among cultures and the need to respect cultural differences.

• Distinguish between the characteristics of urban and rural environments.

• Describe the characteristics (e.g., complex, interconnected, life supporting, driven by solar energy) of natural systems (e.g., climate, biomes, the lithosphere, the hydrosphere).

• Describe the characteristics (e.g., complex, interconnected, affecting natural systems) of human systems (e.g., transportation, communication, infrastructure, energy networks, economic systems).

• Outline the criteria used to define selected Canadian ecozones and describe the processes and interactions that shape those ecozones.
• Explain how human activities (e.g., agricultural and urban development, waste management, parks development, forest harvesting, land reclamation) affect, or are affected by the environment.

• Describe how natural systems (e.g., climate, soils, landforms, natural vegetation, wildlife) influence cultural and economic activities (e.g., recreation).

• Explain how human activities (e.g., agricultural and urban development, waste management, parks development, forest harvesting, land reclamation) affect, or are affected by, the environment.

• Describe how natural systems (e.g., climate, soils, landforms, natural vegetation, wildlife) influence cultural and economic activities (e.g., recreation).

• Recommend ways in which individuals can contribute to the quality of life in their home, local ecozone, province, nation, and the world.