Parent, Teacher and Administrator Perceptions of the Benefits and Costs to Students Participating in an Integrated Program

Sandra Idone

A thesis submitted in partial fulfillment of the requirements for the degree of Master of

Education in the Faculty of Education

Lakehead University

Thunder Bay, Ontario

August 2005



Library and Archives Canada Bibliothèque et Archives Canada

Published Heritage Branch

Direction du Patrimoine de l'édition

395 Wellington Street Ottawa ON K1A 0N4 Canada 395, rue Wellington Ottawa ON K1A 0N4 Canada

> Your file Votre référence ISBN: 978-0-494-15621-6 Our file Notre référence ISBN: 978-0-494-15621-6

NOTICE:

The author has granted a nonexclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or noncommercial purposes, in microform, paper, electronic and/or any other formats.

AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.



Dedicated to all students and their pursuit of knowledge

Acknowledgements

I would like to thank Dr. Connie Russell of the Faculty of Education at Lakehead University. Throughout this entire process she has been a source of knowledge, support, laughter and encouragement. A sincere thank you goes to Dr. Tom Potter of the School of Outdoor Recreation, Parks and Tourism at Lakehead University for his time and his valuable feedback. I would like to thank the Department of Graduate Studies and Research in the Faculty of Education at Lakehead University for providing great instructors and an encouraging atmosphere – I truly enjoyed my time in the Faculty. Finally, I want to thank my family for their support of this academic undertaking.

Abstract

The primary purpose of this qualitative case study is to examine the benefits and costs to students participating in an integrated program. The data were collected through participant observation and informal interviews with parents, teachers, administrators and students. Results indicate that benefits to students consist of improved attendance, influence on postsecondary, career and lifestyle choices, increased environmental awareness or appreciation, and an increase in physical fitness, confidence, maturity, persistence, and social skills. Results also indicate that costs to students include scheduling and time commitments, having to live with the stigma of taking a "bird course," the inability to meet diverse learning needs, and high financial cost. Participants believe that benefits outweigh costs.

Table of Contents

Dedication	11	
Acknowledgments		
Abstract	iv	
CHAPTER 1: SCOPE AND PURPOSE	1	
Introduction	1	
Research Question	1	
Need and Significance	1	
Limitations	3	
CHAPTER 2: REVIEW OF THE LITERATURE	5	
Environmental Education	5	
Experiential Education	10	
Curricular Integration	12	
Integrated Programs	16	
Ontario Integrated Programs	20	
CHAPTER 3: METHODS	25	
Setting	25	
Case Studies	27	
Data Sources	27	
Sample	28	
Analysis	30	
Ethical Considerations	30	

CHAPTER 4:	RESULTS	32
Genera	l Perceptions	32
	Public Relations	32
	Why Students Enrolled	34
Benefit	ts	36
	Attendance	36
	Postsecondary, Career and Lifestyle Decisions	37
	Environmental Awareness and Appreciation	39
	Physical Fitness	39
	Confidence	40
	Maturity	40
	Persistence	42
	Social Skills	43
Costs		47
	Scheduling and Time Commitment	47
	Bird Course	49
	Diversity of Learning Needs	49
	Program Cost	51
CHAPTER 5:	DISCUSSION AND CONCLUSIONS	52
Genera	al Perceptions	52
	Public Relations	52
	Why Students Enrolled	53
Benefi	ts	53

	Attendance	53
	Postsecondary, Career and Lifestyle Decisions	54
	Environmental Awareness and Appreciation	54
	Physical Fitness	55
	Confidence	57
	Maturity	57
	Persistence	58
	Social Skills	58
Costs		60
	Scheduling and Time Commitment	60
	Bird Course	61
	Diversity of Learning Needs	61
	Program Cost	62
The ESP as C	critical Environmental Education	62
Conclusions		65
Recommenda	tions for Future Research	66
REFERENCE	ES	68
Appendix A:	Guiding Questions for Administrators	71
Appendix B:	Guiding Questions for Teachers	72
Appendix C:	Guiding Questions for Instructor of the ESP	73
Appendix D:	Guiding Questions for Guidance Counselors	74
Appendix E:	Guiding Questions for Parents of Students in the ESP	75
Appendix F: Letter of Introduction 76		

Appendix G: Consent Form

77

List of Tables

TABLE 1: Potential Interdisciplinary Learning Outcomes	13
TABLE 2: List of People Interviewed	29

List of Figures

FIGURE 1: Curricular Integration Around a Central Theme 14

Chapter 1: Scope and Purpose

Introduction

In this study, I will describe some of the benefits and costs to students participating in a secondary school integrated program. This is a case study of one integrated program, the Environmental Studies Program (ESP) at Grey Highlands Secondary School in Flesherton, Ontario. While some research has been conducted on integrated programs in Ontario, most have focused on student perspectives; this study therefore included other integrated program stakeholders, such as teachers, parents, and administrators.

Research Question

Generally, the purpose of this study was to determine what costs and benefits students experience in participating in a secondary school integrated program. That, in itself, is still a huge topic, so I have concentrated on one under-researched aspect of this topic:

 What are parent, teacher, and administrator perceptions of the benefits and costs to students in an integrated program?

Need and Significance

I initially became interested in research on integrated programs because of my own experiences with outdoor experiential learning. As I learned more about integrated programs through speaking informally to Lakehead BEd students who had experienced such programs when they were in secondary school or during their placements, talking to integrated program teachers, and through reviewing the literature, I found that most in Ontario are designed to be experiential with students spending more time learning outside the walls of the classroom.

At an integrated program teachers' meeting held during the Council of Outdoor Educators of Ontario (COEO) annual conference (Elrick & Russell, 2002), several teachers expressed their need for research in the following areas (Constance Russell, personal communication, October 2002):

- Longitudinal or follow-up studies of students who participated in secondary school integrated programs – Where are they now? Did the program influence their career choices or lifestyles?
- 2. "Benefits" studies How can we demonstrate these programs are good for students?
- 3. Re-entry into the normal classroom setting How do students adapt to the traditional classroom after participating in an integrated program?
- 4. Parents' observations of how students experience integrated programs
- 5. The co-operative education experience For those integrated programs which include a co-operative education experience (e.g., teaching younger students about environmental issues, interning in environment-related careers), how does that experience influence student attitudes towards school and career choices?

Obviously, no one MEd thesis could cover all these topics. I decided to focus on the second and fourth topics for a number of reasons. First, these topics were of the most interest to me personally. Second, a longitudinal study (#1) would take more time than the typical MEd allows for. Third, there has already been some research conducted on student perceptions of Ontario integrated programs (Horwood, 1994, 1995; Jupp, 1995; Russell & Burton, 2000). Fourth, with less room for choice in the new four-year secondary school curriculum, it may become increasingly difficult to justify the existence

of integrated programs (Barrett & Jupp, 2000; Elrick, 2000; Elrick & Russell, 2002).

Russell and Burton (2000) assert that while integrated programs continue to gain in popularity, the need for research on their benefits is much needed since integrated programs are sometimes met with resistance from parents, teachers and administrators because they deviate from traditional school beliefs and methods. Indeed they are sometimes labeled as 'bird courses' (Russell & Burton, 2000; Simms, 1996). Russell and Burton (2000) argue that there is a need for Canadian studies which parallel the research conducted in the United States by Lieberman and Hoody (1998) in which student benefits were well documented. While not on the scale of Lieberman and Hoody given this is a single case study, the results of this study will be of both scholarly interest and practical interest, especially to teachers already involved with or hoping to initiate an integrated program in Ontario. This study will also supplement existing research on the benefits of an integrated approach in general (Beane, 1991; Case, 1991; Fogarty, 1991; Horwood, 1994; Ivanitskaya, Clare, Montgomery & Primeau, 2002; Palmer, 1991; Selby, 1995).

Limitations

This study is limited, in part, by the requirements of the size and scope of a Master's Thesis. While I was granted access to ESP student marks and attendance records, my supervisor and I felt that working with this additional data would require more time than a master's level project can afford. This data can be analyzed in the future by me, or by another master's student interested in integrated programs. I would have also liked to further triangulate the interview data by including individual student perspectives, but considering that past studies have already accounted for student perspectives, my supervisor and I decided that interviewing administrators, teachers, guidance counselors, and parents would suffice for this master's research project.

There are certain limitations to a case study approach, including a small sample size and a rural sample that is not representative of the general high school population.

This is a study of one integrated program with its own variables (e.g., setting, instructor, program history). Therefore, there is limited generalizability.

The study could also be limited by my personal biases around integrated programs. From the literature review and through my past experiences, I have developed a positive opinion of integrated programs. I have tried to be careful and self-reflective to ensure that my personal biases did not overly affect data collection or analysis.

Chapter 2: Review of the Literature

This literature review is grouped into five sections: Environmental Education; Experiential Education; Curricular Integration; Integrated Programs; and Ontario Integrated Programs. While there are many similarities between environmental education and experiential education, the two are indeed their own fields. The section on curricular integration highlights past research on interdisciplinary curriculum planning and implementation. The section on integrated programs highlights some general characteristics of interdisciplinary programs in the United States and Canada. The final section, Ontario Integrated Programs, synthesizes literature on several programs operating within the province, including the Environmental Studies Program where I conducted my research.

Environmental Education

There is no one distinct way to describe environmental education; it is practiced in many different settings (both formal and non-formal) by organizations and people representing a wide spectrum of views. In Canada, school-based environmental education is just over 35years old (Raffan, 1990; Russell, Bell & Fawcett, 2000). Environmental education in Canada is largely influenced by individual province or territory's educational traditions, as well by geography and culture.

Not surprisingly, then, there are varying approaches to environmental education within the school system. Raffan (1990) argues that the principle goal of environmental education is to produce environmentally responsible and active citizens. Environmental education has often aimed to increase awareness of environmental issues and encourage responsible behaviour while providing a forum for students to think about solutions to these environmental issues (Gigliotti, 1990; Taylor, 1996). Others, however, argue that

the relationship between awareness and behaviour change is not that straightforward and argue for more critical approaches (Kollmuss & Agyeman, 2002; Russell, 1999).

To describe the diversity of approaches, Russell (1997) draws parallels between Jack Miller's (1993) analysis of approaches to education and approaches to environmental education. The three approaches to environmental education as classified by Russell (1997) are: transmission, transaction, and transformation. Russell (1997) states that traditional schooling typically uses the transmission method of teaching and learning. Students are given facts and information that is deemed important by an authority figure. This is done in indoor classrooms which serve to support the idea that humans are separate from, not connected to, the environment (Bell and Russell, 1999; Weston, 1996). Often in the transmission approach, content is separated into small, manageable units.

The transaction approach is likely the most popular approach to environmental education, at least in school settings (Russell, 1997). This approach is concerned with process as much as content and places emphasis on the individual learner. While students are encouraged to become responsibly involved in environmental issues, the focus remains on how humans should manage their natural resources. This approach to environmental education has

a firm recognition that nature is complex and environmental issues important, [but] nature is still seen primarily as a resource for humankind that can be rationally managed with the appropriate tools. The role of humankind is that of steward, hence this position remains anthropocentric; humankind is still considered separate from and superior to nature and must remain in absolute control. (Russell, 1997, p. 36)

Gigliotti (1990) argues that traditional environmental education has produced environmentally aware and concerned students, but they lack knowledge and critical self-reflection of their own role in environmental problems. Despite the intricate nature of environmental issues, Lousley (1999) consistently found students offering overly simplistic solutions to environmental issues. Unfortunately, much environmental education seems to disseminate from the idea that humans are different and separate from other living things, and often fails to show how humans and the environment are interdependent (Gigliotti, 1990; Orr, 1994).

If it is taught at all, environmental education is usually found in segregated geography or science courses. The explicit curriculum, alas, is often not pro-environment. For example, McElroy (1997) comments on a grade 6 social studies textbook description of farming methods in Latin America, which fails to link the method with the extinction of species and other environmental problems with global implications. McElroy believes that the fact that the grade 6 textbook glorified farming technologies and failed to link them to the extinction of species is simply the manifestation of pervasive anthropocentrism in society.

Traditional education, and even environmental education within the traditional school system, may foster anthropocentric attitudes; the way content is taught (e.g., inside, through books or dissection), how school is organized and implemented (e.g., separate subjects with no obvious relationship to one another; focus on abstract rather than real-world problems) can inadvertently become part of a hidden curriculum (McElroy, 1997). This hidden curriculum can be much more powerful than the official school curriculum (Weston, 1996). As Orr (1994) notes, students learn much more than

the explicit curriculum, they also learn from the process and organization of education; this hidden curriculum is decidedly not pro-environment (Orr, 1994).

In terms of extracurricular activities, Lousley (1999) found that the traditional school system's culture shapes the form of environmentalism deemed acceptable in schools. Many environmental programs claim to empower their students, but this potential student empowerment is undermined by the school culture. Lousley (1999) found, for example, that students exploring controversial environmental issues were redirected by supervisors and administrators and encouraged to focus on topics that would generate little or no controversy. Taylor (1996) concurs that too often, environmental education has been taught from an 'apolitical' and limited perspective. For example, recycling programs and Earth Day activities are popular examples of environmentalism in the schools. Lousley (1999) contends that there is a hidden curriculum

of surveillance, regulation, and interrogation which structured the [environmental] club experience [and] taught the students not to rock the boat.... [It hints that the liberal-humanist offer of tangible, 'empowering' results – results which do not alter the relations of power and authority within the school and do not take up controversial and challenging issues – amounts to a false perception of 'making a difference' and an education in naïve conformism. (p. 298)

Another issue facing environmental education is that whether explicitly or implicitly, traditional environmental education is chiefly directed towards white, middle-class citizens (Gigliotti, 1990; Lousley, 1999; Taylor, 1996). The traditional approach to environmental education is "ethnocentric and assimilationist" (Taylor, 1999, p. 3). Students that fall outside of the white, middle-class grouping, often disengage from traditional environmental education because it is of little interest or appears top be of

little relevance to them (Taylor, 1999). Taylor (1999) suggests that the problem lies within the widespread perception of the word 'environment.' She implies that this word calls to mind romantic images of rugged and pristine wilderness, which is simply not relevant (or accessible) to all people.

Other approaches to environmental education, critical of anthropocentrism and monoculturalism, are inspired by indigenous traditions about the earth and human relationships with it (Russell, Bell & Fawcett, 2000). Whereas some approaches to environmental education tend to view nature in terms of resources and as something that needs to be managed by humans, approaches inspired by indigenous traditions tend to view humans as part of the environment, rather than separate from it. Western traditions, writes Henley (1996), exude an attitude of dominance and control over the earth.

A growing number of environmental educators are influenced by critical approaches to environmental education. Environmental educators working from a critical stance often highlight the connections between environmental degradation, sexism, racism, classism and other social justice issues (Russell, Bell & Fawcett, 2000). This would mean, for example, not only looking at the environmental effects of toxic waste sites, but also where these sites are located; this will often lead to connections with classism and/or racism.

Critical environmental educators can be seen to be working from the third approach to environmental education described by Russell (1997) as transformative. The transformative approach is much more than the transmission of facts, but strives to promote personal and social change. Critical environmental educators do not indoctrinate their students; rather, they attempt to challenge their students to become critical thinkers while examining complex, and often controversial issues. These educators believe that

humans and the environment are mutually dependent and connected (Orr, 1994); they also value and nurture "healthy and sustainable relationships both among humans and between humans and other life" (Russell, 1997, p. 37). This type of learning is considered to be holistic.

Integrated programs generally adopt a holistic approach because the complexity of environmental issues requires an interdisciplinary approach (Orr, 1994; Russell, Bell & Fawcett, 2000). Russell, Bell and Fawcett (2000) write that

such integrated programs are lauded for promoting critical aspects of environmental education: grounding learning in authentic, "real-world" experiences; demonstrating links between subject areas; fostering student responsibility; increasing student-teacher contact; and improving relations among students. (p. 200)

Selby (1995) argues that holistic environmental education is not only *about* the environment, but it is also *for* the environment and taught *through* the environment. For example, students could learn *about* river systems *through* spending time investigating and observing a local river or watershed. They could investigate how human actions affect the local river system and connect those local human-river interactions to global human-river relationships. Through education and personal reflection, students should have the opportunity to think about their own role and responsibility in human-nature relationships; this would constitute educating *for* the environment.

Experiential Education

Experiential education is often associated with outdoor or environmental education. While outdoor and environmental educators tend to approach teaching and learning experientially, it is important to note that just being outside does not mean that

experiential learning is taking place. While research demonstrating the effectiveness of experiential education techniques has been increasingly seen in academic literature, this approach has not been adopted by mainstream educators (Lindsay & Ewert, 1999).

Many believe that experiential education, at least as it is practiced in North America, has its roots planted in John Dewey's progressive movement (Lindsay & Ewert, 1999). This movement was very much learner-centered and valued the role of individual experience in the acquisition of knowledge. Some would consider Indigenous peoples a wonderful example of a culture of experiential educators (Simpson, 1998). Experiencing the natural world was the primary way in which Aboriginal cultures educated their children (Hall, 1996; Simpson, 1998). Simpson (1998) writes that the "knowledge systems of Aboriginal peoples have long employed the principles of experiential and holistic learning to teach younger members of the community" (p. 229). Aboriginal children learned by example, by experimenting, by solving their own problems, and by making their own mistakes, all under the careful guidance of their family and the elders (Hall, 1996).

Experiential education strives to actively and emotionally engage students in meaningful situations (Boud, Cohen & Walker, 1993; Chapman, McPhee & Proudman, 1992). Emotions, feelings, relationships, and personal interests are all crucial elements in the learning process. According to Boud, Cohen and Walker (1993), experience is the focal point of all learning processes because the individual builds on existing knowledge, which was gained in the context of his/her own past experiences.

Community service projects, work-study programs, and cooperative education all incorporate experiential education. Experiential education ideally engages students in real-life situations. Students explore questions that are meaningful and relevant to them.

Experiential learning allows students to discover knowledge through exploration, thinking, and more importantly through their own feelings and experiences. Experiential learning is not simply learning by doing, but rather it is a purposeful approach to learning with a specific goal (Chapman, McPhee & Proudman, 1992). One of the most important parts of the experiential learning process, one that is frequently overlooked, is reflection on past experiences (Boud, Cohen, & Walker, 1993). This is where the learner self-evaluates and consciously thinks about the experience and his/her involvement in it; this is when the "doing" occurs, or the experience is transformed into knowledge.

In experiential education, the teacher usually assumes the role of a facilitator; s/he provides support for students and helps them make connections. Experiential education can be regarded as a set of critical relationships – between students and their learning environment, students and themselves, and between students and teacher (Chapman, McPhee & Proudman, 1992).

Curricular Integration

Interdisciplinary approaches are generally more holistic than traditional education. Ivanitskaya, Clark, Montgomery and Primeau (2002) assert that interdisciplinary approaches may not always be as effective as single-subject courses at uncovering specific subject matter, but they encourage higher order thinking. This relates to the pedagogical characteristics of interdisciplinary programs: more personal construction of knowledge, emphasis on coping with difficult tasks and the search for multiple solutions, focus on the evolving connections among ideas, and interpretation and application of knowledge across several contexts. (p. 98)

Ivanitskaya et al (2002) summarize several researchers' descriptions of interdisciplinary learning outcomes in Table 1 below.

Table 1 – Potential Interdisciplinary Learning Outcomes

Author	Outcome
Ackerman (1989)	Flexible thinking Ability to generate analogies and metaphors Understanding of the strengths and limitations of disciplines Ability to assess values to knowledge gained
Ackerman & Perkins (1989)	Enhanced learning and thinking skills Improves higher-order cognitive skills Improved content retention Capacity for proactive and autonomous thinking skills
Field, Lee, & Field (1994)	Ability to tolerate ambiguity or paradox Sensitivity to the ethical dimensions of issues Enlarged perspectives and horizons Ability to synthesize or integrate Enhanced creativity, original insights or unconventional thinking Enhanced critical thinking Capacity to perceive a balance between subjective and objective thinking Humility, sensitivity to bias, and empowerment Ability to demythologize experts

(from Ivanitskaya et al., 2002, p. 100)

Successful curricular integration requires careful planning; it is not merely achieved by combining subjects (Case, 1991; Horwood, 1994). Having a central theme or issue is considered essential in effective curriculum integration efforts (Beane, 1997; Clarke & Russell, 1997; Drake, 1991; Ivanitskaya et al., 2002; Selby, 1995). Selby's (1995) example of integrating several subjects through one broad and central theme is seen below in Figure 1.

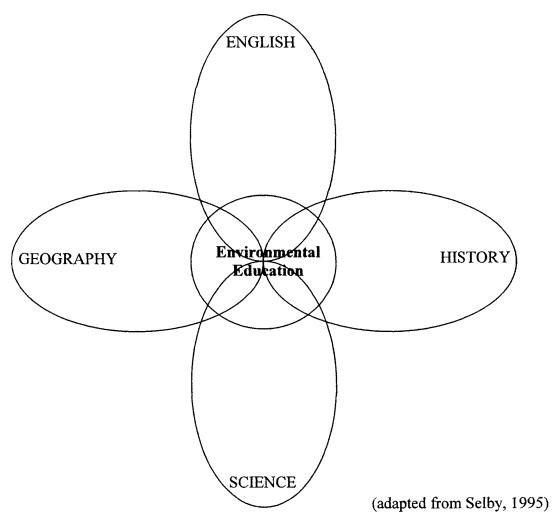


Figure 1 – Curricular Integration Around a Central Theme

What is important to note about this diagram is the way it illustrates four subjects converging and intertwining through the theme, environmental education, which is located in the centre. In this case, environmental education is being used as the central theme for integrating geography, English, science and history. Any broad theme could be placed in the centre circle to represent the integrating theme and any subject combination could be sited in the outer circles. Moreover, there need not only be four subjects for integration; more or less than four is certainly possible.

The boundaries set by individual subjects can limit students' understanding and makes it harder for them to make connections (Beane, 1991). Traditional secondary

school, where students learn subject matter from separate disciplines in 40 to 70-minute fragmented blocks, can actually hinder student learning (Beane, 1991; Case, 1991; Fogarty, 1991; Horwood, 1994; Ivanitskaya et al., 2002). In the traditional, fragmented curriculum, relationships and connections between subject areas are often only implied and not witnessed or experienced (Beane, 1991; Fogarty, 1991). Students essentially have to rely on their teacher's assurance that what they are learning is relevant and useful to them. Traditional schooling encourages students to develop a disjointed view of the curriculum and learning, and therefore, of the world around them (Fogarty, 1991). Too often, students are unable to see the relevance of the theory they learn within the restrictive boundaries of traditional schooling. How are students expected to understand the importance of math, for example, when it is only used in math class answering questions from a textbook?

When faced with a real-life situation, it is very unlikely that one could decipher how much math, history, or language was used (Beane, 1991). We draw on the knowledge we have; we do not think of our knowledge in 40 to 70-minute time blocks. Case (1991) contends that "many students perceive subjects as arbitrarily arranged and rigidly separated; consequently, they have no idea how one subject connects with or could contribute to an understanding of others" (p. 219). An integrated curriculum is typically knowledge-rich and it allows students to apply their knowledge in concrete, meaningful situations (Beane, 1991). Curricular integration can add meaning to learning, and gives students a chance to apply their knowledge (Palmer, 1991). As well, students may find curricular integration empowering; it gives them more of a voice in their education with a focus on students constructing their own meanings rather than adopting the meanings teachers impart to them (Beane 1991). As Beane (1991) argues, this

"redefines the role of the teacher from knowledge gatekeeper and meaning maker to guide and facilitator" (p. 12).

Integrated Programs

As indicated in the literature reviewed on curricular integration, it helps to have a theme for successful curricular integration. Many integrated programs across the United States and Canada use the environment as their integrating concept. A significant study on the benefits of interdisciplinary programs was published in 1998. Lieberman and Hoody (1998) studied 40 schools in the United States that used the environment as an integrating context (EIC). (Many of the programs that use the Environment as an Integrating Context (EIC) are similar in nature to what many people in Ontario call integrated programs.) EIC programs, according to Lieberman and Hoody (1998):

- break down traditional boundaries between disciplines;
- provide hands-on learning experiences, often through problem-solving and project-based activities;
- rely on team teaching;
- adapt to individual students and their unique skills and abilities; and,
- develop knowledge, understanding, and appreciation for the environmentcommunity and natural surroundings. (p. 1)

EIC-based learning is not restricted to solely learning about the environment or developing a pro-environmental ethic. The environment is simply used as an integrating factor – a framework that allows students to experience real-world interdisciplinary learning (Lieberman & Hoody 1998).

The Lieberman and Hoody (1998) report describes the educational benefits of EIC-based learning in eight key areas: general educational benefits; thinking skills;

interpersonal abilities; math; science; social studies; language arts; and revitalized teaching.

Another benefit of EIC programs is that they help develop better thinking skills (Lieberman & Hoody, 1998). Students in EIC programs proved to be better higher-order thinkers and questioners than students in corresponding traditional programs. Lieberman and Hoody (1998) ascertained that EIC students had an increased ability to think creatively, engage in systems thinking, and were better strategic thinkers and problemsolvers.

Another example is that EIC students were more successful in mathematics than their traditional school counterparts (Lieberman and Hoody, 1998). The authors explain that this phenomenon is owing to the fact that EIC students learn and apply mathematical concepts in the context of real-life settings. This lends to more effective skill mastery and allows students to more readily understand abstract concepts through concrete examples. EIC students are able to see mathematics in relation to other disciplines, which assists them in taking an interdisciplinary approach to problem-solving (Lieberman and Hoody 1998).

Through real-world settings and learning experiences, students in the EIC were more capable of establishing connections; this in turn generated greater interest in and excitement for the social studies. Lieberman and Hoody (1998) concluded that

when EIC students apply their social studies skills to everyday situations, they begin to recognize the relevance of their decisions to their community and their environment. As a result, the EIC approach helps to produce active, involved citizens who develop a deeper understanding of their roles and responsibilities as members of a democratic society. (p. 53)

Students in the EIC programs were given numerous opportunities to communicate with outside agencies in the community as part of their programs. Interest and success in language arts, such as reading, writing, and oral communication, was also higher for EIC students than for students in the traditional classroom setting (Lieberman & Hoody 1998). One science teacher expressed his fondness of the integrated approach, saying that students "remember things better and for a longer period of time" (Lieberman & Hoody 1998, p. 6). Students in the EIC are fully engaged with scientific knowledge and processes; this led to EIC students scoring higher on three out of four standardized science tests. On the fourth achievement test, students from the EIC and students from the traditional classroom had equal scores (Lieberman & Hoody, 1998, p.6). The integrated approach to science allows students to more readily see scientific connections in the world around them.

Students in EIC programs also had stronger interpersonal abilities than traditional school students (Lieberman & Hoody, 1998). They had better communication skills and they were better equipped to work in group settings. EIC students also showed more compassion and civility to their peers and others around them.

EIC programs showed general education benefits as well, such as improved attendance. Four separate EIC groups reported a 1-11% higher rate of attendance than their traditional school counterparts. Lieberman and Hoody (1998) believe that the enthusiasm generated in environment-based education programs coupled with the authentic experiences also helped minimize discipline problems.

Revitalized teaching, the eighth key benefit Lieberman and Hoody (1998) identified in their report was based on reports from teachers and administrators. An increased enthusiasm and commitment for teaching was expressed by EIC teachers and

administrators. Lieberman and Hoody (1998) concluded that there were more intellectual opportunities for teachers to explore their disciplines and differing teaching styles.

Teachers in EIC programs also established better working relationships with their students and their colleagues.

EIC programs, including the integrated programs in Ontario, employ problem and project-based learning. Instead of learning about ecosystems from a textbook, students go outside and explore the local ecosystems; students look at the real-life ecosystem and examine how it is connected to the local community and economic activities. Most integrated programs incorporate what is called "minds-on learning," which allows students to tackle authentic and complex problems. Not only do problem- and project-based activities encourage higher level thinking skills, but because they are authentic experiences, they also help "convince students their studies are meaningful and important" (Lieberman & Hoody 1998, p 14).

The idea of authentic learning experiences and problem/project-based learning is part of almost all the literature on integrated programs. For example, Russell and Burton (2000) examined student perspectives of the Environmental Studies Program (ESP). Students in the ESP felt that their learning had a purpose and therefore it was meaningful for them. Students in the ESP undertook large projects that focused on real problems and solutions. In another Ontario-based integrated program, the TAMARACK program, students worked under the supervision of a local scientist as part of their science expectations, and contributed to local publications as part of their English curriculum expectations (Horwood, 1994, 1995). This learning structure allows students to see the purpose of their learning and makes their experiences feel more authentic (Horwood, 1994; Jupp 1995; Lieberman and Hoody, 1998; Russell & Burton, 2000). Students were

generally cognizant of traditional schooling's isolation and seemingly irrelevance to the real world (Russell & Burton, 2000).

The learner-centered and constructivist approaches used in these types of programs permit students to answer their own questions and pursue their own interests; these approaches help establish a more personalized learning experience for students than do more traditional approaches (Lieberman & Hoody (1998). Lieberman and Hoody (1998) maintain that "teachers who use learner-centered and teacher-facilitated instruction pay closer attention to individual student's academic abilities, learning needs, and interests" (p. 16).

Ontario Integrated Programs

Integrated programs in Ontario are typically organized as four or five-credit packages. Many integrated programs use the environment as an integrating factor, but this is certainly not a prerequisite. Programs offer a variety of combinations of courses. Geostudies is an integrated program that operates in Barrie, Ontario. In 1996, it offered a four-credit package of physical geography, environmental science, outdoor education and co-op credits (Simms, 1996). In 1995, students in the Bronte Creek project, run by the Halton Board of Education, received credits in environmental science, physical education, leadership, and personal lifestyle management (Jupp, 1995). The TAMARACK program at Mackenzie High School in Deep River combined environmental science, English, and physical education, and peer-helping credits (Horwood, 1994). In 1998, the Roots of Courage/Roots of Change program (ROC), at Mayfield Secondary school offered senior English, geography, physical education, and leadership skills credits (Bozzelli, 1999). It should be noted that programs no longer offer environmental science credits since the Government of Ontario removed it from the curriculum; most programs

have replaced environmental science with a geography course (resource management) or locally-developed courses which still allow for some environmental science to be taught.

Integrated programs are free from typical time constraints because the same group of students and one or two teachers are teamed up for an entire semester. This in turn allows for deeper learning experiences outside the boundaries of the four classroom walls and greater flexibility. While the school provides a good home-base for many integrated programs, anywhere from 40-80% of the learning experiences occur outside and/or away from school premises (Horwood, 1995). In the ESP program, for example, 75% of the semester takes places outdoors, learning during activities such as:

Water testing, winter and summer camping, rock-climbing, cross-country skiing, snowshoeing, hiking, and a 16-day wilderness canoe trip in Temagami. Assignments include journal keeping, developing activities and lesson plans for co-op teaching, researching careers, final exams, as well as researching and presenting reports to the class on environmental science topics and various environmental issues. (Russell & Burton, 2000, p. 292)

By spending time outside and away from school, Horwood (1995) affirms that students experience three critical factors which are: inescapable consequences; personal growth; and a sense of wonder. Inescapable consequences occur in experiences outside the school because the students are dealing with real-life situations. When out in the wilderness, the effects of a poor decision or lack of problem-solving skills are often immediate; the students cannot evade the consequences and must learn how to deal with them.

Through their interactions with others and continuous reflection on their experiences, students are able to learn more about themselves (Jupp, 1995). The Bronte Creek Program alumni testified that their experiences in the program changed them and that those experiences have remained with them and, in some way, influenced their lives. Many students affirmed that the Environmental Studies Program provided an avenue for personal growth, something that is often lacking in the traditional classroom (Russell & Burton, 2000). Student in the ROC program reported that they were surprised at their own capabilities (Bozzelli, 1999).

Horwood (1995) defines a sense of wonder as "the student's experience with feelings that go beyond words to express...it leaves the student with a memorable sense of themselves within the world. The students are touched emotionally by such experiences in ways that enhance every aspect of their learning and memory" (p.17). It is the presence of these three critical factors that Horwood (1995) believes lead to the six fundamental principles of a successful integrated program. The six fundamental features are: experiential learning; whole process, which has students involved in as much of the learning process as possible; authenticity, which has students engaged in real-world experiences; challenge, which calls on the students to push his/her limits and think innovatively; responsibility, where the students feel accountable to their peers and teacher(s); and community, where students feel a sense of camaraderie with the other students in the program and their school environment (Horwood, 1995). Bozzelli (1999), who conducted research on the ROC program, attests that the six components described by Horwood (1995) were successfully present in that integrated program.

Simms (1996) suggests that there are three components to the Geostudies program: theoretical; experiential; and practical. Russell and Burton (2000) believe that

integrated programs share four important characteristics: experiential learning; authentic learning experiences; holism; and human-nature connections. Both Horwood (1995) and Russell and Burton (2000) incorporate holism, authenticity, and experiential learning in their descriptions of integrated programs. Although many integrated programs use the environment as their integrating theme, Russell and Burton (2000) were the only authors that listed human-nature connections as an important feature of integrated programs.

Integrated programs, such as the ROC, treat students as active participants, rather than passive listeners (Bozzelli, 1999). Students reported learning more in the ROC course, an integrated program, than in their regular, traditional schooling (Bozzelli, 1999). They learned about teamwork, communication, and research skills.

According to Russell and Burton (2000), student responses from questionnaires indicated that experiential learning, interpersonal skill development, and personal growth were significant in the Environmental Studies Program. Many students indicated that the experiential nature of the ESP allowed them to learn more and actually retain the knowledge. The questionnaires also suggested that most students found experiential learning, which is one of the fundamental elements of the integrated program, to be more effective than more traditional approaches to teaching and learning.

Russell and Burton (2000) report that the Environmental Studies Program helped break down social barriers and develop crucial interpersonal skills. One student attested that "there were so many different 'groups'. Half of the class I would never have talked to before this course. Now...they are my friends" (p. 296). Bozzelli (1999) describes a similar sense of community that developed among students and teachers involved in the ROC program. Students expressed how they experienced deeper relationships with both their peers and their teachers (Bozzelli, 1999). Bozzelli (1999) asserts that students

involved in the ROC integrated program felt a sense of responsibility, not only to themselves and their teachers, but more importantly, to their peers. She writes "nearly all students reported that they felt they had more responsibility in the ROC programme than they had in any other courses" (p. 26).

When a sense of community is developed, people within the group often feel comfortable enough to share a little more, push their limits, and take risks, both emotional and physical (Horwood, 1994). Also, because of the intensive group-focus in much of the course-work, students must learn to effectively deal with their disagreements and differing perspectives. Not only does cooperative learning allow students to develop crucial interpersonal skills, but it also helps students to work with and appreciate different perspectives (Lieberman & Hoody, 1998).

The literature review indicates that there are many potential benefits to integrated programs. The research on integrated programs is limited in that it has typically focused either on programs in the United States or, in the case of Ontario programs, on student perspectives. Also, there appears to be no research on any costs to students for participating in these types of programs. This research study addresses some of these gaps by examining parent, teacher, and administrator perceptions of the benefits and costs to students of participating in an integrated program.

Chapter 3: Methods

To reiterate, in this study, I was interested in determining both the benefits and the costs of student participation as perceived by parents, teachers and administrators. I conducted a case study of the Environmental Studies Program (ESP) at Grey Highlands Secondary School in Flesherton, Ontario.

Setting

The ESP is an integrated program in which students earn four grade 12 credits that are taught with an environmental focus. Grey Highlands Secondary School is a rural school located 150 KM northwest of Toronto (Russell & Burton, 2000). Approximately 900 students attend Grey Highlands Secondary School; 95% of the students are bused to the school. In general, most of the students live on farms, or in small towns of less than 2500 people and most are of European ancestry.

Given that most students that attend Grey Highlands Secondary School are bused, there are limited opportunities for students to engage in extracurricular and out-of-classroom activities. The creation of the four-credit Environmental Studies Program is inspired by this reality. One of the rationales for the program is to provide out-of-school learning experiences for their students (Russell & Burton, 2000).

The ESP began in 1993. A teacher at Grey Highlands Secondary School, John Burton, created and teaches the ESP. Burton graduated from Lakehead University with a M.Sc. in Sedimentary Geology and a B.Ed in Science and Geography.

In February of each year, students at Grey Highland Secondary School must choose their courses for the following year. The 30-40 students who select the ESP must complete an application form which includes: parental permission; medical information; information about previous relevant experience; and reasons for wanting to enroll in the

course. The application process is mostly to check for prerequisites; it has never been used to 'weed' students out because the need has not arisen (Russell & Burton, 2000). Final enrolment in the ESP in 1997-2004 ranged between 22 and 26 students.

The ESP is designed so that students may see more clearly the interconnections between subjects and content, and between content and the real world. A combination of traditional academic methods and hands-on, practical outdoor skills are used. Many classes are held off of school property where students travel to both local and remote locations around Ontario. The students spend approximately 75% of the school day out of the classroom learning about the environment through their experiences and spend every day for the entire term together. On average, three quarters of their time during the semester is spent with John Burton, and one quarter of their time is spent with another teacher, Rich Fletcher, who is a physical education teacher.

Students participate in many different learning activities, including: winter and summer camping skills; cross-country skiing; snowshoeing; tree planting; first aid and CPR training; hiking and trail maintenance on the Bruce Trail; rock climbing; and a 2-week canoe trip to Temagami (ESP, 2005). Through these activities, the students learn about such things as forestry, water quality, leadership, navigation, group dynamics, cooking, and ecology. For example, students compare and contrast the water chemistry of lakes in remote parts of Northern Ontario and more frequented lakes in Southern Ontario. They also study the biotic and abiotic communities in these natural locations. Students are constantly conducting investigations of a variety of topics in their surroundings and following up with academic research.

Another component of the ESP is the co-operative education experience. Students organize and instruct a program in environmental education and outdoor recreation for

local elementary students. Each year, over 1000 students from kindergarten through grade 8 are taught by the students in the ESP.

Case Studies

Merriam (1998) describes the qualitative case study as a phenomenon with obvious boundaries. In this instance, the case is the Environmental Studies Program and the boundaries are set by the scope of the program. When a researcher wishes to study a phenomenon whose factors and setting should not be separated, a case study design is especially appropriate. This design allows for a more holistic approach to the study.

Merriam (1998) writes that case studies are particularistic, descriptive, and heuristic. Particularistic means this type of design focuses on one particular phenomenon which in this instance is the ESP; this approach allows a researcher to better determine relevant issues that may arise within the case. Descriptive means that the results of this type of study should be information rich because case studies are often conducted over a period of time and include as many variables as possible. Finally, case studies are heuristic, which means they have the potential to contribute new insights to or confirm previous knowledge of a phenomenon.

Data Sources

Most case studies employ a variety of methods within one research setting (McMillan & Schumacher, 2001). The data for this study were collected from a variety of sources. I interviewed five teachers, an administrator, and 3 parents from Grey Highlands Secondary School. The interviews were recorded and ranged in duration from approximately 30 minutes to 1.5 hours. I used interview guides (see Appendices A, B, C, D and E), except for the informal discussion with the ESP students. This helped me follow the same path of inquiry and broach the same subjects with each participant

(Patton, 2002). I felt that a standardized interview would have been too rigid and formal. Conversely, I felt that I lacked the experience and interviewing skills to ensure a degree of consistency if I conducted informal conversational interviews. I thus prepared four lists of guiding questions for administrators, teachers, the instructor of the ESP, guidance counselors, and parents.

I also spent some time with the students in the ESP at Grey Highlands Secondary School so that I could gain a sound understanding of the workings of the program. Prior to data collection, I joined the group on four day trips and two overnight canoe trips, including the much-anticipated 2-week Temagami wilderness canoe trip. Finally, I conducted an informal round-table discussion with the ESP students on the last day of class. Even though the focus of this study was not on student perceptions, I had developed a strong rapport with the students and felt that any information they could offer in regards to their ESP experiences would be beneficial, if only for the purpose of triangulating the data.

Sample

I used both probability and non-probability sampling to select my participants (Patton, 2002). Some participants were selected purposefully. Patton (2002) states that samples that are purposefully selected are often information-rich and are cases "from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (p. 230). I thus purposefully interviewed an administrator, a guidance counselor and a co-op teacher. I felt that they could share interesting perspectives on the benefits and costs to students in an integrated program. Administrators assume responsibility for all students and programming within their organization; they also deal with budgets, discipline, and student placement. Guidance counselors also handle student placement

and often advise students on their academic options. Since co-op credits are earned through participating in the ESP, I felt that the co-op teacher could be another information-rich respondent. Finally, I deliberately interviewed John Burton, the teacher, creator and coordinator of the ESP.

The parent and teacher participants were selected randomly. Random sampling can help control selection bias (Patton, 2002). I acquired a list of parents who had children enrolled in that semester's Environmental Studies Program and randomly selected four participants. I also interviewed two other staff members. I asked John to compose a list and separate it into three sections: teachers known to support the ESP; teachers known to oppose the ESP; and teachers neutral to the ESP. From the supportive and non-supportive lists, I randomly chose one teacher each to interview. The interviews were conducted after the Temagami field trip, between Monday June 16, and Monday June 30, 2003. A summary of interviewees is below in Table 2.

Table 2: List of People Interviewed

Position	Number
Guidance counselor	1
Administrator	1
ESP Instructor	1
Co-op Teacher	1
Teacher thought to support the ESP	1
Teacher thought to oppose the ESP	1
Parents	3
Total Educators:	6
Total Sample Size:	9

I did not include the approximately 30 students in my sample as my discussions with them were more to get a feel for the program and to identify any glaring discrepancies between their perceptions and the perceptions of the adults around them.

Analysis

The data generated from the interviews were analyzed inductively. Formal data analysis took place when nearly all the data had been collected. Data analysis involved the following steps:

- 1. The interviews were transcribed verbatim from the taped interviews.
- I read through the transcripts several times, making notes in the margins before coding every line of the transcripts.
- 3. Once the transcripts were coded, I then grouped the codes into categories.
- 4. The categories were grouped together to form themes.

Ethical Considerations

I obtained informed consent from all participants in this research study. The introductory cover letter and consent form can be found in Appendices F and G. I explained my role as a researcher as well as the nature of the fieldwork to all participants (Schram, 2003). The participants understood that there were no risks involved in this study and that their anonymity and confidentiality was assured. One exception is teacher John Burton who waived this. Naming Burton and the school does not betray the anonymity or confidentiality of the other participants as there were multiple parents, teachers and administrators who I could have interviewed. Participation in this study was completely voluntary and participants had the right to withdraw at any time. I obtained permission from the Bluewater District School Board, the principal of Grey Highlands Secondary School and John Burton in order to conduct my research with the ESP

program. All data collected from this study will, in accordance with the ethical guidelines for Lakehead University, be stored for seven years at Lakehead after which it will be destroyed.

Chapter 4: Results

The focus of the results is teacher, parent and administrator perceptions. Where appropriate, student input from discussions are added in order to enhance understanding. In order to protect anonymity, I will be grouping the co-op teacher, the counselor and the administrator feedback together under the phrase "teacher."

I chose not to report the findings by participant group because the assessments are very similar. Instead, I chose to integrate their comments and organize this section by themes. Three themes emerged with several sub-themes: 1) General Perceptions: a) Public Relations; and b) Why Students Enroll; 2) Benefits: a) Attendance; b) Postsecondary, Career and Lifestyle Decisions; c)Environmental Awareness and Appreciation; d) Physical Fitness; e) Confidence; f) Maturity; g) Persistence; and h) Social Skills; and 3) Costs: a) Scheduling and Time Commitment; b) Bird Course; c) Diversity of Learning Needs; and d) Program Costs.

General Perceptions of the ESP

Public Relations

The ESP is well known to the Grey Highlands community and in the wider community. This is largely because many of the learning activities are meaningful community projects. For example, a parent stated that,

John does a lot of community things, where he goes out and does work for the Bruce Trail Association and they build bridges and they work in Flesherton Hills and they do those kinds of community things. So even though it's through the schools, they do those things with the community of schools, so it sort of becomes a small Outdoor Ed centre down here because ours is 2.5 hours away.

Similarly, one teacher said that the ESP has "done a lot of work out in the back 40, turning it into a big conservation area. So outside of the school it [the ESP] has a pretty high profile." Eight people interviewed stated that the ESP has brought recognition to itself and to the school. One teacher believes that the ESP "has become one of Grey Highland's trademarks."

The program's creator and instructor, John Burton, also has a very good reputation. He has maintained his academic associations and writes for academic journals and local media outlets. Teachers and parents believe that John is integral to the program's success and positive public relations. Two educators and two parents identified the crucial characteristics and skills John possesses are enthusiasm, knowledge of the environment, passion both for the environment and for teaching, strict guidelines, organization skills, and attention to detail. The educators and the parents felt that a program of this nature is strongly dependent on the leader. One parent said "We've been really fortunate with Mr. Burton...Obviously the person that is going to be there doing that is going to be there because they love it. There is so much time and effort into what he prepares, it just blows me away, just right from the heart." Burton is very committed to this program, often going to great lengths to make it more financially viable for students. For example, Burton earned his bus driver's license so that he can charter a school bus and transport the students to and from wherever they need to go; this cuts down on the high cost of hiring a driver. I have witnessed the many hours the ESP consumes of Burton's personal time. The level of dedication Burton shows towards the ESP can only be that of someone who truly loves what he is doing and firmly believes in its value.

Most students in the ESP think that the program attracts "all kinds of people." The administrator and two teachers agree, saying it attracts a wide array of students, with a variety of post-secondary goals. The administrator said:

...over the 4 years I've seen a huge cross-section of kids in that program. So it's unlike, let's say senior university-bound biology, where its a pretty narrow range of kids. Whereas he gets a wide range of kids, a mix of boys, girls, university, college-bound. There are probably more university and college-bound kids in the program, but there are work-place bound kids and there certainly are kids who ...have had their academic and behaviour difficulties before going into the program

One student had a concern about financial cost, however, noting "You have to have 450 bucks to spend." One teacher added that "you would think it would be your better academic students because of the course fee and so on it would likely be your upper-middle class. It is not."

Some students decided to take to course because older siblings have taken it; others because of feedback they've received from older friends. Others may be attracted to the program because they are fed up with the regular classroom setting. One student's mother explained how her son "had to get out of the classroom" because the classes "were driving him crazy."

Two teachers from Grey Highlands have such positive impressions of the ESP that they have or are encouraging their own children to take the course. They both believe that the ESP is a valuable opportunity. Another teacher has already been successful in convincing his child to take the program; he said, "I'm very pleased that we're lucky

enough to have a program like this in our school, pleased enough that I dragged my own daughter out of her own school, a perfectly good school, because of this program and you know, because I believe in it."

One common characteristic mentioned by teachers, parents and echoed by students was that ESP students were either physically fit or had an interest in physical challenges. One explained that her child "has always been into physical fitness and whatnot and this was another desire with this program because it gave her that extra little mile to push for." Another parent described her child as being interested in outdoor activities, like hunting and fishing, so the course provided:

...something entirely different and it also presented a challenge for him, and that's the kind of thing he likes. He didn't look at it as, "Oh good, I get to take ESP and I don't have to write essays and I don't have to do this and it's a real slacker course." Some kids might, but he looked at it as a real challenge, a real physical challenge.

Two teachers and one parent also agreed that ESP students tend to have adventurous or outdoorsy personalities.

One teacher also thinks that ESP students "tend to be leaders in the school." This teacher also believes that students "are attracted to the program because they like working with younger children and they tend to be active in extra-curricular activities and so they tend to have good leadership qualities and I think the program probably builds on that."

Benefits

Attendance

Through his observations over the years, John has come to believe that student attendance improves during the ESP. Another teacher agrees with this observation and attributes it to the strict rules John has in the program. For example, students are required to phone prior to the first school bell if they will be absent, just as if they were an employee, and excessive lateness results in a set number of push-ups. The administrator also thinks that there is improved attendance for some students; he said "I think [being in the program] really does help their difficulties... Without ever having crunched any numbers, [I think] that it's had a positive impact on those kids."

One parent, whose child had missed a number of school days prior to ESP due to chronic illness related how this was the very first semester in high school that her child had not missed any school. She emphatically believes that the ESP improved her son's attendance record. "There were days when he said, 'If I had to go to regular school, I wouldn't go.' But he dragged himself out, partly because of the support within the group." The same parent went on to say how other parents of students in the ESP were:

...surprised at how willing their kids were to go to school. We had a lot of snow days here. We had an awful lot this year. Kids were so disappointed whenever they missed anything. Well, because you know, "We were going to this and we can't do this, this isn't right. I want to go to school I want to do this". That's very common. When we had our Temagami meeting that was a common comment from many of the parents, that the kids just didn't want to miss school.

Postsecondary, Career and Lifestyle Decisions

The ESP has influenced the choices of postsecondary, career and lifestyle of a number of students. John reported that several students have entered post-secondary programs related to the things they learned about in the ESP. For example, one exchange student is now attending a university in his own country, taking civil engineering and John noted that

...when they talk about environmental impacts of dams on rivers, he's got a real solid background and he said it's only because of that course. You can do the academic stuff, but people that focus only on academia, lack in so many other ways. This is a nice balance.

One guidance counselor observed that many of the ESP students she's seen over the years have "a much [greater] appreciation of the outdoors and environmental issues and it makes them want to go on and do something at the post-secondary level that would be related to that." Another teacher said that over the years he has seen many ESP students

...become interested in pursuing careers in Environmental Studies because of this. I could name a few just off the top of my head. Actually, they've gone to the Lakehead and graduated in Environmental Studies. They come back here, and sometimes we've got people on staff who came from other ESP programs and now they're teaching Science or what-have-you.

Some participants also reported that ESP has inspired some students' career choices. A large part of the ESP is the cooperative portion, where different elementary schools from around Grey County take turns visiting Grey Highlands Secondary School to participate in a day of outdoor environmental learning. The ESP students are separated

into task groups and each student has a turn at being the leader at least once during the semester. On these days, the ESP students run a quasi environmental centre. The ESP students are responsible for researching and delivering lessons about various environmental issues in an effective manner to the elementary school children. The ESP students also handle the day's logistics from supervision to lunch preparation. One teacher said that the co-op portion of the program is a formative experience. She's known several ESP students that have gone on to become teachers:

I don't think too many of them considered teaching, but some come away quite enthusiastic about working with young children. Maybe they hadn't thought of [that] before. And they get a challenge of a teacher working outdoors as a teacher and the four walls aren't there to confine them. So they do learn some good skills working with children there.

For those students who did show interest in pursuing teaching, one teacher said that the ESP helped them develop necessary skills like flexibility, communication, and management. The latter, she feels is especially challenging because they have to learn how to keep the attention of their young listeners outside the confines of four classroom walls.

Two parents and one educator also indicated that participating in the ESP had an effect on students' lifestyle choices. One parent stated that, "there's been a lot of Flesherton students that have really grown from this and carried on and have found their niche" Another parent was impressed at the amount of excitement the program generated in her son. She believes this experience has introduced him to a new world of recreational activities that he is likely to participate in years from now.

Environmental Awareness and Appreciation

Three of the educators interviewed argued that the ESP instilled a great appreciation for the outdoors and developed a necessary environmental awareness. Some feel that is crucial that students develop concern for the environment and were grateful that the ESP helps fulfill that need. Another teacher said that the program exposes students to so many beautiful natural sites that students cannot help feeling a sense of awe, nor can they help developing an appreciation for something so impressive.

Sometimes, students would happen upon a camp site that had been negatively impacted by previous human visitors. I personally witnessed the angry reactions of several students at the lack of respect for both the site and future user groups.

Students agreed that their awareness and appreciation of the environment increased, although some did report that they did not actually enjoy managing the recycling program. They learned some things through the recycling portion of the course, but many did not enjoy sifting through other people's garbage. Still, as one student said, working in the school recycling program "makes you more conscious of what you're throwing out." One student commented that he did not find any of the environmental learning very worthwhile, so there may be some disjunction between teachers' perceptions and student perceptions. Interestingly, this issue did not come up at all in the parent interviews.

Physical Fitness

All parents reported that their children became more physically fit as a result of the ESP. They saw a real progression over the course, especially leading up to the Temagami trip. One parent remembers her child's first adventure with ESP:

They hiked Old Baldy and I remember her coming home and saying, "Oh my gracious, are we out of shape." Then as it continued on, the next thing I hear is they're walking around the track with these canoes on their heads and I'm going, "Boy, have we ever come a long way."

John Burton likes to demonstrate to students how their fitness levels have improved by taking them on the same hiking trip at the beginning and end of the semester. At the beginning of the semester, the class hikes up Old Baldy; many of them are panting heavily and become physically exhausted. At the end of the semester, the time it takes to complete the hike is nearly cut in half, with some of the students running up the trail and laughing at how out-of-shape they were months before.

Two teachers interviewed also said that in addition to becoming more physically fit, students are expected to lead a healthy lifestyle. For example, Burton encourages those students who smoke to quit the habit. The students also agreed, saying the course "makes you physically and mentally stronger."

Confidence

All people said that the ESP helps develop students' self-confidence. One parent stated that she has seen a visible boost in her child's feeling of self-reliance:

It made him feel a lot better about himself and a lot more confident that I think he will do better in everything. I've just seen him more outgoing and willing to take risks and do things. There are things like, I'm sure he will go rock climbing in Guelph again and about the second thing out of his mouth was, "we have to organize a canoe trip up to Algonquin." He never ever would have thought of doing anything like that before. So it's opened up a lot of doors for him.

Similarly, another parent reported seeing the same growth in feelings of self-assurance and empowerment in her child:

You know, I think one of the neatest things, before there was a whole lot said, she said to me, "You know, Mom, I feel like I can go out and do anything now." And I said that is the most wonderful thing to hear from an individual at your age because that's the way you have to feel, to just say, "You know what, I can just go out and tackle anything." And it was so sincere, you just knew that what she had gained from it was just, I've just seen a big growth spurt, emotionally and mentally.

An administrator noticed the same phenomenon:

There are people that go into it that are self-confident already, but there are others that go into it, typical teenagers, sort of struggling with their own emotions, their own identity, their own issues and so on, and they come out of it feeling like they've really accomplished something, feeling like they know themselves better, really feeling good about themselves.

These sentiments were echoed in my discussion with students. One student summed it up well by saying, "this class doesn't make you feel small, it makes you feel big...in the regular class, you're like a number."

Maturity

All parents reported seeing notable changes in their children post-ESP. One parent says that her son has "just been more relaxed and happy" and even went as far as to say "as far as I'm concerned, it has saved [her son's] academic career." One parent recounted how her child specifically described the ESP experience as being a "transformation."

Teachers also report seeing a change in students. One teacher described how she has had

several ESP students come to her and tell her that the ESP has "totally changed them." Most students corroborate this. One student said, "You know, when we came into this course some people couldn't deal with certain things and now you have the mental capacity to do it," while another student added that, "if you've got something to do now you just do it." All parents and two teachers reported seeing a development in maturity in students after they had completed the ESP program. All parents noticed that students had become better problem-solvers and acted more responsibly than they had before the ESP. One teacher argued that the program:

...teaches responsibility in a different way because you're responsible often for others ... A lot of these younger teenagers are responsible to themselves only. But not when you've got 10 or 12 kids and you have to have a lesson ready and so on, it teaches responsibility like that.

Two parents described the course as being an "amazing character building program." All the field trips ESP students take during the semester, including the culminating trip, in which the students organize and attend a two week wilderness canoe trip, are real-life situations. What is important to note about these trips is that the students are far from passive listeners; rather, they are very much active participants, often bearing the responsibility for the trip's success. The students organize and pack all the food for the trip; they also take care of food preparations and camp duties during the trip.

Persistence

All parents mentioned that the ESP was challenging for their children. The students had to learn to persevere and work together. One parent said, "They're at it for 5 months. Some days are going to be really bad and you don't want to be out there because it's going to be windy and snowing and -22. You take the good with the bad and so they

learn a lot about basically toughing it out without quitting." All teachers and parents said that the students had to learn how to effectively solve problems.

Two parents made reference to a specific event on the Temagami trip: the "Barn" portage. Prior to experiencing this sometimes treacherous 2-hour portage, it was a source of apprehension for many of the students. After completing the portage in record time and in the pouring rain, it was arguably one of the proudest accomplishments for many of the students during the Temagami trip. One parent laughed about how her daughter "brought home her socks from the one portage [the Barn] to show me and dried them one night and put them in her journal." Another parent said the Barn portage was all her son could talk about. She thought "it was so neat because they [the students] had worked through it together and not against each other. And I know the highlight of that whole thing was [the] Barn portage."

Social Skills

All people interviewed, as well as the students, talked about the need for developing social and teamwork skills in the ESP. Several teachers, parents, and students said that because the students and teachers are together for an entire semester, they must find a way to work and coexist with all the different personalities. As one student said,

You have to learn to get along with people, like not only classmates, even the teacher. You have to get along with everyone because we spend the whole day with them.

Another student stated it bluntly, "If you didn't socialize, you were going down." One teacher argued that one of the benefits of this program is that students learn to become more open and direct and better communicators. Learning these skills, according to all of

the parents, the four teachers, and the students, is partially due to the special bond that is formed between ESP students.

A parent credits the ESP with helping her child's social growth. She witnessed her son develop a close knit group of friends that has given him "social supports that he just didn't have before...So I've seen a lot more social activity." Another parent attested to the positive social connections developed within the ESP; she recounted how her child said that "the bonding was unbelievable...you became so close, like brother and sister, that you pretty well were able talk about anything you felt and yet it was accepted and no grudge was held so you were able to express your feelings with each other." Yet another parent recounted how her son, who lives with a chronic illness, said that if he had to go to school and sit in the regular classroom setting, he wouldn't go,

...but he dragged himself out, partly because of the support within the group. You know, in the [regular] classroom, you get goofs and idiots that are sort of working at cross-purposes; there isn't that group feeling and with ESP there was so much, like you could go with your t-shirt and your sweatshirt and sit in the corner and feel gross all day and still be part of it and accepted and not hassled.

As the students get to know each other better and social walls start to crumble, ESP students often get together on weekends and after school. It's important to note that it is not just three ESP students getting together on weekends or after school, but the *whole class* is invited. I witnessed this on several occasions during my time with the ESP group. One instance had the group going to play golf at a local golf course; another had the students going for a barbeque at one of their classmate's houses; and on yet another occasion, the students organized a sleepover at a classmate's house. The group abounds with inside jokes, playful nicknames, and fond memories.

John talked about how, in the first week of class, the students automatically sit with the one or two people they know prior to entering the ESP. As a group, they talk about their goals for the week and most say it is 'to get to know other people in the program." He says, "when I mention that goal at the end, they just laugh. Now they're like best friends." One parent commented on the development of "lifelong friendships" to describe the connection his daughter feels towards her classmates, and a student later used the same term.

Several of the educators and parents agree with John's assertion that the program is set up to foster social growth among the students. The elementary model, where students are with one teacher and one class for the entire semester, is instrumental to the set-up of the ESP. As John says,

...they have period A, they can't skip period B and come back period C, because they have the same teacher and they know I'm going to call. I treat it like a job. And if you're not coming into school, what would you do if you're not going into work on a Saturday morning? Well, you would call and I expect the same here. And if they don't, then there are consequences.

Several teachers and most of the students specifically made reference to the sense of social responsibility ESP students feel towards their peers. There was a general consensus among the students that they felt others in the group were depending on them and that their participation and attendance was needed. One student said that it is necessary to "pull your weight" or risk disappointing others in the group. Another student said,

...On the day that someone was missing and they were leader [of a teaching day with the feeder schools], everyone else pulled together to do their job for them.

And it was, weird that they weren't there. I mean you get so used to each other, it was like, whoa, where is that person?

All students agreed that this sense of obligation towards their peers was a definite benefit.

One teacher explained this sense of obligation by comparing it to a work placement, where it is not only the teacher who has expectations. In this case, the expectations are coming from fellow students and "there's a sense of supporting the team." Another educator believes that the very nature of the ESP with goals like a 2-week wilderness canoe trip requires students to be willing to commit to the team because a trip of that magnitude needs everyone willing to do what needs to be done to accomplish the group's goals. Overall, then, there was much positive feedback on the program. All parents interviewed offered positive feedback about their child in the ESP and would recommend the program to others. Indeed, all parents and two of the teachers interviewed expressed regret that not every student was able to fit the ESP into their school timetables. One parent admitted that she was pleasantly surprised at the outcome of the course; she said

to be quite honest, I knew it would be a hard course, but I wondered...just how much they would push them, and how beneficial it was going to be at the beginning. You know you're always kind of like, well, let's see how this goes, you don't want to set your expectations too high. After seeing they did it at a very good pace, didn't rush them too hard, let them each endure at their own fitness level, and yet were very sure when they went to Temagami they were prepared and those that weren't prepared were not able to go. And when we went for the orientation and the video, I came away and I was a little nervous about Temagami. I thought, oh boy, what if she gets out there and thinks, oh boy, I can't

do this, not that she indicated that, but this is quite a thing, going out in the bush and not coming out to civilization for 12 days. It's been wonderful. I wish there was something like this when I went to school. I don't think there was one negative thing in it. I really have to express that. I just don't think there was one negative aspect to it.

Costs

Scheduling and time commitment

Two educators stated that because the ESP is a 4-credit package, it is difficult for students to fit into their overall secondary school schedule. The condensed, 4-year curriculum has exacerbated this problem. The guidance counselor confirmed that the university-bound students have the most difficulty fitting ESP into their schedules because they have specific high school course requirements for the university programs they wish to enter. Even when planning ahead, it is difficult for students to get their required courses and do the ESP because subjects are only offered in certain periods and certain semesters; this is compounded by the fact that it is difficult to know what the timetable will be like in a student's grade 11 year when they are only in grade 9.

Four educators worried that the ESP segregates the students from the rest of the school culture during that term. One teacher said,

...Because it's a 4-credit package, it's pretty isolated as far as mixing with the school." Another teacher said, "Sometimes you forget the fact that they're even here...it can create very intense relationships in a lot of ways... I think there are some social issues that come up sometimes...the segregation from the rest of the school. They are separated from their friends.

This is one of the reasons John has chosen to have the ESP run the school's recycling program; John argues that it gets the students back inside the building and visible to the rest of the school.

Still, one educator considers the separation of the ESP from the rest of the school "the number one reason, other than John, that this program is successful. Because it's a block...when you think about it, it makes sense. You can just pick up and go and you're free to plan the day." He compares the ESP model to other integrated programs that run for only one period and points out the many difficulties of organizing field trips and gaining permission for the students to miss other classes. John is seen as separate from the other teachers during the term ESP runs. As one teacher noted, some other teachers on staff are perhaps a little resentful of John and "the cozy little set-up that he's got out there. He kind of, like, he gets to run his own show."

Two parents, two educators and several students spoke of the commitment needed to participate in the ESP course. Both parents and one educator suspect that some students enroll in the course thinking it will be an easy credit. These students may not have fully understood the level of commitment demanded by the ESP and these parents and teacher worry that such students will not prosper in the course and may eventually end up dropping out of the program.

The teachers noted that because of the off-site learning and time commitment required in the ESP, some students are forced to choose between the ESP and participating in extra-curricular sports or clubs. John tries not to force the students to choose between one or the other, but tries as much as possible to make the schedule work so that the students do not miss out on either. Depending on the sport or club and the season that it occurs, however, it is not always possible to work the schedules out.

There was a general consensus among the students that the ESP is indeed very demanding and as a result, they have had to give up certain things. Many students reported that they have lost touch with friends outside the program. A couple of students mentioned that during May and June, the travel-intensive months for the ESP, they barely saw their families, friends, or significant others. Several students mentioned having to take a lot of time off from their part-time jobs, and one student even reported having to quit her job because her employer was not willing to grant her the time off she required to participate in the ESP.

Bird Course

There are some who consider the ESP to be an easy semester or a 'bird course.'

One parent confessed that when she told other parents that her child was taking the ESP,

"some of them looked at you, like, 'Oh, really.' A high-achieving student reported that
when he informed one of his former teachers that he was taking the ESP, that teacher
responded with, "Oh, you've decided to take a semester off." Two students confirmed the
idea of the ESP being a 'bird course;' one expressed that the semester seemed like a
holiday to him, while another agreed and said, "Yeah, it's a total bird course."

Diversity of Learning Needs

One parent felt that the instructors, both male, related to the boys better than the girls. This parent suspected that the nature of the program draws more males than females and that it is important to be more inclusive so that females felt more welcome. The parent said, "I would like a little more sensitivity towards females, rather than a one-size-fits-all."

A concern brought up by two educators and two parents was the participation of students from the Developmental Learning (DL) unit. DL students have exceptionalities,

such as learning disabilities, behavioural problems, or special physical needs. Depending on the severity of the student's exceptionality, an educational assistant could be assigned to help the student participate in the program. One parent mentioned that the ESP students had to shoulder some responsibility for or supervise the students from the DL unit to ensure their safety and that of the group; he said, "That's not what [ESP students] are in the program for. They're not in the course to look after Jen¹ or Joe²...it jeopardizes the program."

Parents and some teachers were concerned that not only did participation of certain DL students compromise the safety of the program, but it compromised the overall experience of the program for the ESP students. One parent said:

For example, one of the ESP students was saddled with a DL student for the entire snowshoe hike, which lasted for 5-6 hours, and the DL student was constantly stepping on the other student's snowshoe, causing it to come off, and sitting and crying and holding up the group and misbehaving and having tantrums and so on. Similarly, another parent said that:

at one stage in the ESP program, they had kids from our developmentally challenged unit in doing some of the day activities, so some of them with physical disabilities, some of them with emotional/intellectual disabilities...And it wasn't successful, from [her son's] point of view, because it was an infringement on that group. You know, these were kids that couldn't hold their own, you know carry the load that everyone else did. Not that they resented them. Some of the activities it was fine, there was an EA with them, but it just it would be someone new

¹ Real name was not used

² Real name was not used

coming into the group and leaving and coming in and leaving. It was somewhat disruptive for [her son]... And some of the other kids felt somewhat like that as well. Now I don't know if all of them did by any means.

One teacher was also concerned that the ESP might become a 'dumping ground' for students who had behavioural problems or other exceptionalities, and that the standards of the ESP would then have to be modified or lowered.

Program Cost

Three educators felt that the financial cost of the program, which at the time was \$450, excludes some students who could benefit from the program. One student even said the program is known as "the rich kid's course." In addition to the initial fee, one parent pointed out that there are also ongoing costs, such as bug shirts, rain suits, and other equipment: "no one item is all that expensive, but we probably spent about \$200 or more. If you've never gone camping before, you might need a lot more than that."

Despite the financial cost associated with the ESP, many students still felt that they got their money's worth. The students felt they did a lot more than \$450 worth of activities during the semester. When pressed on whether they felt the cost prevented some students from participating in the program, one student said, "Well, no, I think it narrows it down good because you're only going to spend the money if you actually want to do it. Four hundred and fifty bucks is a lot for anybody, but if you spend the money its cause you want to be here." A teacher corroborated that statement by saying, "It's not a bad thing either to have to invest in something. It really adds value to it."

Chapter 5: Discussion and Conclusions

This discussion will follow the order of the three themes and subsequent subthemes that emerged in the results of this study. The first theme, General Perceptions of the ESP, included the participants' perceptions of the ESP within the community, overall public relations, and reasons for enrolling in the ESP.

The second theme reported benefits to students who participated in the ESP, included: an increased willingness to attend school; an influence on postsecondary, career and lifestyles decisions; a development of environmental awareness and appreciation; an increase in physical fitness; an increase in confidence; an increase in maturity; the ability to persist and overcome challenges; and the opportunity to develop social skills and connections.

The third theme, the costs to students who participated in the ESP, emerged from the study and included: conflicts in scheduling and a demanding time commitment; having to deal with the stigma of the ESP being a 'bird course'; the diversity of learning needs within the program; and the financial cost of the program.

I would like to reiterate that this study focused on parent, teacher and administrator perspectives, with some corroboration from students.

General Perceptions

Public Relations

The ESP is a popular program. The program is involved in many community projects and thus gains recognition of itself as well as the school. John has a very good reputation and has worked hard to raise the profile of the program by maintaining academic and media contacts. Much of an integrated program instructor's time goes into developing connections with community organizations and publicizing the program

(Comishin et al, 2004). John is integral to the program's success and positive public relations. He possesses the crucial characteristics and skills needed to run a program of this nature. Comishin et al (2004) write that while there are many teachers interested in starting integrated programs, there are a limited number of teachers that actually possess the necessary skills and qualifications.

Why Students Enroll

The ESP does not attract just any type of student. Many ESP students are either physically fit or have an interest in becoming physically fit. Many students decided to take the program because of feedback they have heard from older siblings or friends who have previously participated in the ESP. Many teachers have had children in the program or are encouraging their children to enroll in the future. These findings were also seen by Russell and Burton (2000).

Benefits

Attendance

Parents and teachers think that being in the ESP has changed student attitudes towards attending school. Parents believe that their children do not want to miss school during the ESP because they are excited about the activities during the semester. Parents from the ESP said that they were pleasantly surprised at how much their children wanted to go to school. There were several snow days in which buses were canceled to Grey Highlands, and therefore any student not within walking distance could not come to school; parents remarked how disappointed the kids were when they could not attend school because of weather conditions because they didn't want to miss out on the planned activities. As a secondary school teacher myself and having experienced several snow days at my own school, I can attest that most students feel anything but disappointed

when they hear that buses are canceled and they do not have to go to school! If anything, students are excited because they get to sleep in and have a 'holiday.' Lieberman and Hoody (1998) also found that students participating in integrated programs showed improved attendance records, so this may be an outcome shared by these programs.

Postsecondary, Career and Lifestyle Decisions

Over the years, teachers and parents have seen many former ESP students enrolled in post-secondary environmental or outdoor studies related programs. Teachers explained this observation by saying that the ESP helped students develop an appreciation for the environment and the issues surrounding it. Environmental education encourages students to become responsibly involved in environmental issues (Raffan, 1990; Russell, 1997). Enrolling in a post-secondary program or choosing a career in environmental studies shows that many ESP students become interested in continuing their environmental education and becoming environmentally responsible citizens. For others, instructing the elementary students prompted some students to pursue careers in teaching or child care. Parents agreed that the ESP had an effect on student lifestyle choices.

Russell & Burton (2000) also found students interested in discussing the impacts of the program on future decisions, and Jupp (1995) also found that students of the Bronte Creek Integrated program reported that their experiences in the program influenced their lives in some way. Longitudinal or follow-up studies would be useful in determining whether this is a widespread phenomenon.

Environmental Awareness and Appreciation

Environmental appreciation was something most teachers considered ESP students gained from participating in the ESP. Lieberman and Hoody (1998) wrote that

EIC programs help students develop knowledge and appreciation for the environment. Holistic environmental education is about, for and through the environment (Selby, 1995). Through reflection, students should have the opportunity to think about their own role and responsibility in fostering positive human-nature relationships; this would constitute educating *for* the environment. During the ESP, students learned about various environmental issues and they were also exposed to many natural sites in Ontario. This seemed to make many students more careful about their own environmental impacts on the environment. When students saw first-hand the negative human impact on the natural sites they visited, they grew more conscious of their own actions and how they affected the world around them.

Russell, Bell and Fawcett (2000) write that, among other things, critical environmental education grounds student learning in "real-world" experiences, such as the Temagami wilderness trip, and it has the potential to foster a sense of responsibility. Horwood (1995), too, discusses the importance of "authenticity" in integrated programs. Having developed an awareness of the environment and how they impact it, students became more responsible in their actions towards it. Another example of this emerged when the students managed the school's recycling program. Admittedly, many of the students disliked sifting through their schoolmates' garbage; however they agreed that running the program made them more conscious of their own waste habits.

Physical Fitness

Another interesting finding was that teachers, parents and students reported an increase in physical fitness as a result of students participating in the ESP. This makes sense, as the ESP is a very physically demanding course, in that students are physically active every day and often for the better part of a day. If a student is fully participating in

the program, s/he could not help but notice an improvement in physical fitness level. The degree of improvement would obviously depend on how active the student was pre-ESP. The ESP has a gentle progression of the level of fitness intensity. The many challenges during the semester serve to mentally and physically prepare students for the culminating two-week wilderness trip, which in itself is a huge mental and physical challenge.

Horwood (1995) argues that challenge, which is when student limits are pushed and comfort zones are extended, is one of six fundamental components of an integrated program. A Physical Education credit contributes well to the ESP package given students spend 75% of the semester outdoors doing activities that include rock-climbing, cross-country skiing, snowshoeing, hiking, and canoeing (Russell & Burton, 2000).

Time in natural environments also provides opportunities for authentic experiences, where there are real-life consequences for students. According to Horwood (1995), authenticity is another fundamental feature of an integrated program. This is true for the ESP. For example, on the Temagami trip, one of the options for students is to complete a 2-hour portage or go over a waterfall. The real-life consequence of going over the waterfall surpasses the trepidation a student might feel about completing a 2-hour portage. Thus the real-life activitites with the real-life consequences facilitate the physical and mental challenges that students experience. After an entire semester of working towards meeting various physical challenges, it is not surprising ESP students actually become more fit. The Bronte Creek Project, The TAMARACK program and The ROC program also offer a Physical Education credit as part of their integrated program package (Bozzelli, 1999; Horwood, 1994; Jupp, 1995).

Confidence

As mentioned above, fundamental to the ESP are the real-life situations and consequences the students encounter. Among the "real" situations students experience are the cooperative teaching days with the elementary school students, the management of the school's recycling program, and participation in the various field trips, including the 2-week Temagami trip. Beane (1991) states that an integrated curriculum can allow students to apply their knowledge to real-world meaningful situations; this can be empowering for students because they gain the opportunity to construct their own meanings. As Lieberman and Hoody (1998) explain, problem- and project-based activities, which are fundamental to the ESP, are real experiences that persuade students that what they are doing is not only significant, but also contains value. This finding is confirmed in the work of Russell and Burton (2000) where ESP students reported feeling that the learning they engaged in served a purpose and thus it contained meaning. During the ESP, students successfully tackle situations they never would have believed they could; this results in a sense of accomplishment and pride and can explain why all the adults in this study witnessed an increase in confidence in ESP students.

Maturity

According to teachers and parents in this study, ESP students displayed an increase in maturity level over the course of the program. They tended to approach situations rationally and became better at resolving conflicts at home. This finding is similar to a finding in the Lieberman and Hoody (1998) report where they found EIC students had an increased ability to think creatively, engage in systems thinking, and were better strategic thinkers and problem-solvers.

Parents and teachers, and, interestingly enough, students all felt that the ESP helped increase maturity. The students believe they are more efficient than pre-ESP and that they have an improved mental capacity to deal with various situations. In a previous study of the ESP, the researchers found a similar emphasis on personal development (Russell & Burton, 2000).

Persistence

The ESP is a mentally and physically challenging program. The students had to learn to persevere and work together to get through many trying situations. Again, authenticity was an important part in this process (Horwood, 1995). Ivanitskaya et al. (2002) write that while interdisciplinary programs may not uncover as much specific subject matter as single-subject course, they encourage higher order thinking skills, which allows students to better cope with and persevere in difficult tasks.

Social Skills

Another benefit to students participating in the ESP is that they form strong social connections with other students in the program. Most students only know one or two others on the first day of the program and sometimes they only know these others by name. Because the ESP involves group-based learning and problem-solving, the nature of the program would not permit a student, however shy, to sit in the corner and not speak to others. As time in the program passes, bonds seem to increase to the point that the whole class often gets together outside of school. An interesting point to note about the ESP students and the friendships formed is that these students are from different social groups and high school cliques and have varying academic ability, yet within the first month of entering the program all social walls practically vanish.

Russell and Burton (2000) report that the ESP helped break down social barriers. Bozzelli (1999) also described how the ROC program helped unite students from different social groups. By the end of the semester, many students feel like they have made "lifelong friends." This finding is described in the literature as 'camaraderie' where participants form deep bonds with one another and feel a sense of community towards others in the group (Bozzelli, 1999; Horwood, 1995). Horwood (1996) lists camaraderie or a sense of community as another of the six fundamental features of an integrated program. Horwood (1994) suggests that students who experience a sense of community are more likely to challenge themselves by taking risks. Challenge, as discussed earlier, was another of the six key features of successful integrated programs (Horwood, 1996). Generally, positive relationships, are seen as crucial elements in the learning process (Boud, Cohen & Walker, 1993; Chapman, McPhee & Proudman, 1992), and this is a particular strength of integrated programs.

Another benefit resulting from participation in the ESP is social responsibility. Teachers and students reported that students feel accountable not only to themselves, but to everyone in the group. This sense of responsibility integrated program students feel towards their peers was also found in a study of the ROC (Bozzelli, 1999). Students feel that they are an integral part of the group and that their presence and participation is both needed and appreciated. The students specifically described this feeling of obligation as a benefit. There was a sense of trust among the group that everyone would do what was required to get the day's tasks completed, whether it was instructing the elementary children or packing for a field trip. The students felt accountable to a real-life user group (the elementary students) and a very strong sense of responsibility towards their peers.

Responsibility towards peers is another one of the six features Horwood (1996) considers key in order for an integrated program to be successful.

During the ESP, the students develop strong social skills and other transferable life skills, such as communication and problem-solving. Being in a group-based program, students must collaborate and learn to respect different perspectives. During the course, students become more direct in their interactions with others. In a study by Russell and Burton (2000), ESP students reported developing significant interpersonal skills. Overall, Lieberman and Hoody (1998) found that EIC students had better communication and problem-solving skills than their traditional school counterparts.

Costs

Scheduling and Time Commitment

While this study has found there are many benefits to students participating in an integrated program, I have also found there to be some costs. One of the main costs to students is the amount of time and level of commitment they must devote to the ESP.

Integrated programs typically spend anywhere from 40-80% of their time outside or off of school premises (Horwood, 1995). Some students had to give up extra-curricular clubs or sports; others had to quit part-time jobs; and others lost friends outside of the ESP.

Some teachers believe, especially in May and June, which are the travel intensive months, that the ESP segregates students from the rest of the school culture. This is not just an issue for students. Comishin et al (2004) writes that integrated program teachers reported feeling physically and emotionally drained at the end of the semester because of all the extra duties they have to do in order to keep their programs running smoothly.

More research is needed on this topic.

Bird Course

Another cost to students is that some of them have had to endure mockery from certain people, whether parents, other students, or teachers, that the ESP is an easy ride. In the literature on integrated programs, the term 'bird course' was used to describe a stigma sometimes attached to integrated programs (Russell & Burton, 2000; Simms, 1996). Whether it is accurate or not, this notion of an integrated program being an easy feat seems to be present among certain parents, students, and teachers. Those used to traditional schooling methods often have trouble seeing the pedagogical value in integrated programs (Comishin et al, 2004). It is important to note that only one student made reference to the environmental studies program being easy. With the exception of this student, the term 'bird course' came up in the group discussion with the students and in a parent interview not because the students and the parents themselves believed the course to be easy, but because they were telling me of certain students, teachers and parents outside of the ESP who mocked them for being affiliated with the program. Diversity of Learning Needs

The Developmental Learning (DL) unit at Grey Highlands sometimes has students partially or fully participating in the ESP. This has been received with mixed feedback from parents, students and teachers. Because of safety issues, some students require more supervision than others. Parents felt that without additional supervision, certain DL students created safety hazards and at times hindered the experience of the other students. The ESP poses challenges for the safe and successful inclusion of exceptional students. This is not to say, however, that inclusion is not possible in an integrated program. Sapon-Shevin (2001) writes that inclusion is not easy and that even

the best teachers require support and help integrating exceptional students. This topic, too, deserves further attention.

Program Costs

There is a financial cost to students wishing to participate in the program. Not only is there an initial course fee, but students often need to buy suitable outdoor clothing, a sleeping bag, hiking boots and various other program-related gear. Even with the high financial program costs, which many of the students covered through jobs of their own, the students maintain that there is a lot of value for the money they spend. Some people have referred to the ESP as "the rich kid's course." There is a concern that the cost of the program is excluding certain students from participating in the ESP because they cannot afford it. Environmental education has traditionally been directed towards white, middle-class citizens (Gigliotti, 1990; Lousley, 1999; Taylor, 1996). It is important to make these types of programs accessible to all students. Comishin et al (2004) write that funding is a challenge facing integrated programs because of all the field trips and equipment required and that most integrated programs charge students a supplemental fee to help cover operating costs.

The ESP as Critical Environmental Education

When I began this project, I wondered whether the ESP would measure up to the ideals of critical environmental education as described in the literature review. In terms of curricular integration, most of the literature emphasized the need for a central theme (Beane, 1997; Clarke & Russell, 1997; Drake, 1991; Ivanitskaya et al., 2002; Selby, 1995). The ESP uses the environment as a theme to integrate physical education, cooperative education and sometimes geography or science credits.

Experiential education is fundamental to the ESP. Experiential education actively involves students in meaningful situations where emotions, feelings, relationships, and personal interests are all important elements of the learning process (Boud, Cohen & Walker, 1993; Chapman, McPhee & Proudman, 1992). ESP students are continually engaged in meaningful, real-world learning experiences. Another important part of the experiential learning process as described by Boud, Cohen and Walker (1993) and that is used in the ESP is reflection on past experiences. ESP students are required to record their experiences and thoughts in an ongoing journal.

Russell (1997) described transmission, transaction and transformation as three possible pedagogical approaches to environmental education. The ESP uses one key element of a transformative approach to environmental education, namely that it is a holistic program. Russell, Bell and Fawcett (2000) also suggested that authentic learning experiences, student responsibility, increased student-teacher contact, and better relationships among students are key features of critical environmental education, all of which are evident in the ESP. Another key aspect of critical environmental education described by Russell, Bell & Fawcett (2000) is the connections between environmental issues and social justice issues. These types of connections did not seem to be examined in the ESP. Instead, the ESP, similar to the type of environmental education described by Taylor (1996), is taught from an "apolitical" perspective, with a large part of the action component of the program focusing on running the school's recycling program rather than on more systemic or political issues. Further, as discussed, there were some concerns about how gender and disability issues were addressed in the program.

It is very rare for any environmental education program to meet all the ideals expressed in the literature on transformative or critical environmental education. While

there is, of course, still room for improvement, especially in terms of becoming more political and making greater connections to social justice issues, overall, the ESP, with its emphasis on curricular integration and holism, experiential and authentic learning, student responsibility, increased student-teacher contact and good relationships among students is certainly inspiring.

Conclusions

Previous research on integrated programs has focused on student perspectives (Bozzellii, 1999; Horwood, 1994; Jupp, 1995; Russell & Burton, 2000). Many benefits to students found in previous studies on integrated programs have been confirmed in this research study. What is interesting about this research study is that parents, educators and ESP students have identified many of same benefits that integrated program students have identified in previous studies. As a result of participating in the ESP and similar integrated programs, students appear to be able to expect all or some of the following: improved attendance; an influence on post-secondary, career, and lifestyle choices; an increase in environmental awareness and appreciation; an increase in physical fitness; an increase in confidence; an increase in maturity; a sense of perseverance; and an improvement in social skills.

A previously under-researched area of integrated programs is the possible costs to students of participating in an integrated program. While there are many advantages to participating in an integrated program, this study has found that there are also some costs associated with participating in an integrated program. Among the possible costs of participating in an integrated program are: having to give up part-time jobs; having to give-up some or all extra-curricular activities; decreased social contact with friends and family outside if the integrated program; initial and ongoing financial costs; and having to endure some ridicule for participating in the program. More research on student perspectives of the costs would be helpful. Also, research on other integrated programs and interviews with teachers on how they have dealt with these challenges could be enlightening.

In this study, the benefits of participating in an integrated program seem to outweigh the costs. The fact that educators other than John Burton are encouraging and hoping their own children to take the ESP speaks volumes about the value they see in the program.

I hope that current and future integrated program instructors can use this study to support their own programs as yet more demonstration that integrated programs are beneficial to students. As well, identification of some of the costs to students of participating in an integrated program can hopefully help integrated program instructors proactively address these issues within their own programs.

Recommendation for Future Research

There are several areas deserving of further research. The integrated program instructor and his/her characteristics is an integral and yet seldom researched piece of the integrated program. It is clear that not everyone could create and run a successful, well-respected integrated program; there are certain characteristics that educators and parents feel an instructor must possess in order for a program to run smoothly. It would be useful to delve further into this topic.

Another issue not yet addressed in the literature is the participation of exceptional students in integrated programs. Inclusion, while difficult, is possible. More attention to this issue could help make integrated programs accessible to a wider population of students.

Finally, longitudinal studies or follow-up studies on integrated program alumni would be a worthwhile pursuit. Of interest would be whether participation in an integrated program did, in the end, influence their career or lifestyle choices and what, if any, long-term benefits they experience. It would also be interesting to get their

retrospective impressions of being in the integrated program and if they would still recommend the program to others.

References

- Beane, J. (1991). The middle school: the natural home of the integrated curriculum. *Educational Leadership*, 49(2), 9-13.
- Beane, J.A. (1997). Curriculum integration: Designing the core of democratic education. New York, NY: Teachers College Press.
- Bell, C., & Russell, C.L. (1999). Life ties: Disrupting anthropocentrism in language arts education. In J.P. Robertson (Ed.), *Teaching for a Tolerant World: Grades K-6* (pp. 68-89). Urbana, IL: National Council of Teachers of English.
- Boud, D., Cohen, R., & Walker, D. (1993). Introduction: Understanding from experience. In D. Boud, R. Cohen, & D. Walker (Eds.), *Using experience for learning* (pp.1-17). Bristol, PA: The Society for Research into Higher Education & Open University Press.
- Bozzelli, E. (1999). ROC 1998 and Horwood's model of integrated programmes. *Pathways*, 11(2), 24-27.
- Case, R. (1991). The anatomy of curricular integration. *Canadian Journal of Education*, 16(2), 215-224.
- Chapman, S., McPhee, P., & Proudman, B. (1992). What is experiential education? Journal of Experiential Education, 15(2), 16-23.
- Clarke, J.H. & Russell, M.A. (1997). *Interdisciplinary high school teaching*. Needham Heights, MA: Allyn & Bacon.
- Comishin, K., Dyment, J.E., Potter, T.G., & Russell, C.L. (2004). The development and implementation of outdoor-based secondary school integrated programs. *Applied Environmental Education and Communication*, 3, 47-53.
- Drake, S.M. (1991). How our team dissolved the boundaries. *Educational Leadership*, 49(2), 20-22.
- Elrick, M. & Russell, C.L. (2002). *Integrated programs and the new curriculum: Moving forward*. Council of Outdoor Educators of Ontario Annual Conference, Tobermory, Ontario, September 25-27.
- Fogarty, R. (1991). Ten ways to integrated curriculum. *Educational Leadership*, 49(2), 61-65.
- Gigliotti, L.M. (1990). Environmental education: What went wrong? What can be done? Journal of Environmental Education, 22(1), 9-12.
- Hall, M. (1996). Full circle: Native educational approaches show the way. *The Journal of Experiential Education*, 19(3), 141-144.

- Henley, T. (1996). *Rediscovery: Ancient pathways, new directions*. Edmonton, AB: Lone Pine Publishing.
- Horwood, B. (1994). Integration and experience in the secondary curriculum. *McGill Journal of Education*, 29(1), 89-102.
- Horwood, B. (1995). Energy and knowledge: The story of integrated curriculum packages. *Pathways*. 7(4), 14-18.
- Ivanitskaya, L., Clark, D., Montgomery, G., & Primeau, R. (2002). Interdisciplinary learning: process and outcomes. *Innovative Higher Education*, 27(2), 95-110.
- Jupp, J. (1995). An integrated programme from the student's perspective: The Bronte Creek Project. *Pathways*, 7(4), 19-23.
- Kollmuss, A. & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental Education Research*, 8, 239-260.
- Lieberman, G.A. & Hoody, L.L. (1998). Closing the achievement gap: Using the environment as an integrating context for learning. San Diego, CA: State Education and Environmental Round Table.
- Lindsay, A. & Ewert, A. (1999). Learning at the edge: Can experiential education contribute to educational reform? *The Journal of Experiential Education*, 22(1), 12-19.
- Lousley, C. (1999). (De) Politicizing the environment club: Environmental discourses and the culture of schooling. *Environmental Education Research*, 5(3), 293-304.
- McElroy, M.W. (1997). Paradigms lost and the myths we teach our children. *Green Teacher*, 53, 6-10.
- McMillan. J.H. & Schumacher, S. (2001). Research in education. New York, NY: Addison Wesley Longman, Inc.
- Merriam, S.B. (1998). Qualitative Research and Case Study Applications in Education. San Francisco, CA: Jossey-Bass Publishers.
- Orr, D.W. (1994). Earth in mind: On education, environment and the human prospect. Washington, DC: Island Press.
- Palmer, J.M. (1991). Planning wheels turn curriculum around. *Educational Leadership*, 49(2), 57-60.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.

- Raffan, J. (1990). The failed curriculum. *The Journal of Experiential Education*, 13(3), 47-49.
- Russell, C.L. (1997). Approaches to environmental education, towards a transformative perspective. *Holistic Education Review*, 10(1), 34-40.
- Russell, C.L. (1999). Problematizing nature experience in environmental education: The interrelationship of experience and story. *Journal of Experiential Education*, 22(3), 123-128, 137.
- Russell, C.L., Bell, AC., & Fawcett, L. (2000). Navigating the waters of Canadian environmental education. In T. Goldstein & D. Selby (Eds.), Weaving Connections: Educating for Peace, Social and Environmental Justice (pp. 196-217). Toronto, ON: Sumach Press.
- Russell, C. L., & Burton, J. (2000). A report on an Ontario secondary school integrated Environmental Studies Program. *Canadian Journal of Environmental Education*, 5, 287-303.
- Sapon-Shevin, M. (2001). Making Inclusion Visible Honoring the process and the struggle. *Democracy and Education*, 14(1), 24-27.
- Selby, D. (1995). Earthkind: A teachers handbook on humane education. Oakhill, UK: Trentham Books.
- Schram, T.H. (2003). Conceptualizing qualitative inquiry. Upper Saddle River, NJ: Merrill Prentice Hall.
- Simms, K. (1996). Geostudies: Structuring a multi-credit outdoor environmental course. *Green Teacher*, 49, 19-22.
- Simpson, L.R. (1998). Aboriginal peoples and the environment. Canadian Journal of Native Education, 22(2), 223-237.
- Taylor, D.E. (1996). Making multicultural environmental education a reality. *Race, Poverty & the Environment,* 6(2/3), 3-6.
- Weston, A. (1996). Deschooling environmental education. Canadian Journal of Environmental Education, 1, 35-46.

Appendix A: Guiding Questions for Administrators

Administrative duties

- ✓ How long have you been an administrator at Grey Highlands Secondary School?
- ✓ If I followed you through a typical day, what would I observe you doing as an administrator?
- ✓ What are some administrative duties that result from having a program such as the ESP at your school.

ESP - General Questions

- ✓ How do you feel about having a program like the ESP at your school?
- ✓ How does the ESP fit into life at Grey Highlands?
- ✓ What does the ESP bring to the school culture (if anything)?
- ✓ What sort of feedback have you heard about the ESP (parents, students, community, etc.)?

ESP - Students

- ✓ What type of students are typically attracted the ESP?
- ✓ Describe some of your observations of past and present ESP students.
- ✓ Have you witnessed any changes (positive or negative) in students that have participated in the ESP?
- ✓ How has participating in the ESP affected student behaviour?
- ✓ Could you describe some of the positive aspects of student participation in the ESP?
- ✓ Could you describe some of the negative aspects (or costs) of student participation in the ESP? OR Do you have any concerns about students participating in the ESP (if yes, please describe)?
- ✓ Is there anything you would like to add?

Appendix B: Guiding Questions for Teachers

- ✓ How long have you been a teacher at Grey Highlands Secondary School?
- ✓ What grade/subjects do you teach?

ESP - General Questions

- ✓ What do you think about the ESP?
- ✓ How does the ESP fit into life at Grey Highlands?
- ✓ What does the ESP bring to the school culture (if anything)?
- ✓ How does the ESP affect you as a teacher?
- ✓ What sort of feedback have you heard about the ESP (parents, students, community, etc.)?

ESP - Students

- ✓ What type of students are typically attracted the ESP?
- ✓ Describe some of your observations of past and present ESP students.
- ✓ Have you witnessed any changes (positive or negative) in students that have participated in the ESP?
- ✓ In your opinion, do you think that participating in the ESP benefits students? (If yes, in what ways)?
- ✓ Do you have any concerns about students participating in the ESP (if yes, please describe)?
- ✓ Is there anything you would like to add?

Appendix C: Guiding Questions for John Burton, Instructor of the ESP

- ✓ How long have you been a teacher?
- ✓ How long have you been at Grey Highlands Secondary School?

ESP - General Questions

- ✓ When did you begin the ESP?
- ✓ Why did you begin the ESP?
- ✓ How does the ESP fit into life at Grey Highlands?
- ✓ What does the ESP bring to the school culture (if anything)?
- ✓ What sort of feedback have you heard about the ESP (parents, students, community, etc.)?

ESP - Students

- ✓ What type of students are typically attracted the ESP?
- ✓ Describe some of your observations of past and present ESP students.
- ✓ Have you witnessed any changes (positive or negative) in students that have participated in the ESP?
- ✓ In your opinion, do you think that participating in the ESP benefits students? (If yes, in what ways)?
- ✓ Do you have any concerns about students participating in the ESP (if yes, please describe)?
- ✓ Is there anything you would like to add?

Appendix D: Guiding Questions for Guidance Counselors

- ✓ How long have you been at Grey Highlands Secondary School?
- ✓ How long have you been a guidance counselor?

ESP - General Questions

- ✓ What do you think about the ESP?
- ✓ How does the ESP fit into life at Grey Highlands?
- ✓ What does the ESP bring to the school culture (if anything)?
- ✓ What sort of feedback have you heard about the ESP (parents, students, community, etc.)?

ESP – Students

- ✓ What type of students are typically attracted the ESP?
- ✓ Describe some of your observations of past and present ESP students.
- ✓ Have you witnessed any changes (positive or negative) in students that have participated in the ESP?
- ✓ In your opinion, do you think that participating in the ESP benefits students? (If yes, in what ways)?
- ✓ Do you have any concerns about students participating in the ESP (if yes, please describe)?
- ✓ Is there anything you would like to add?

Appendix E: Guiding Questions for Parents of Students in the ESP

- ✓ How do you feel about your son/daughter's participation in the ESP?
- ✓ In your opinion, why did your son/daughter decide to enroll in the ESP?
- ✓ What sort of feedback have you heard about the ESP (parents, students, community, etc.)?
- ✓ Have you witnessed any changes (positive or negative) in your child as a result of the ESP?
- ✓ In your opinion, do you think that participating in the ESP has benefited your child? (If yes, in what ways)?
- ✓ Do you have any concerns about your child's participation in the ESP? (if yes, please describe)?
- ✓ Would you recommend the ESP to others? Why or why not?
- ✓ Is there anything you would like to add?

Appendix F: Letter of Introduction

Dear Participant:

Thank you for agreeing to participate in this study on secondary school integrated programs. My name is Sandra Idone and I am a graduate student at the Faculty of Education at Lakehead University. I am conducting the study in partial fulfillment of my master's degree.

The purpose of this study is to describe the benefits and costs to students of participating in an integrated program.

You will be invited to participate in an interview that is expected to anywhere from 30 minutes to one hour. You may be contacted for a shorter follow-up interview, should the need arise. All interviews will be audio taped for analysis purposes.

You should be aware of the following ethical considerations:

- There are no risks to participating in this study
- All data generated from the study, including tapes, transcripts, will be stored at Lakehead University for seven years.
- Your participation in this study is voluntary and you have the right to withdraw at any time
- Your anonymity and confidentiality are assured
- The findings of this project will be made available to you at your request upon completion of the project.

I would like to thank you in advance for your participation. Should you require additional information, please do not hesitate to contact me or my Faculty advisor, Dr. Connie Russell, at the email addresses listed below.

Sincerely,

Sandra Idone Graduate Student sidone@lakeheadu.ca

Dr. Connie Russell
Constance.Russell@lakeheadu.ca

Appendix G: Consent Form

1,	, agree to participate in a study conducted by
Sand	ra Idone on The BENEFITS AND COSTS TO STUDENTS OF PARTICIPATING
IN A	N INTEGRATED PROGRAM. The purpose of this study has been explained to me.
	lerstand the following:
1.	My participation is voluntary and I have the right to withdraw from this study at any time.
2.	There is no apparent risk to my participation in this study.
3.	My identity will be protected (anonymity) and confidentiality is assured.
4.	All data generated from this project will be stored at Lakehead University for seven years.
5.	I will receive a summary of the project, upon request, following the completion of the project.
Sign	ature of Participant Date