

Long-Term Perceived Outcomes of an Integrated Curriculum Program as it Relates to Active Citizenship

By

Gordon Robert Sturrock

M.Ed., Simon Fraser University, 2004
H.B.P.E., University of Western Ontario, 1988
B.Ed, University of Toronto, 1989

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Approval

Name: Gordon Robert Sturrock
Degree: Doctor of Philosophy
Title: *Long Term Perceived Outcomes of an Integrated Curriculum Program as it relates to Active Citizenship*
Examining Committee: **Chair:** Engida Gebre
Assistant Professor

David Zandvliet
Senior Supervisor
Associate/Professor

Milton McClaren
Member
Professor Emeritus

Sean Blenkinsop
Member
Professor

Allan MacKinnon
Internal Examiner
Professor
Faculty of Education

Clifford Knapp
External Examiner
Professor Emeritus
Northern Illinois University

Date Defended/Approved: September 6, 2017

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Abstract

How should 21st century youth be educated to meet the challenges of work, life and citizenship that will lead to environmental, social and economic sustainability? This is a question many educators have been trying to address for a long time. Although the importance of an education system attempting to address 21st century needs is recognized, it is not clear how to achieve this. This dissertation's research addressed this issue, asking, "What are the perceptions of a group of alumni from a Grade 10 integrated curriculum program (ES 10) with regard to the effects of the program on their citizenship activities?" A retrospective study utilizing mixed methods determined the long-term effects of ES 10 relating to active citizenship and identified key learning environment program features that alumni believed to be important. Quantitative instruments measured student's perceptions of their ES 10 learning environment relating various active citizenship components. Qualitative data collection included an open-ended survey and a group interview. The major findings of this study show that alumni believe ES 10 affected their current disposition toward and engagement with citizenship activities, identifying various program elements as having influenced their overall development. Environments where group cohesion is high with regular engagement in student-relevant, hands-on activities and experiences followed by a reflective process were identified as important. Also identified as important in helping students gain skills, beliefs and attitudes that have influenced their adult years were allowing students to have a voice in how the schedule is arranged, what sorts of activities they might choose or how their work may be assessed.

Dedication

I dedicate my dissertation work to my family and many friends. I extend a special feeling of gratitude toward my wife, Nancy Dheilly, and my two children Marcia and Matthew. They supported me throughout my entire journey and are very special to me.

I also dedicate this dissertation to my many friends and colleagues who have supported me throughout the entire process. I appreciate all they have done, especially Peter Koci and Bob Sharp who both offered a great deal of encouragement and wisdom throughout the entire process.

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List of Acronyms

LoT	List of Tables
LoF	List of Figures
ToC	Table of Contents
ISSP	International Service Survey Programme
PLACES	Place-Based and Constructivist Environment Survey
AC	Active Citizenship
RI	Relevance/Integration
CV	Critical Voice
SN	Student Negotiation
GC	Group Cohesiveness
SI	Student Involvement
SC	Student Control
OE	Open Endedness
ICP	Integrated Curriculum Program
EE	Environmental Education
ES10	Experiential Studies 10

Terminology

This section includes definitions of the following terms that are used often throughout this dissertation: active citizenship, experiential learning, experiential education, integrated curriculum program, outdoor education, environmental education, adventure-based learning, citizenship education, problem-based learning, and place-based learning. More detailed descriptions of active citizenship, integrated curriculum programs, experiential learning and experiential education will be offered in the review of literature chapters.

Active Citizenship

Active citizenship is a term to describe ways for “citizens to have their voice heard within their communities, a sense of belonging and a stake in the society in which they live, the value of democracy, equality and understanding different cultures and different opinions” (Hoskins & Mascherini, 2009, p. 462). Active citizens are people who care about their local communities and beyond. Active citizens actively embrace social responsibilities and take it upon themselves to play a civic role of being informed and maintaining and developing critical perspectives while becoming actively involved in social, political and/or environmental issues (Klincheloe, 2005).

Experiential Learning and Experiential Education

The Association for Experiential Education (n.d.) defines experiential education as “a philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities” (para. 2). Breunig (2008) says there is a “distinction between experiential education as a methodology and experiential education as a philosophy” (p. 78), which suggests there is a difference between experiential learning and experiential education. Experiential learning is focused on the process of learning rather than the product. What is essential in experiential learning is the presence of stages in the experiencing process, which has often been described in the literature as cyclic in nature. Proudman (1995) emphasizes that while there are various experiential learning models that utilize cycles with a varied number of stages, this number is not important; what is important is that the phases of experiencing, reflecting and applying are present.

Proudman (1995) also stresses that the stages of reflection and application are what makes experiential learning unique and more successful than the models commonly referred to as “learn by doing” or “hands on learning.” Breunig (2008) points out that many experiential education initiatives follow this cycle but do so without intended learning outcomes or aims, suggesting experiential learning as a methodology. In this example, experiential learning can be seen as the change in an individual as a result of the reflection on a direct experience leading to formation of new knowledge and applications. On the other hand, experiential education includes the transactive component between the teacher and learner while taking advantage of the experiential learning process that “challenges the learner to explore issues of values, relationship, diversity, inclusion, and community” (Itin, 2008, p.139). Those who engage in project-based learning, service learning, adventure-based education and many others are often “expressions of the philosophy of experiential education in action” (Itin, 2008, p. 143).

Integrated Curriculum Program

Integrated curriculum programs (ICPs) are interdisciplinary educational programs that blend content from various sources around a common theme. There is more to ICPs than integrating curriculum as they are also about the process of teaching and learning. ICPs are an approach to education that some educators believe will help students link their school learning experiences to successfully meet the demands of everyday challenges. Typical ICPs combine various courses taught in a holistic manner. The Experiential Studies (ES) 10 program is an ICP that combines Science 10, Earth Science 11, Social Studies 10, and Physical Education 10. Horwood (1994) states, “Integration happens, not so much from putting school subjects together into a shared time and space, but from certain types of general experience which transcends disciplines” (p. 91). ICPs tend to blend complementary subject areas with the intention of creating interdisciplinary investigations of a central theme, topic, or experience (Jacobs as cited in Breunig & Sharpe, 2009).

Outdoor Education

Outdoor education is considered a method for learning. Outdoor education primarily takes place in outdoor settings and takes advantage of learning experiences that directly connect with nature and real life situations. Ford (1986) defines outdoor education as “education in, about, and or, the out of doors” (p. 2), which describes where

the learning takes place (outdoors), the topic to be taught (related to the natural environment) and the purpose of the activity. Knapp (1996) points out the purpose of outdoor education as providing meaningful contextual experiences that take place in both natural and constructed environments to expand and complement the classroom experience, which may be dominated by print and electronic media.

Environmental Education

Environmental education (EE) is an educational approach that is concerned about the relationship between humans and the environment. Stapp (as cited in Gough, 2013) explains that “Environmental education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution” (p. 15). EE can occur both inside and outside the classroom.

Adventure-Based Learning

Cosgriff (2000) defines adventure-based learning as “the deliberate use of sequenced adventure activities - particularly games, trust activities and problem solving initiatives – for the personal and social development of participants” (p. 90). Central to adventure-based learning is the philosophy that “individuals are usually more capable (mentally, emotionally and physically) than they perceive themselves to be, and if given the opportunity to TRY in a supportive atmosphere, can discover this excellence within themselves” (Rohnke, 1989, p. 21). Typical adventure-based learning programs take place in outdoor settings where participants engage in a sequence of concrete problem solving or experiences. These experiences can also extend to low ropes and high ropes courses, canoeing, hiking, rock climbing or participating in games that require teamwork and communication skills.

Citizenship (Civic) Education

Civic learning is primarily characterized by procedural knowledge around topics of politics and how to act and behave in society. The main goal of civic education is to teach civic literacy, which is simply defined as the knowledge and understanding of the basic principles of government. It also has the aim to convey a basic understanding of current social values and norms as well as fundamental rights and responsibilities. In

Canada, through the research by Llewellyn, Cook, Westheimer, Giron, and Suurtamm (2007), there are recommendations that educational programs for civic literacy include teaching students to make informed, active choices about policies affecting their lives as well as to engage with their community in efforts for social change (hence the start of active citizenship).

Problem-Based Learning

Problem-based learning can be described as an instructional method that involves active experiential based learning centered on the investigation and solving of real world problems. Students in problem-based learning are self-directed active investigators working collectively in small groups to solve problems. The problems are context specific and operate within natural and societal communities. The field has a strong base emerging from the medical field and environmental education (Barrows & Tamblyn, 1980; Orr, 1992, 1994, 2002; Sobel, 1996, 2005; Thomashow, 2002). Problem-based learning allows for relevance of curriculum to emerge by providing purpose to the knowledge being taught. By giving meaning to a subject or variety of subjects, students can construct knowledge based on personal relevance while being engaged in the problem-solving experience.

Place-Based Learning

Place-based education from the term itself suggests it emerges from the attributes of a place. Relph (1992) offers a notion of place describing it as “fragments of human environments where meanings, activities and a specific landscape are all implicated and enfolded by each other” (p. 37). Place-based education is an approach to teaching that immerses learners in the context of community to include both natural and social (Penetito, Raffan, Theobald, & Curtiss, as cited in O’Connor, 2016). By linking content specific to the conditions of a particular place, which includes geography, ecology, sociology, politics and others, gives rise to the attachment of meaning for learners and can provide the context for critical thinking, situational conditions and other attributes. Place-based educational activities often “focus on environmental and social values, situational characteristics and psychological variables; as community action is open to a range of varying and competing interests” (Barr as cited in O’Connor, 2016, p. 48). Gruenewald (2003) ascertains that “critical pedagogy” and “place based education” are mutually supportive and has advocated for a “critical pedagogy of place,” which

combines the efforts of these two camps. This way of viewing place-based education is important in active citizenship research since many place-based educators through interaction with local places attempt to inspire students to take social and/or ecological action of some form. Critical pedagogues seek to “challenge the assumptions, practices and outcomes taken for granted in dominant culture and in conventional education” (Gruenewald, 2003, p. 3); this ensures place-based educators attend to both social and ecological issues.

Chapter 1. Introduction

How should 21st century youth be educated to meet the challenges of work, life and citizenship that will lead to environmental, social and economic sustainability? This is a question many educational practices have been trying to address for a long time. Recently this question has gained more attention due to the diminished state of the environment, global economic imbalance and evidence from various studies indicating higher levels of youth disengagement from politics and public life (Bennett 1997; Putnam 2000). In Canada, recent studies express concerns that the youngest cohorts as they age are voting in lower numbers than cohorts did in the past, which indicates a trend that non-voters may continue to be non-voters as they age, a trend contrary to those seen in the past (Barnes, 2013). One response to this trend in British Columbia was the development of the “Being an Active Citizen” project, an education program with a prime goal of providing enhancements to British Columbia’s curriculum on law and citizenship to better prepare students to become informed citizens who actively participate in the life of their community (Justice Education Society, 2016). A part of this initiative includes community engagement and social action that attempts to promote students to connect with their local communities and find out what they are passionate about.

In November 2014, the United Nations Intergovernmental Panel on Climate Change (IPCC) released the first of four chapters of its Fifth Assessment Report AR5 in November (Intergovernmental Panel on Climate Change [IPCC], 2014). Not surprisingly this report calls for a concerted global effort to combat climate change. This effort is seen as an important step to help protect the health of economies, communities, children and future well-being (IPCC, 2014). As far back as 2002, these concerns had the attention of the United General Assembly, which recognized education as a major catalyst for change through its Resolution 57/254 (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2002), which declared the Decade of Education for Sustainable Development (DESD; 2005-2014). The Resolution designated the United Nations Educational, Scientific, and Cultural Organization (UNESCO) as the lead agency for the promotion of the Decade. Throughout the Decade, the goals of many education initiatives focused on sustainable development as a means of contributing to citizens’ abilities to face present and future challenges, leading to relevant informed decision-

making toward a sustainable world. The desired outcomes from the Resolution and Decade programs asked that citizens will

have acquired various skills (critical and creative thinking, communication, conflict management and problem solving strategies, project assessment) to take an active part in and contribute to the life of society, be respectful of the Earth and life in all its diversity, and be committed to promoting democracy in a society without exclusion and where peace prevails. ([UNESCO], 2005, p. 3X)

UNESCO recognized that education can be used as a catalyst toward change.

Thus, education is the primary agent of transformation towards sustainable development, increasing people's capacities to transform their visions for society into reality. Education not only provides scientific and technical skills, it also provides the motivation, justification, and *social support* for pursuing and applying them. The international community now strongly believes that we need to foster—through education—the values, behaviour and lifestyles required for a sustainable future. Education for sustainable development has come to be seen as a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities. (UNESCO, 2002, p. 5)

Based on the Fifth Assessment Report AR5 (IPCC, 2014) it would seem apparent that there is still a ways to go and a global education effort needed to reach the desired outcomes of educating citizens to be informed, able to think critically and be involved in a wide range of social and/or environmentally related issues. The British Columbia's Ministry of Education's (1989) "Mandate for the School System" document describes the educated citizen as follows:

Continued progress toward our social and economic goals as a province depends upon well educated people who have the ability to think clearly and critically, and to adapt to change. Progress toward these goals depends on educated citizens who accept the tolerant and multi-faceted nature of Canadian society and who are motivated to participate in our democratic institutions. (p. D96)

The purposes of education can be seen as twofold: they must address the development of individuals and society. Therefore, education as it is intended can assist individuals to become more competent in the pursuit of legitimate personal goals while at the same time set the stage for social participation. When one is considering an educational objective that includes environmental sustainability and personal and social responsibility the term *active citizenship* comes to mind. The concept of citizenship is usually associated with voting, accepting legal responsibilities, paying taxes, and

obeying the law. Although arguably these are important parts of being a citizen, a much more involved concept is that referred to as active citizenship.

The term active citizenship was first used in a European Community context when proposals were developed for the European Commission's Lisbon Strategy, which focused on developing a competitive knowledge society and greater social cohesion (Hoskins & Mascherini, 2009). In this context, active citizenship was the term utilized to describe ways for "citizens to have their voice heard within their communities, a sense of belonging and a stake in the society in which they live, the value of democracy, equality and understanding different cultures and different opinions" (Hoskins & Mascherini, 2009, p. 462).

Barr (2013) uses the term critical citizenship where its roots originate from active involvement at the community level. Active citizens embrace social responsibilities and take upon themselves civic roles of being informed and maintaining and developing critical perspectives while becoming actively involved in social, political and/or environmental issues (Klincheloe, 2005). In the light of public campaigns as represented by UNESCO's (2002) Resolution 57/254 and the 2014 United Nations IPCC Report, it has become more apparent for educated young people to have the skills and knowledge that will enable them to think and act critically toward long-term responsible environmental and social behaviours.

While the world is undergoing fundamental change, many professions are redefining their roles in the workplace in order to deal with the complex web of factors being introduced in society. Educators should find themselves, similar to other professions, being challenged to respond to changing times. For educators, this comes back to the question, "How should youth in the 21st century be educated toward a life of participatory actions leading to more environmental, socially and economically sustainable ways of life?" In British Columbia, Canada, one response to this question has been addressed through the province's Ministry of Education's (2007) framework document, *Environmental Learning and Experience: An Interdisciplinary Guide for Teachers*. This framework aims to integrate environmental thinking and ideas into the everyday lives of students. The long-term objective of the framework is to support personal and social responsibility and a more environmentally sustainable way of life.

The framework advocates for a principle of experiential education as a main pedagogical tool as well as offering some key learning practices, including a multidisciplinary approach to curriculum, critical reflection and placed-based education. While this framework offers good suggestions for educators, many of the suggestions are difficult to adopt within the present-day system of delivery simply because adopting innovative practices to address 21st century learning means using a 19th century education model does not work that well. Interestingly, many of the education initiatives advocated through this framework have been in existence for some time now, especially through environmental and outdoor programs that are considered unique from the mainstream. Henderson (2002) describes a particular ICP that he refers to as an environmental studies program:

In my experience, integrated programs like [environmental studies program] ESP offer a unique alternative to the regular classroom environment. They create an atmosphere where students can develop a love of knowledge, the ability to think critically and creatively, and a respect for our world and for others. In the program, I felt that students became more informed about themselves and about the world in which they live. If the goal of public education is to create engaged and informed citizens who are dedicated to life-long learning, then there should be more integrated programs since they go a long way towards meeting this goal. (p. 16)

Henderson (2002) believes that ICPs offer unique opportunities to meet the aims of education, opportunities that are not afforded in traditional settings. A program similar to Henderson's environmental studies program is an ICP called Experiential Studies 10 (ES 10), which has been operating at Centennial High School in Coquitlam, BC, since 2003. ES 10 utilizes experiential education and placed-based education in a multidisciplinary approach to foster critical thinking. The research I describe in this thesis is focused on the ES 10 program. Just recently the British Columbia Ministry of Education has moved forward a new curriculum initiative (Government of British Columbia, n.d.-a) with an intent to address these 21st century learning needs so that students can develop the skills to succeed in the changing world.

Core competencies (Government of British Columbia, n.d.-b) are at the center of this initiative, which includes intellectual, personal and social and emotional proficiencies required for students to engage in deeper learning. A major component in this new approach includes more hands-on learning opportunities for students so they can expand on these core competencies. The results from this research project comes at an

opportune time because it can help educators understand important learning features within EE programs that play major roles toward the development of these core competencies, which include skills such as critical thinking, an important identified skill as cited throughout active citizenship research (Hoskins, 2006; Ross, 2012).

Background Research Information

I posit that ICPs that utilize EE and place-based initiatives can help participants gain the knowledge and skills that lead to long-term learning relevant to becoming active citizens. My research focused on the long-term perceptions of the participants within ES 10 in regard to concepts of active citizenship. I employed a retrospective case study method to examine the perceptions of the ES 10 participants toward the development over time of skills, knowledge, attitudes and outcomes relating to responsible environmental and social behaviours. The study also examined key features of the learning environment that are claimed to be linked to these long-term outcomes and results.

I was the founder and teacher of the program that was the focus of the study. As both participant and researcher, I had deep knowledge of the program, making it a good candidate for the study. However, being the founder and teacher of the program also has its problems, especially associated around potential biases. To minimize these potential biases, I took various steps in choosing the methods to use to conduct the study and in the writing of this dissertation; I applied member checking and triangulation of results, and I included committee members in various parts of the research process to limit confirmation biases. A more detailed description of the methods and steps I took to limit research bias is provided in the Methods chapter.

When the ES 10 program was first implemented in 2003, it integrated four of British Columbia's high school curriculum courses: Science 10, Earth Science 11, Social Studies 10 and Physical Education 10. These subjects were integrated in such a way as to give purpose to the subject material through experiential learning. Outdoor initiatives were used as vehicles to empower the learning experiences and foster attainment of the program goals. The students took part in various local field studies as well as in several extended overnight field experiences. For information regarding program goals of ES 10 and samples of field experiences, refer to Appendix J and L respectively.

Brief History of the ES 10 Program

I was originally motivated to start this program with the encouragement of Bob Sharp, a close friend, who at that time ran an ICP called Experiential Science 11 (ES 11) in Whitehorse, Yukon. Bob Sharp is well known and respected for his vast knowledge of and experience with ICPs and place-based education. He was one of the original founders of the Wood Street School in Whitehorse, Yukon. The Wood Street School is a unique school that offers six different ICPs, which center around themes of art, language, outdoor field studies and science.

I still recall when Bob piqued my interest about developing a program similar to ES 11; it was the year 2001 when I arranged to have Bob and his ES 11 student group stay for a few days at Centennial High School (where I was teaching) as a place to sleep and cook meals. They were on the tail end of a 30-day extended trip that started in Whitehorse, Yukon, and worked its way down the coast via ferries and bus to the Lower Mainland with various field experiences along the way. I was very intrigued with the program and asked many questions. At one point during our conversation, Bob said, "If you really want to know what a program like this is all about, why not join us on our Salt Spring Island trip?" I immediately said yes, made the necessary arrangements with my school administration and was on the ferry with them the following day.

In the three days I was with the group, I experienced a fresh water study, took an interpretative bog walk led by the students, investigated a wet land, conducted forest and foreshore studies, surveyed theodolites, and volunteered in the community. While on these experiences, we met up with various local biologists and conservationists who were willing to share their expertise and help the students to investigate various ecosystems. I instantly saw the engagement of all the participants involved, the level of responsibility demonstrated, and the deep conversations that took place in the field and late into the evening. The program was robust from both the academic and hands-on learning perspectives. I felt that these students were exposed to more concepts in a single day than some students may experience in an entire semester in a traditional class. What really intrigued me was that many of the activities mentioned emerged from expressions of community concern. For example, in the Ford Lake wet lands (where Robert Bateman now has his home), we investigated long-term impacts to the local ecosystem from water flows that were seemingly affected by Canary grass mowing and

pond trenching by a local farmer. Community members were concerned about the impacts of this disruption related to the local bird and salmon populations. In another experience, a forest mapping study arose out of the concern about inappropriate public use of a conservation area. A long-term investigation by ES 11 students and ES 10 students (who later partnered up on the study) determined that a local deer population was to blame for the extensive disruption and not inappropriate public use in this conservation area.

Another study initiated by the ES 11 students and continued later by the ES 10 students focused on intertidal zones out of the concerns from local biologists that the Department of Fisheries and Oceans data collection was not rigorous enough. It did not take me long to realize that Bob Sharp was concerned not only with providing enriching experiences to add value to curriculum but also with introducing students to the value of doing what he referred to as “the greater good” and the importance of giving back to the community. This is what I really thought learning should look like, and from that moment my journey began. As soon as I returned to the Lower Mainland, I drew up a proposal and won the support of my school administration to initiate the ES 10 program.

In 2002, while I was developing and refining the program details, I was fortunate enough to be accepted into a Master of Arts program at Simon Fraser University with a focus in environmental education. This program helped me build on a philosophical foundation for the ES 10 program. Drawing on my initial experiences with Bob Sharp and my master’s studies, I envisioned a program that not only provided enriched experiences but also challenged students to think outside the extant paradigm and shift into a more comprehensive, integrated and creative worldview. It was important to me to make a concerted effort to not indoctrinate students on how to view the world and their interactions within it.

I purposely settled on the name Experiential Studies 10 because much of our curriculum was to be accessed through hands-on learning, and the term “studies” would not limit areas of investigation and would enable the inclusion in the curriculum of environmental, social and other concept areas. More importantly, I intended that the program’s design could help foster a learning environment that would invite students to develop a philosophical perspective of thinking “outside themselves” to open up the possibility of becoming more environmentally and socially responsible. Although I made a concerted effort not to indoctrinate the students, a major theme of the program

centered around environmental and social responsibility, so therefore I realize that fact on its own can be argued as a form of indoctrination. It was my intent to provide a variety of learning experiences, many of which I chose based on the interests of the students to limit indoctrination as much as possible.

Overview of the ES 10 Program

Similar to the ES 11 program, some of the experiential components of this program included environmental field studies or projects based on data collection, often in partnership with community groups. Students use field journals to help facilitate a reflective and active experiential learning process. During some of the field experiences, students had the opportunity to meet and take part in studies with scientists, foresters, naturalists, graduate students and other volunteers from various organizations. These encounters provided students with unique opportunities to extend their knowledge, while reflective practice allowed them to think outside the extant paradigm and shift into a more comprehensive, integrated and creative worldview. In other words, these unique experiences had the potential to invite students to push or shift their current perception or view of events by being open to new connections and ideas that may have emerged through the experience and/or reflection process.

Students were regularly pushed outside their comfort zones through activities that were either physically, mentally or emotionally challenging or ones that had a perceived risk. ES 10 utilized various low ropes and high ropes activities to create a learning environment that encouraged students to work together to accomplish common goals. An example of an extended experience offered near the start of the program was an overnight snowshoe trip where the students slept in snow caves. The students snowshoed up steep terrain, constructed sleeping structures (snow caves) and conducted curriculum studies that centered on atmospheric sciences, snow studies and avalanche assessment. The snow trip was physically, mentally, and intellectually challenging.

Another trip included mountain biking through an abandoned rail bed while learning about history, geography and other curricular areas. Other field experiences included activities such as canoeing, rock climbing, hiking and kayaking, while taking advantage of opportunities for academic learning and studies along the way. The wide

variety of field experiences (short and long term) provided opportunities to work with professionals and volunteers from various fields. Examples included working in partnership with the previously mentioned ES 11 program students, conducting various forest mapping and environmental monitoring for sustainable forest practices located on Salt Spring Island. Another example included working alongside a University of British Columbia PhD candidate on an extensive study of sea lice and salmon fry. Sometimes these experiences prompted students to get involved as volunteers in their own communities with organizations such as Stream Keepers. I like to refer to ES 10 as a “school within a school” model since the program operated on its own schedule with an integrated curriculum but was attached to Centennial High School, which in itself operated on the traditional bell schedule with distinct subject groupings. The flexibility in the ES 10 schedule enabled the program to take advantage of unique learning opportunities within the local community while the integration of curriculum through multiple disciplines provided the opportunities for more active experiences while addressing more than one curricular outcome at the same time.

What is unique about ES 10 is how it approached curriculum outcomes. Traditionally an educator may decide on an activity based on curriculum. However, with the ES 10 program, the experience drove the curricular opportunities. Often curriculum outcomes were not realized or appreciated until an experiential activity was underway. When opportunities were revealed, they could be taken advantage of to foster curricular outcomes. One example of this practice could be when a group is climbing and takes notice of the geomorphology of a rock cut. Students could be asked to stop and notice rock formations on various field experiences. These particular rock formations always have unique layers and intrusions showing differentiating rock structures. The students can be encouraged to observe, sketch and come up with hypotheses about how they think the rock face came to look as it appeared. This activity could then be extended with a debrief followed by the introduction of textbooks or other informative artifacts so students can fill in gaps of their knowledge of this particular experience and formation. This sort of learning process places students at the centre of the experience with the intention of making the event meaningful and to lead to long-term learning. The outdoor physical activity component, while valid in its own terms, can also be seen as a vehicle to access new experiences related to other curriculum areas.

Now that the ES 10 program has been in operation for over 10 years, it is not uncommon to have a regular stream of visits from various former students and even some parents of these students. The motivations behind these visits are often to volunteer or just to share how the program has had a positive influence. From these visits, I learned that many students from ES 10 were actively involved in their communities or beyond and were often motivated by a wide range of interests, ranging from social justice to involvement with environmental, political, and youth programs. From a long-term learning perspective, these visits seem to provide concrete indicators that the program was doing something right. This insight motivated me to find out more. After teaching the program for six years, I decided to go back to school to start a PhD with the goal of investigating the outcomes of the ES 10 program. I was interested in whether long-term learning had occurred and, if so, the nature of that learning. I also wanted to explore whether the students perceived that some of the experience had long-term effects toward the development of active citizenship.

Brief Overview of Methods

I chose to do a retrospective case study with two cohorts from the ES 10 program. A case study approach can provide a robust source of ideas and study phenomena. Case studies allow for a rich collection of data and of greater depth than that of other research designs. Since my goal with this study was to determine the long-term perceived effects of the ES 10 program in terms of active citizenship as well as to understand various contributing factors of the program, the research methods needed to allow for the collection of various data sources. In addition, although case studies tend to collect mainly qualitative data, they also allow for the collection of quantitative data as well, moving them towards a mixed methods approach. Therefore, I used a mixed methodology approach for this study.

Adopting both qualitative and quantitative methods can provide a better understanding of the results and make conclusions more credible while enabling a deeper understanding of the processes occurring in an integrated curriculum program such as ES 10 (Yazan, 2015). Furthermore, the use of multiple sources of evidence that converge on similar facts allows for triangulation to occur, which can lead to construct validity (Yazan, 2015). In essence, a mixed methods approach can lead to confirmation of some phenomena through cross validation between methods.

The qualitative methods consisted of a group interview with past students from the 2003 and 2004 cohorts as well as an open-ended questionnaire. The quantitative portion consisted of two separate one-time surveys: one measured active citizenship components while the other measured learning environment perceptions. My rationale for utilizing these two cohorts was to ensure long-term results since these graduates completed the program eight to nine years earlier at the time of the data collection.

I also collected data utilizing only the learning environment survey on a 2007 cohort. The rationale for including this cohort and limiting the data collection only to the learning environment questionnaire was due to the availability of preprogram and post program data as it relates to the learning environment tool (Place-Based Learning and Constructivist Environment Survey [PLACES]; Zandvliet, 2007, 2012), which I utilized in the quantitative portion. The results from this help to determine consistency of the instrument relating to long-held perceptions (beliefs). The results here can be significant for learning environment research and this study, since I was asking participants to recall their experiences in ES 10 that occurred eight to nine years earlier. A more detailed description of the methods, rationale and reliability/validity considerations are included in the Methods chapter.

Research Issue

How should 21st century youth be educated to meet the challenges of work, life and citizenship that will lead to environmental, social and economic sustainability? This is a question many educators have been trying to address for a long time. Although the importance of an education system attempting to address 21st century needs is recognized, it is not clear on how to achieve this. The research conducted for this dissertation addressed the issue of how to educate 21st century youth towards a more environmental, socially and economically sustainable way of life. The results from this study could help shed some light on important learning features in education programs that could help develop skills, beliefs and attitudes that not only meet the needs of the 21st century but also lead to long-term active citizenship.

Research Questions

Given the above statement, I proposed that the research should address a core research question:

What are the perceptions of a group of alumni from a Grade 10 Integrated curriculum program (ES 10) with regard to the effects of the program on their citizenship activities?

In order to give structure to the core research question, I proposed to explore the ES 10 alumni's perceptions on the unique learning environment features of the program that they felt had influence toward the development of various skills, beliefs and attitudes that persist into the future relating to concepts of active citizenship and their current level of civic and community engagement. This research was therefore articulated around the four following sub-research questions:

Sub-question A: *Do alumni view themselves as being engaged in their communities or beyond?*

Sub-question B: *Do alumni believe their experience in the ES 10 program contributed to the development of their desire to make contributions to their communities or beyond?*

Sub-question C: *Do alumni identify particular skills or attitudes that they view as having been developed or fostered during ES 10 as having positively affected their community participation?*

Sub-question D: *What aspects of the ES 10 program do alumni remember as having the greatest general impacts?*

Content of the Thesis

This thesis is organized around eight chapters in the sequence as described in the paragraphs below.

Chapter 1, Introduction, the current chapter, explains the background, rationale and significance of the research in light of long-term effects of an ICP toward concepts of active citizenship. It presents the main research issue of this study, introduces the core research questions and sub-questions and the methodology approach.

Chapter 2, Active Citizenship and Integrated Curriculum Programs, reviews the literature on active citizenship within the educational context. This review includes current view of active citizenship and its implication in educational settings as well as current research in the field. This chapter will also review the literature on ICPs as they relate to concepts of active citizenship, which will include relevant research in this field as well.

Chapter 3, Experiential Education, Experiential Learning and Contemporary View on Learning, discusses the difference between experiential education and experiential learning, reviews the literature on the philosophical background of experiential education and learning and reviews the literature on contemporary views of how people learn with a focus in developing relevant skills for active citizenship.

Chapter 4, Learning Environment Research, reviews the literature on learning environment research related to ICPs and components of active citizenship.

Chapter 5, Research Methodology, explains the research design, methods of data collection, timelines of the study, data analysis methodology and how interpretations were made that forms the base of this research. This chapter describes the quantitative and qualitative methods and data collection techniques. This chapter concludes by outlining validity and reliability issues of this research.

Chapter 6, Quantitative Results, focuses solely on the describing the data that was collected through Zandvliet's (2007, 2012) Place-Based Learning and Constructivist Environment Survey and the International Social Survey Programme's 2004 Citizenship survey (International Social Survey Programme [ISSP] 2012) as well as the characteristic data from the open-ended questionnaire. Charts and graphs were employed to help make sense of this data as well as detailed descriptions to include reliability and validity considerations.

Chapter 7, Qualitative Results, focuses solely on describing what was found in the open-ended questionnaire, group interview and individual interviews. This chapter is divided into three sections: a) results from the open-ended survey questions; b) results from the group interview questions; and c) composite stories of five graduates written using their "voices" from their own responses to the open-ended questions and the group interview.

Chapter 8, Discussion and Conclusion, discusses the field findings in light of the review of literature on experiential education, experiential learning, contemporary views of learning, active citizenship, ICPs and learning environments. This discussion chapter looks at the research findings to answer the sub-questions of this thesis, which leads to answering the core question. The last part of this chapter concludes with a model for education programs with a goal of active citizenship as well as indicating directions for future research.

Chapter 2. Review of Literature: Active Citizenship and Integrated Curriculum Programs

Active Citizenship

The importance of active citizenship as a part of life long practices and learning has gained much momentum over the past number of years. Much of the research in active citizenship has come out of Europe due to concern over low youth votership and participatory action through volunteering. In Europe, it has been reported that there is an acknowledged gap between policy makers and their citizens and an increasing concern about apathy, social cohesion and common values, indicating the need to find possible responses for enhancing active citizenship. In England, the introduction of Citizenship curriculum was ignited by *The Crick Report* (Crick, 1998), a document produced by an advisory group headed by Bernard Crick, a political theorist, which outlined recommendations for sustainable citizenship education within school curricula. The recommendations focused on three strands: social responsibility, community involvement and political literacy. In Canada, trends in voter turnout and other forms of democratic participation indicate people are becoming increasingly disengaged in active expressions of citizenship and most alarming is that younger generations show the greatest decline (Adams & Flumian, 2015; Pammett & LeDuc, 2003). Putnam (as cited in Potter, 2002) comments on America's declining social capital, which is referred to as stocks of social trust, norms and networks that people can draw upon to solve common problems:

Many students of the new democracies that have emerged over the past decade and a half have emphasized the importance of a strong and active civil society to the consolidation of democracy...To those concerned with the weakness of civil societies in the developing or post-communist world, the advanced Western democracies and above all the United States have typically been taken as models to be emulated. There is striking evidence, however, that the vibrancy of American civil society has notably declined over the past several decades. (p. 37)

Potter (2002) believes active citizenship education practices can help nations to restore depleted stocks of social capital. In BC, Canada, a minimum of eight task force reports have identified active citizenship as a key response for positive change on large-scale public issues. This task force identified eight reports that focused on a variety of

social concerns that identify active citizenship as a main solution to deal with local problems and recognized schools as an important starting place (Dobson, 2012). Countries and agencies realize that when people become involved in their local communities and beyond, they can become powerful change agents, especially when working together in groups in a coordinated and planned way. It is clear for many that active citizenship in education is needed to achieve this; however, what is not clear is what kind of education works and whether there are common strategies or pedagogical approaches that can lead to successful practices. The purpose of this section is to shed some light on the complexities behind active citizenship and identify some key factors and/or themes as presented in the literature that relate to long-term participatory action in the educational context.

Defining active citizenship is no easy task as there is no real common accepted definition; however, the following paragraphs will outline a definition that I used for the purpose of this dissertation. The concept of citizenship is usually associated with votership, legal responsibilities, paying taxes and obeying the law. Arguably these are important parts of being a citizen, but much more is involved when referring to active citizenship. Aristotle (as cited in Ross, 2012) stated,

It is not possible to be a good ruler without first having been ruled. Not that good ruling and good obedience are the same virtue – only that the good citizen must have the knowledge and ability both to rule and be ruled. That is what we mean by the virtue of a citizen – understanding the governing of free men from both points of view. (p. 7)

Aristotle makes the reference to the “good citizen” and it is important to note that the good citizen is not the same as the active citizen. If one obeys the law, drives carefully and behaves in a socially correct manner, this is representative of a good citizen in a democratic society. Expanding on this description the active citizen would be able to discuss the merits of laws, if they are inequitable, and how they can be changed.

In 2011 a national dialogue to engage Canadians on unique meanings of citizenship was initiated by collaboration between five national organizations (Enviroics Institute for Social Research, the Institute for Canadian Citizenship, Maytree Foundation, CBC News and RBC). Key findings from interviews indicated Canadians viewed being a good citizen means more than obeying the law; having an active commitment in the community and being accepting of others who are different were just as important (Neuman, 2012). In the literature, active citizenship within the educational context is

viewed as more than “learning the rules of the game and how to participate within existing models and structures” (Mayo & Annette, 2010, p. 50). Lister (as cited in Mayo & Annette, 2010) stresses active learning for literacy and the development of skills and dispositions that allows one to address structures and relations of power and, while working towards social inclusion and social justice, change these relations where possible (Mayo & Annette, 2010).

The term active citizenship was first used in a European level context when developing proposals for the European Commission Lisbon Strategy, which focused on developing a competitive knowledge society and greater social cohesion (Hoskins & Mascherini, 2009). In this context, active citizenship is the term utilized to describe ways of “empowering citizens to have their voice heard within their communities, a sense of belonging and a stake in the society in which they live, the value of democracy, equality and understanding different cultures and different opinions” (Hoskins & Mascherini, 2009, p. 462). One may argue that utilizing the term “empowering” in the definition of active citizenship suggests a level of hierarchy, and this relational power perspective is contrary to what active citizenship seeks to achieve. Barr (2003) uses the term critical citizenship where its roots originate from active involvement at the community level. Active citizens embrace social responsibilities and take it upon themselves to play a civic role of being informed and maintaining and developing critical perspectives while becoming actively involved in social, political and/or environmental issues (Klincheloe, 2005). This definition by Barr (2003) does not refer to an active citizen as being empowered to have their voices heard but rather “embraces” the opportunities available to get involved.

This term active citizenship is often used at the community level to refer to citizens who become actively involved in the life within their communities solving problems or bringing about positive change (Potter, 2002; Ross, 2012). Active citizens are usually those who develop skills, knowledge and understanding to be able to make informed decisions about the happenings within their communities or beyond with the aim of improving the quality of life in these. A general set of values and dispositions can be associated with active citizenship to include respect for justice, democracy, openness, tolerance, courage or efficacy to defend a point of view, as well as a willingness to stand up for others. Some key characteristics of active citizenship are summarized succinctly by Durr (2004):

Participation in the community (involvement in a voluntary activity or engaging with local government agencies)

People are empowered to play a part in the decisions and processes that affect them, particularly public policy and services

Knowledge and understanding of the political/social/economic context of their participation so that they can make informed decisions

Able to challenge policies or actions and existing structures on the basis of principles such as equality, inclusiveness, diversity and social justice.

Active Citizenship and Environmental Action

It is important to note that active citizenship also includes environmental action. Environmental action can be defined as the “process of co-creating environmental and social change while building individuals’ capabilities for further participation contributing to personal and community transformation” (Schusler, Krasny, Peters, & Decker, 2009, p. 124). This is an important piece for ICPs, since many of them have an environmental education focus. Schusler et al. (2009) suggests that young peoples’ involvement in environmental action can further lead to “the development of democratic citizens and creation of sustainable communities” (p. 121). In the case of a group of students restoring habitat or investigating water quality represents environmental action leading to positive environmental and/or community change. Schusler et al. (2009) state that the process of “envisioning and co-creating environmental and community outcomes develops learners’ understanding and capabilities as democratic citizens, [which in turn enables learners over the long term to continue in] processes of envisioning and transforming their communities” (p. 121).

Active citizenship is understood in a broad sense of the word participation and does not focus solely on the political aspect; it ranges from cultural, political and environmental activities on local, regional, national or global levels. Examples of active citizenship are included below:

- A young person volunteers with a local “stream keepers” group, a type of local organization found throughout British Columbia with the mandate of protecting and preserving streams in their communities. This young person regularly volunteers time to monitor water quality and monitor the general health of the streams.
- An adult is a regular volunteer with Canadian Red Cross and is involved with various humanitarian projects at the local, national and global levels.

- A group of senior citizens decide they would like to have a place to meet on a regular basis and discuss with city council how to implement the process of developing a community centre.

Active citizens are people who care about their local communities and beyond. They are motivated to make a positive contribution and have a say in what is happening. Active citizens take part, make decisions and influence a wide variety of things that can lead to more vibrant, sustainable communities from the social, political and environmental perspective. Active citizens are motivated by a strong desire to make some sort of positive influence or change, and they do this by being informed and maintaining and developing critical perspectives while becoming actively involved in social, political and/or environmental issues (Klincheloe, 2005).

Education can help a young person become a good engineer, good teacher or a good carpenter as these things do not happen just by accident. Just as education can play a role in young people's professional pathway, it can also play a significant role in the development of active citizenship. Many active citizenship scholars believe education to be key in developing those skills, attitudes and dispositions that have been identified as being important for active citizenship (Mayo & Annette, 2010; Potter, 2002; Ross, 2012). The next section will discuss how education can help young people gain important skills and dispositions that are considered important for the development of active citizenship.

Active Citizenship and Education

Ross (2012) states that citizenship educational practices can inspire citizens to critically engage and create change through the acquisition of intellectual skills and knowledge. Ross (2012) points out that based on research from (Crick & Lister, 1979; Crick, 1998; Kerr & Ireland, 2004; Cleaver & Nelson, 2006), three major elements are present in effective active citizenship education programs: values and dispositions; skills and competencies; and knowledge and understanding. Examples of values described included upholding human rights, ideas of social responsibility and obligations towards others, including diversity and minorities, legal values, democratic processes and various (contested) notions of freedom; and humanistic values of tolerance and empathy towards others. A study by Kidder (as cited in Ross, 2012), which looked at core moral values from people all around the world agreed on five ideas: honesty, respect, responsibility, fairness, and compassion. Although these were common agreements,

perceptions of what each of these would look like in the context of different cultures would look different from one place to another.

Crick and Porter and Crick and Lister (as cited in Ross, 2012) looked deeper into these values and argued for attitudes of skepticism to be moderated with self-awareness, self-criticism and awareness of consequence. This leads to critical thinking skills, important skills identified throughout the active citizenship literature (Hoskins, 2006; Hoskins, D'Hombres, & Campbell, 2008; Ross, 2012). Also important in this discussion by Ross (2012) was the concept of tolerance towards values of others to include religious, political and ethical dimensions. To exercise tolerance, one needs to respect truth and reasoning; they need to be open minded and willing to compromise. In this view, tolerance is more than accepting difference; it is welcoming diversity void of exploitation, racism or suppression of opinion. Interestingly, in the study mentioned earlier about how Canadians defined a good citizen, tolerance towards others ranked fourth in the top 10 unprompted mentions through the interviews behind obeying laws, actively participating in the community and helping other people respectively (Neuman, 2012).

Ross (2012) summarizes the skills and competencies necessary to be an active citizen to include

skills of enquiry, of rationally seeking to establish processes, causes, and the bases for action; sophisticated skills of communication, which include being able to consider and respond to the views of others, being able to persuade, and being capable of being persuaded; skills of participation, which include an understanding of group dynamics and of how to contribute to the social development of civic action; and skills of social action. (p. 10)

Knowledge and understanding can be seen as the foundation of active engagement. This includes more than a conceptual understanding of key concepts of politics and society; it extends to include institutional procedures all from local, national and international perspectives. Awareness of democracy, government, economy, society and environment are necessary for the educated citizen, and these are far reaching to include local and global affairs. However, how one comes to the understanding of this knowledge is paramount. Critical thinking skills thus become a key attribute if one is going to be an informed active citizen.

Information and knowledge are growing at rates faster than ever before. Nobel Laureate Herbert Simon (as cited in Bransford, Brown, & Cocking, 2000) wisely stated, “The meaning of knowing has shifted from being able to remember and repeat information to being able to find and use it” (p. 5). The sheer magnitude of this knowledge sets up education practices to fail trying to cover it; the goal for education should rather be helping students develop the intellectual tools and learning strategies that are needed to acquire knowledge so students can think productively within multidisciplinary content areas. Fundamental understandings of various subject areas can lead to a basic understanding of principles of learning, and this in turn can lead to sustained lifelong learning (Bransford et al., 2000). The following represents an excerpt from a BC Premier’s Technology Council (PTC) document addressing education for the 21st century advocating for critical thinking skills:

Students need the search skills required to access information, the critical thinking skills needed to analyse and evaluate that information, and the problem-solving skills required to effectively use that information. It involves purposeful, reflective judgment, logical analysis, and assessment of factual accuracy, credibility, significance and fairness. (Premier’s Technology Council [PTC], 2010, p. 1)

Being able to think critically opens the doors for the practice of other skills as well to include problem solving, informed decision making, and critical reflective practices—all very important skills for active citizenship (Hoskins et al., 2008). To be able to think well involves being able to independently discern questions worth pursuing while critically looking at knowledge, knowing that it is contestable and being able to provide evidence and support to one’s arguments. Mayer (as cited in Pithers & Soden, 2000) note there are core competencies necessary for lifelong learners that demonstrate adaptability and flexibility. These competencies are related to both knowledge and skills to include collecting, analyzing and organizing information; planning activities; problem solving; communicating information; working with others; and using technology.

Critical thinking as it is defined in the literature involves many abilities and dispositions. Critical thinkers are open-minded while at the same time able to identify a problem and its associated assumptions. They are able to dissect the problem to narrow down aspects, analyze, make reference and use inductive and deductive logic, while judging the validity and reliability of the assumptions (Ennis, Perkins, Jay, Tishman & Kuhn as cited in Pithers & Soden, 2000). There is the assumption that critical thinking lies solely in the teacher’s hands; however, to promote critical thinking, the students

themselves need to reflect and refine strategies to develop their own knowledge and skill base. Langer (1997) stresses that teachers should learn to teach from multiple perspectives, which can give rise to connections and similarities of content. An example may be to try to understand why a particular wet lands area is demonstrating a loss of water levels over the past years and what kinds of environmental impacts this may have. To understand this problem, students will need to ask questions, discern and focus on pertinent ones, design experiments, test ideas, collect data, make inference, etc., while at the same time engage in content areas such as biology, geography, chemistry and math. Place-based activities as such are common in many ICPs with experiential education focuses, and the one described here was an example from ES 10.

The Center for Research on Lifelong Learning (Hoskins, 2006) has proposed the following detailed list of knowledge, skills, attitudes and values as necessary for active citizenship from an education context:

Knowledge: human rights and responsibilities, political literacy, historical knowledge, current affairs, diversity, cultural heritage, legal matters and how to influence policy and society.

Skills: conflict resolution, intercultural competence, informed decision-making, creativity, ability to influence society and policy, research capability, advocacy, autonomy/agency, critical reflection, communication, debating skills, active listening, problem solving, coping with ambiguity, working with others, assessing risk.

Attitudes: political interest, political efficacy, autonomy and independence, resilience, cultural appreciation, respect for other cultures, openness to change/difference of opinion, responsibility and openness to involvement as active citizens, influencing society and policy.

Values: human rights, democracy, gender equality, sustainability, peace/non-violence, fairness and equity, valuing involvement as active citizens.

Identity: sense of personal identity, sense of community identity, sense of national identity, sense of global identity. (p. 7)

Active citizenship education has a goal of increasing students' awareness of individuals' rights and responsibilities while at the same time developing skills and attitudes that promote learners to ask questions and to critically analyze the established system and structures (Mayo & Annette, 2010). An outcome of active citizenship education would include high levels of political, social and environmental responsibility combined with some knowledge and desire on how to engage in various participatory actions for the goal of making positive change (Westheimer & Kane as cited in Mayo & Annette, 2010).

The preceding section discussed active citizenship from the educational perspective, particularly relating to important goals and outcomes. Although the literature is consistent around what types of goals and outcomes are important for education programs with active citizenship as an aim, how one achieves this is not as clear. The following section will discuss current literature related to educational practices that have active citizenship as a goal.

Active Citizenship and Educational Practices

Hope (2012) conducted a case study on Sands School, a small independent secondary school based in South Devon, England. What is unique about this school is that it describes itself as a democratic school much in line with Dewey's (2004) view of democratic education. Foundational to its core philosophy is a strong ideology about enabling students to have control of their own learning and their own lives. Experiential learning is practiced regularly while students and teachers carry equal status in the decision-making process. The school operates as a small community. Notable was the fact that the school was originally founded by a group of students and teachers; this can be seen as active citizenship in practice.

Hope (2012) utilized a grounded theory methodology over a three-year period. Observation, interviews, informal discussions and participation at meetings were utilized in his approach. What he found was that students were changed in many ways throughout their time at Sands. The environment of democracy is one where they have to engage with others, think about responsibilities to others and be accountable. They do not follow a strict set of rules per se but decide on how to behave through critical thinking. Since the school operates as a community where all participants (teacher and students) have a voice, everyone feels accepted as an individual while at the same time

feels connected to and invested in others. This sense of belonging helped motivate individuals to participate in the community in a way that was beneficial for all. Individuals over time developed attitudes, values and skills that helped them become active citizens in the school but more importantly when they left as well.

Hope (2012) notes that the school does not offer citizenship as a curriculum subject nor does it explicitly state it as a goal, and yet active citizenship attitudes, values and skills were very prominent in the day-to-day goings on of the school community. He advocates for democratic schools such as Sands where pedagogy and school decision-making reflect the aims of active citizenship to fully engage young people as active participants within their school communities.

Dewey, an advocate of democratic education and a key thinker on experiential education and learning argued that schools should be run as democratic communities since “the very process of living together educates” (Dewey, 1938, p. 6). Active citizenship through this lens is not like a traditional subject; it must be learned through experience. When individuals experience rights and responsibilities, being accountable to others while being accepted in a community of practice, they can come to terms with the complexities of active citizenship. Democracy in the classroom that is a shared responsibility towards learning is another important feature within educational practices, particular experiential ones that can lead to long-term participatory action. Experiential education and learning will be discussed in more detail in Chapter 3.

A great deal of the research on active citizenship and education has come out of Europe; notable was an extensive study on active citizenship education by the European Commission Directorate General for Education and Culture (European Commission, 2007). This study set out to understand how active citizenship education works and whether there are common strategies that lead to successful practice. The qualitative analysis of 57 good practices (across 33 countries) and 10 cases studies suggest the following themes necessary for citizenship education success (in brief):

Going beyond civil rights and democracy to include socio-cultural issues.

Empowerment and “giving people a voice” as well as taking responsibility and leadership.

Awareness through experiential learning practices while developing skills around debating, and discussions.

Activating people in the near future on expanding contacts and networks.

Partnership building with the wider community especially those at various implementation levels providing mixed types of education and working with mixed age groups.

Community involvement

Projects that have a lasting success by transferring these over to other organizations.

In recent years, there has been a shift for all types of citizenship education to include a more participatory aspect of citizenship; in other words, it has begun to focus on citizens' direct participation within the democratic process and communities with a strong emphasis on individual action with the intent to make a difference (Barber as cited in Hoskins & Mascherini, 2009). A study by Ireland, Kerr, Lopes, & Nelson (2006) highlights the considerable potential for citizenship education, as an active practice. They suggest that a number of key underlying factors evident in school and daily life are necessary to foster and sustain active citizenship. Summarized briefly these factors include

Sense of community and belonging to include the desire to be part of strong, safe communities based on networks and friendships that foster trust, concern for well-being, a sense of self-worth and encouragement towards individual and collective social responsibility.

Attachment to the school community with the majority of students involved in the study viewed school as the main social and participative community in their lives.

Attachment to wider communities, although these not being the major community in which young people participated in, they still valued being part of a wider community. They genuinely cared about the happenings in and out of the wider community.

Having a voice; young people believed that they should have a voice on matters that affect them especially at school.

Making a contribution; most young people were keen about making active and responsible contributions to the communities in which they belong to especially the school community.

Linking experience to opportunity; young people made connections between their opportunities and active citizenship experiences in various contexts. (Ireland et al., 2006)

Experiential Learning and Active Citizenship

Although the literature is not clear on what is the best way to educate for active citizenship, there are some common themes that emerge resulting in successful practices. These common themes include community involvement, active engagement in real problems, experiential learning, democratic practices in the learning process and sense of community (Mayo & Annette, 2010; Packham, 2008; Potter, 2002). Perhaps one of the reasons that experiential learning has been cited as successful within education programs that have an aim of active citizenship is that it can afford experiences that encompass these themes while at the same time foster the growth of skills and beliefs (Breunig, 2008; Itin, 2008).

In terms of common skills, knowledge or beliefs, critical thinking and tolerance emerge as being very important. Effective active citizenship education must actively engage students by encouraging them to not just learn about community, politics or the environment but to be actors in all. It seems clear in the literature that the most effective way toward active citizenship in education is through active engagement (learning) in real-life community and or environmental issues.

Crick's first and seminal report, *Education for Citizenship and the Teaching of Democracy in Schools*, commonly known as the Crick Report (Crick, 1998) resulted in the addition of citizenship to the national curriculum in England. It is important to note that this report also recognized the importance of active learning in the community, learning that is, by definition, experiential in nature. Many scholars have extended this thinking to include the experiential learning cycle as a preferred approach to curriculum planning where learning spirals in a continuous fashion from having an experience, reflecting on that experience to learning from the experience and applying it to new or similar situations. The experiential learning cycle most cited in active citizenship literature is the Kolb cycle (Mayo & Annette, 2010; Packham, 2008; Potter, 2002). The learning cycle of Kolb (1984) is discussed in detail in Chapter 3.

While Kolb's learning cycle is the most cited learning cycle in active citizenship research, it is important to note that the field of experiential learning has moved forward somewhat and there has been some critique of Kolb's (1984) experiential learning cycle. Holman, Pavlica, and Thorpe (as cited in Beard & Wilson, 2006) raise some issues with Kolb's theory, which are briefly summarized below:

1. Kolb's theory is primarily located in the cognitive psychology tradition and is somewhat mechanical in its approach that separates people from the social, historical and cultural aspects of self, thinking and action.

2. The sequential aspect of the cycle does not represent what really happens in learning. "Learning can be considered as a process of argumentation in which thinking, reflecting, experiencing and action are different aspects of the same process. It is practical argumentation with oneself and in collaboration with others that actually forms the basis for learning." (Holman et al., as cited in Beard & Wilson, 2006, p. 42)

Although, Holman et al. (as cited in Beard & Wilson, 2006) raise concerns over Kolb's model, they do recognize how influential this model has been and state that the concerns "is rarely seen as problematic" (p. 42). While there are various forms of experiential learning models in the literature, most are cyclic in nature and some attempt to address the issues of Kolb's (1984) model. Proudman (1995) emphasizes that the most important factor within these models is the existence of particular phases to include experiencing, reflecting and applying. Perhaps one reason Kolb's model of experiential learning is most cited in active citizenship research is because Kolb's learning cycle can be regarded as a simplistic interpretation of complex operations that occur in learning and is therefore easy to understand and apply compared to other models that are more complex (Beard & Wilson, 2006). In addition, Kolb's model even with its limitations has been "identified and endorsed throughout history and remains the most enduring of the experiential learning theories (Beard & Wilson, 2006, p. 44).

Since experiential learning is considered an important educational component within the active citizenship literature, a more detailed discussion around this will be included in Chapter 3. The next section of this chapter focuses on the theoretical background of ICPs as well as research related to active citizenship of ICPs, particularly those with an experiential education focus built into their philosophy of delivery since this aligns with ES 10, the program at the centre of this thesis research.

Integrated Curriculum Programs

ICPs are interdisciplinary educational programs that blend content from various sources around a common theme. There is more to ICPs than integrating curriculum as they are also about the process of teaching and learning. Breunig and O'Connell (2008) state that some ICPs, especially those with an environmental studies theme, have the intent to situate learning in real world experiences to help bring relevance to learning and

encourage student responsibility. The ES 10 program can be regarded as an ICP with similar aims.

ICPs tend to blend complementary subject areas with the intention of creating interdisciplinary investigations of a central theme, topic or experience (Jacobs as cited in Breunig & Sharpe, 2009). Commonly ICPs combine four or more subjects taught in a holistic manner that is organized around themes such as drama, music, language, science and the environment. A good example of ICPs around these kinds of themes can be found at the Wood Street Center, a school in Whitehorse, Yukon, that offers only ICPs of various themes from Grades 9 to 12 (Yukon Schools, n.d.). The ES 10 program is an ICP that combines Science 10, Earth Science 11, Social Studies 10 and Physical Education 10 and is organized around the environment. These types of ICPs are taught in a format that is atypical of the rotating time schedules prevalent in most high schools. Participants form a cohort usually between 20 – 25 students spend an entire semester with one or two teachers that teach the course-related content in an interdisciplinary and holistic way without having to move from class to class on a rotating time schedule (Horwood, 2002; Russell & Burton 2000). ICPs emphasize experiential learning and often have the philosophy of experiential education built into their delivery (Breunig, Murtell, Russell, & Howard, 2013).

While the term curriculum traditionally refers to the teaching content of a single subject, an integrated curriculum includes the unison of various other knowledge areas. ICPs often approach learning and teaching from a world view perspective, utilizing varied strategies and resources while taking advantage of real-life situations for problem solving and critical thinking (Drake, 1998). Horwood (1994) states, “Integration happens, not so much from putting school subjects together into a shared time and space, but from certain types of general experience which transcends disciplines” (p. 91). According to Oberholtzer (1937), the philosophy underlying curriculum integration holds that education is the

creative grappling with the situations which the world continually puts before us. . . . Education has the task of setting up programs so that the child may and will develop the ability to answer intelligently and face courageously certain life problems with some skills in finding possible solutions. (p. 15)

Malloy (1996) concluded that “curriculum is a potent tool for reform when it integrates and interrelates subjects and disciplines in a manner that makes learning

experiences meaningful” (p. 233). Drake (1998) who has done a great deal of work within ICPs believes that curriculum integration done well involves shifting all aspects of curriculum design to align with what is already known about the learning process. This would include most recent brain research and various innovative teaching strategies.

Case (1991) points out that there are various forms of integration to include: integration of content, integration of skills and processes, integration of social and self and holistic integration. Content refers to what many educators would call propositional knowledge, representing the understandings and beliefs that educators aim to foster (Case, 1991). Linking understandings from one subject area or discipline would be an example of content integration. Process and skills are what educators would call procedural knowledge, which represents knowing how to do something utilizing various skills. An example of this form of integration is teaching how to read and write into content areas such as social studies and science.

The integration of school and self, as Case (1991) points out, includes what the students study in school, which includes content and processes, compiled with the student’s own concerns, needs, desires, queries, aspirations, etc. Demonstrating how science and/or social studies curriculum can provide usefulness or connection in a student’s life is an example of this form of integration. Finally, holistic integration, as Case (1991) states, refers to the integration of all other school-related experiences not necessarily identified or expressed in the other forms of curricular integration. Informal and formal practices, routines, methods, and school-based influences on students’ learning are all forms of holistic integration. ICPs that do not operate on the typical bell schedule allow for this kind of integration to occur more freely, especially if integration is organized around themes such as the environment.

According to Drake (1998), integrated curriculum can be defined in various ways; however, most experts in the field believe that there is a continuum along which progressively more and more connections are made, and the progressive process along this continuum is evolutionary in nature. Erickson (as cited in Drake, 1998) differentiates between lower levels of integration as multidisciplinary to a higher level of integration as interdisciplinary (characteristic of higher level thinking). There is an agreement among experts in this field that teachers tend to start from the multidisciplinary (disciplines share a theme but are approached separately by subject) and move to the interdisciplinary (subjects are interconnected beyond a common theme).

The common understanding of curriculum integration can be very complex as Case (1991) points out in his typology, which exhibits many dimensions allowing for a multitude of complexities. For example, Case (1991) points out that horizontal and vertical relationships exist in theme-based integration. A theme around the environment may cross content areas of science, social studies, and others but may do so at the expense of taking advantage of vertical relationship connections that may exist within a content area (e.g., investigation of various social conditions that may take the students' learning beyond their own grade level) because this topic may be outside the environmental theme.

Jacobs (as cited in Drake, 1998) simplifies the process of integrating curriculum by proposing a curriculum mapping process that allows for both horizontal (across one grade) and vertical (K–12) integration. Drake (1998) introduces a continuum of integration demonstrating the existing complexities, which includes multidisciplinary and interdisciplinary approaches as well as what she would describe as the highest level referred to as transdisciplinary. She notes that while educators utilize differences in philosophy and techniques when they develop curricula, a movement into more degrees of integration is evident when more connections were made. It is important to also note that one position may not be regarded as superior to the other; rather, the different approaches may be more suitable depending upon the context in which they occur. Drake (1998) summarized the continuum of integration as follows:

Traditional. The material is taught through the lens of only one discipline, such as science or English.

Fusion. A topic is inserted into several subject areas. For example, one fuses environmental issues, social responsibility, and social action into single courses such as geography or English.

Within one subject. The sub disciplines are integrated within one subject area, such as physics, chemistry, and biology integrated as science.

Multidisciplinary. The disciplines are connected through a theme or issue that is studied during the same time frame, but in separate classrooms. In elementary school, students may rotate through learning centers representing different subject areas. Generally, students are expected to make the connections among subject areas rather than having them taught explicitly.

Interdisciplinary. Interdisciplinary curriculum has many different variations. The subjects are interconnected in some way beyond the common theme or issue. These connections are made explicit to the students. The

curriculum may be tied together by guiding questions, a common conceptual focus, or cross-disciplinary standards.

Transdisciplinary. This approach transcends the disciplines and is found in many different forms. It differs from the other approaches because it does not begin with the disciplines in the planning process; rather, the planning begins from a real-life context. The disciplines are embedded in the learning, but the focus does not start there. This approach can include cross-disciplinary outcomes, but often emphasizes personal growth and social responsibility. (p. 20)

Structure of Integrated Curriculum Programs

Although there are relatively few ICPs in British Columbia, the exact make up and design of the program can be quite unique. However, what tends to be similar is as follows: In these programs, students tend to spend a full day (every day) with a cohort of peers taught by one or two teachers within a semester. The integrated approach involves the grouping of four to six subjects, which makes up the program's curriculum. As mentioned previously, the program studied in this thesis (ES 10) integrates four subjects: Science 10, Physical Education 10, Socials 10 and Earth Science 11. Often the courses that are offered are selected by individual teachers based on their own expertise (Russell & Burton, 2000). In the ES 10 case, these courses were selected due to a desire to make the program academically robust by including three academic courses, one of them being at a higher-grade level than that of the students. Having the Earth Science 11 course included in the program also encourages the fostering of vertical integration relationships as defined by Drake (1998) and Case (1991). In addition, the courses were selected for continuity (how they complemented each other) and according to the abilities of the teacher—me in this case.

After three years of running the program by myself, I enlisted the help of one other teacher and included two more courses (Leadership 11 and Planning 10). Having one more teacher in the program helped to balance out the workload but more importantly provided more insight and perspective for the day-to-day goings on of the program. As previously mentioned in the Chapter 1, I purposely settled on the name Experiential Studies 10 because much of our curriculum was to be accessed through hands-on learning and the term “studies” would not limit investigation areas whether it was a curricular, environmental, social or any other concept. More importantly, I was hoping that the program's design could help foster a learning environment that would invite students to think from a philosophical perspective (i.e., thinking “outside

themselves”) so they could become environmentally and socially responsible. The following paragraphs will shed some light on how ICPs such as ES 10 can lead to long-term learning related to active citizenship through the current research in this area.

Integrated Curriculum Programs and Environmental Education

Breunig and Sharpe (2009) note that ICPs as an alternative approach respond to a number of critiques launched against the traditional educational model in terms of its limitations in fostering environmental citizenship. Breunig and Sharpe (2009) point out two critiques from Orr and Nicol, which advocate ICPs for a more interdisciplinary study of the environment as a good alternative to address existing complexities within environmental education. Full-day and extended overnight field experiences allow for real world environmental learning opportunities to occur. These opportunities include service learning, PBL projects, environmental monitoring and investigation, and partnership activities with advocacy groups or agencies within communities, which leads to personal growth. Orr (as cited in Breunig & Sharpe, 2009) argues that “traditional education focuses on indoor activities that distance students from the environment, nature and bioregion (p. 301).” Furthermore, Russel and Thomashow (as cited in Breunig & Sharpe, 2009) point out that ICPs allow for learning to be grounded in authentic real world experiences, which ultimately helps education shift from content delivery and information transmission toward “action, reflection, and efforts toward social transformation” (p. 301).

ICPs often adopt experiential education as a pedagogy, and many of them have an environmental and/or outdoor education theme (Henderson, 2002). Comishin and Potter (2000), while defining integrated curriculum with outdoor education as a theme, also describe various levels of integration and relationships that exist:

Integrated Curriculum applied to the outdoors is a blending of skills and knowledge from a number of traditional subjects to be presented through a holistic teaching approach in the outdoor classroom whereby the students gain credit for the integrated subjects. Integrated curriculum is a curriculum where the students cannot discern between subject material because the lessons of each subject are intermeshed, as in life. (p. 26)

ICPs often go beyond using the outdoors as a resource. Having an environmental education philosophy embedded into the program is intended to invite learners to re-establish their understanding of their interconnectedness with the biotic.

Orr (2002) defines environmental education as experiencing nature and gaining knowledge about nature in order to develop an environmental ethic. Having an environmental education philosophy as such helps guide the learning process, especially with the reflection, debrief and subsequent action. Higgins (2009) argues that developing a connection with the environment can lead to further learning opportunities to include “an ethic of citizenship, where rights and responsibilities are understood and exercised, and care, for self, other and the environment” (p. 48). He believes that once a connection with the environment is developed an understanding of consequences of actions can be made leading to an ethic of citizenship. This in turn can lead to a better understanding of rights and responsibilities through action that considers the care for self, others and the environment. Higgins stresses the key to this level of understanding and long-term learning is through critical reflection where learners have the responsibility to carefully and critically examine the issue at hand, which is not a traditional focus of many experiential education programs. It is important to note that while many experiential educators believe in outcomes as such, there is limited evidence in the literature to back these claims. Although it is limited, research does exist drawing links from various features within ICPs toward concepts related to those of active citizenships. The next section will include a discussion around recent literature of ICPs within the theme of active citizenship.

Narrow and Broad Based Adventure Experiences

Many ICPs with an outdoor focus incorporate adventure-based learning through various activities and experiences. The ES 10 program, for example, utilized various low rope and high ropes course activities with the intention of building the students’ trust, communication and problem-solving skills. In addition, ES 10 also integrated more broad based adventure activities to include canoeing, hiking, snow showing and biking that spanned over several days.

Rubens (as cited in Higgins, 2009) conducted qualitative research through linking outdoor education, adventure, and learning with taking responsibility by completing a comprehensive review of the educational and psychological literature. He concluded that narrow adventure experiences, which can be described as short-duration activities that focus on the thrill factor such as low and high ropes courses, miss the benefit potential of broad adventure experiences that are longer in duration. Broad based adventure

experiences such as an extended canoe trip can offer a wide variety of experiences encouraging a mastery approach to education and lead to a willingness to take responsibility for their actions that can be transferred to future behaviour as well suggesting long-term learning. The narrow adventure experience from his review appeared not to produce these long-term benefits.

Rubens (as cited in Higgins, 2009) suggested that if taking responsibly is a desired outcome (goal), then adventurous activities that are broad in nature will have a higher potential to bring about that desired outcome rather than activities that are narrowly focused. Broad adventure activities such as hiking or canoeing offer extended curricular opportunity as well, especially for place-based or problem-based learning opportunities, which is characteristic of ICPs. For example, a group of students can also be part of a broader investigative study of bird populations and patterns while undergoing a multi-day canoe trip. The extended nature of this experience allows students to not only interact and conduct themselves in an environmentally responsible way but also, because of the discussions and reflections that can come out of it, bring into context and relevance what this responsibility means.

Higgins (2009) states that if “taking responsibility” is adopted as a central theme, opportunities exist within outdoor programs to apply this approach to other aspects of life, through “raising the awareness of consequences of actions and taking responsibility for them is vitally important in both local and global citizenship” (p. 51). The important note here is that while ICPs may integrate narrow and broad focused adventure experiences, it is the experiences that are extended in time and engage the student in other learning opportunities that have demonstrated more long-term learning, which in some cases can mean demonstrated higher levels of environmental responsibility.

Flexible Schedule and Experiencing Real-Life Issues

ICPs have the advantage of having more control of schedules and often offer student experiences that are extended in nature that may span several days. Several researchers (Ballantyne & Packer, 1996; Bogner, 1998; Cummins & Snively, 2000) investigated the change in students’ environmental perspective that occurs within environmental ICPs. The researchers concluded that students who experienced real-life issues while spending extended periods of time together, developed an increased efficacy towards their perception that they could bring about change through their

behaviour. This perception and higher efficacy lead to an outcome of them taking extra care of their surroundings. The continued longevity of this behaviour was contingent upon the duration of the program. Two important notes come out of this research to include the importance of “extended time” and immersion in real-life issues, which are both features of many ICPs.

Active Citizenship Related Outcomes

Schusler et al. (2009) studied the aims of environmental action through the stories of various environmental educators who specifically through experiential education practices attempt to create positive environmental and social change in youth. What they concluded was that despite critiques of environmental education programs assuming a deterministic educational aim (Jickling & Spork, as cited in Schusler et al., 2009) and the neglecting of broader historical, economic, social and political constraints on environmental improvement (Robottom & Hart as cited in Schusler et al., 2009), many environmental education practices in United States predominantly focused on education towards pro environmental behaviours successfully. Interestingly, the successful programs that had this focus were more democratic in nature, and teachers were seen as facilitators of participatory education through environmental and/or social action. Perhaps, the democratic nature of the learning environment within these successful programs allowed the program to be less deterministic in its educational aim (by allowing students to have input), which addresses, in part, Jickling and Spork’s critique of environmental programs stated earlier.

Environmental action seen here “is a process of co-creating environmental and social change while building individuals’ capabilities for further participation contributing to persona land community transformation” (Schusler et al., 2009, p. 124). A key feature in the learning environment was the level of democracy present where decision-making was shared between teachers (practitioners) and youth. Orr (1992) and Stapp, Wals, and Stankorb (1996) as cited in McClaren and Hammond (2005) support this approach in environmental education and indicate that by providing students opportunities to plan and implement actions that address real environmental problems in local communities is a powerful way of enhancing civic literacy.

McClaren and Hammond (2005) stress the importance of an integrated curriculum for effective environmental education programs with aims of environmental

action. They cite various reasons for integrating curriculum. Integration of curriculum can promote “collaboration and communication among once isolated disciplines” (McClaren & Hammond, 2005, p. 272). Approaching curriculum from a more multidisciplinary perspective supports contemporary views on how people should construct knowledge (Bransford et al., 2000). In addition, integrating curriculum supports current learning theory that suggests learning is a very context-sensitive activity (Bransford et al. as cited in McClaren & Hammond, 2005).

Integrated curriculum can offer educational opportunities to help students understand linkages from one area of study to another while transferring learned skills and knowledge to various other contexts. Furthermore, integration of curriculum translates to the availability of larger blocks of time which in turn allows students to spend more time engaging in complex problems. McClaren and Hammond (2005) believe that the availability of larger amounts of time to access complex problems that may also involve working with a variety of field specialists while focusing on topics of common concern is a key element of ICPs toward environmental action. However, McClaren and Hammond believe that ICPs must be cognizant of the potential of indoctrination when it comes to the selection of environmental action projects, even if it is toward well-intentioned purposes and goals. To limit indoctrination, McClaren and Hammond (2005) challenge environmental educators with a goal of environmental action to find ways to engage students to partake in complex problems and involve them in the decision-making process while having an opportunity to “critically consider environmental issues, examine possible courses of action, and take action as integral parts of education experience [without being persuaded by the teacher to take up] selected causes or policies and indoctrinating them to particular ideologies” (p. 274).

Research of ICPs Similar to ES 10

Breunig (2013) conducted a case study on an integrated environmental studies program at the secondary school level in Ontario, Canada. The purpose of this study was to investigate pro-environmental behaviours and to what extent and in what ways does environmental knowledge inform social and environmental actions. Over a four-year period, since the inception of the program in 2009, she utilized qualitative methods to include student focus group sessions focusing on questions relating to how the teacher’s teaching praxis impacted attitudes, knowledge and social and environmental

justice action. Teacher and principal interviews were also conducted. Four dominant themes emerged in Breunig's (2013) final analysis, which centered on the evolving structure and dynamics of the program to include a strong sense of community and group cohesion; an evolving mission/vision; the continued adaptation and growth of the teacher's pedagogical praxis; and an increase in activist leanings. The results of this study demonstrated a change in pro-environmental behaviours in the participants related to being in the environmental studies program and due to the increased environmental knowledge learned. In addition, the formation of a pro-social group (strong group cohesion) was reported as key to environmental learning and action. These phenomena are consistent with relational social justice theorists (Fraser, 2003; Young, 1990, as cited in Breunig, 2013) who stress the importance of individuals in groups to recognize and accept differences between one another in order to work together toward justice.

Humphries (2004) conducted a case study on a Grade 10 ICP with an outdoor education focus called TREK, which operates out of Vancouver, Canada. He utilized a qualitative approach to his study to include focus groups and one-to-one interviews. The goal of the study was to gain a better understanding of what sustainable education looks like from the perspective of students. Brundtland (as cited in Humphries, 2004) describes sustainable education as "meeting the needs of the present generation without compromising the ability of future generations to meet their own needs" (p. 2). Three key themes relating to curriculum content and pedagogical practices emerged. From the students' perspective, direct (hands-on) experiences, integration of curriculum (systems thinking) and personal connections were the most important features in relation to learning to live in a more sustainable manner. The hands-on experiences included field studies related to consumerism and ecosystems, extended wilderness trips focusing on minimum-impact camping and volunteering in the community. The second theme on integration was related to how many of the lessons and/or activities integrated various curricular outcomes with a more systems way of thinking. Many of these projects centered on concepts of bio-diversity and examination of earth systems. Insights into the "big picture" were cited as a foundation to understanding the topic of sustainability. The last theme was personal connections, where students were able to make a personal connection to either the subject matter or to others. The students referred to the relevance behind what they were learning and how connections could be made to their own daily lives.

Rowley (2010) conducted a phenomenological study of the same integrated curriculum program TREK as did Humphries. She utilized a mixed methods approach to explore what graduates from this program found most significant about their outdoor education experience. Data was collected using semi structured interviews, an online survey, and journal reflections analyzed within a transformative learning theory framework. Transformative learning theory is concerned about the relationship between learning and change. It attempts to understand learning processes leading to the experience of deep structural shifts in thought, feelings and actions (O'Sullivan, as cited in Rowley, 2010). The Transformative Learning Centre (Rowley, 2010) describes the process of transformative learning as

a shift of consciousness that dramatically and permanently alters our way of being in the world.

This shift includes our understanding of our self-locations and our relationships with other humans and with the natural world. It also involves our understanding of power relations in interlocking structures of class, race and gender, our body awareness, our visions of alternative approaches to living, and our sense of possibilities for social justice, peace and personal joy.

In sum, transformative learning makes us understand the world on a different way, changing the way we experience it and the way we act in our day-to-day lives. (p. xi)

Rowley (2010) had a total of 183 graduates from 2000 to 2009 participate in this study. She found that the TREK program provided a transformative education experience for many of its participants. She identified core concepts of transformative education to include experiential learning; challenge; opportunities for critical reflection and dialogue; a safe learning environment; and time. Experiential learning in relationship to using the environment and community as context for learning was cited as an important feature. ICPs such as this one where multiple subject areas are taught in a holistic fashion allows for experiential learning opportunities to take advantage of many learning outcomes. The TREK program combines classroom learning with activities with the intent of connecting students to the real world through experiential learning to include outdoor trips, field studies and service learning. Curriculum content that included education for sustainability, outdoor pursuits and character development were also cited as important features. Many reported that this type of curriculum made them more environmentally aware and allowed them to examine personal impacts on the environment. Rowley (2010) suggests that the outdoor challenges and integrated

themes of the TREK curriculum may act as triggers for both social and personal transformation as many participants reported on long term pro-environmental behaviour and a belief that they were changed for the better in many aspects of their adult life, especially with regard to self-esteem and/or self-efficacy.

O'Connor and Sharp (2013, 2015) describe a longitudinal mixed methods research on an ICP called Experiential Science 11 (ES 11). It is important to note that the initial conceptualization of the ES 10 program (the program studied in this dissertation) was based on the same ES 11 program. In fact, as previously mentioned in the introduction, Sharp the original founder of the ES 11 program played a key role in encouraging and assisting me in developing and initiating the ES 10 program. O'Connor and Sharp's research on the ES 11 program examined the various educational strategies that foster long-term commitments towards responsible citizenship. The research methods included open-ended surveys, interviews and anecdotal discussions as well as data on post-secondary education with many of the former students of the ES 11 program. They were able to contact students that were in the program as far back as 1994, the inception of ES 11, which represents data collection from participants that were in the program 20 years earlier. The preliminary results of this study highlighted the value of early student involvement in place-based activities and communities of practice leading to social and environmental action and responsibility from the student perspective.

Key themes emerged from O'Conner and Sharp's (2013, 2015) studies to include how the ES 11 program had an effect on their educational and professional goal pathways. In many cases, past students choose fields and or organizations that valued "global sustainability, global awareness and social consciousness" (O'Conner & Sharp, 2015, p. 24). Another theme that emerged was the importance of relationships that were fostered in the program and maintained years beyond the program, accomplished by the amount of time students spent and through the various problem-based challenges they experienced together. Almost all of the students participated in the study continued to be involved with some sort of community service or initiatives local and/or beyond. Many of the participants indicate that they found their voice in the ES 11 program through many of the problem-based initiatives; they say the course was democratically run and continue to use it. Most important to finding their voice was the importance of having an opinion that was backed up by quality research and critical thinking. O'Connor and

Sharp (2015) believe that critical thinking, a condition found in place-based activities, gives rise to responsible environmental and social responsibility. In this context learning to think critically can be conceptualized by

the acquisition of the competence to participate critically in the communities and social practices of which a person is a member. If education is to further the critical competence of students, it must provide them with the opportunity at the level of the classroom and the school to observe, imitate and practice critical agency and to reflect upon it. Learning contexts must be chosen which students can make sense of and in which they can develop a feeling of responsibility for the quality of the practice in question. (Ten Dam & Volman, 2004, p. 359)

Experiential Education and Place-Based Practices

Experiential education practices to include place-based initiatives have the great potential to encourage critical thinking and to promote practices that can persist into the future. Klincheloe (as cited in Breunig, 2005) argues that a critical pedagogical vision within education has its foundation in the social, cultural, cognitive, economic and political context, and this is part of the larger community and society. Experiential practices to include placed-based education initiatives allows for “a way of thinking about, negotiating, and transforming the relationship among classroom teaching, the production of knowledge, the institutional structures of the school, and the social and material relation of the wider community and society” (Breunig, 2005, p. 109). Context plays as an important condition for critical pedagogy leading to sustainability. O’Connor and Sharp (2015) advocate for place-based initiatives framed around community issues to provide the context for critical thinking, situational conditions and other attributes. This may be an important feature within the experiential educational practices if the goal is long-term participatory action of sorts.

The Development of Self-Efficacy

The development of self-efficacy was also mentioned as a key outcome of some ICPs (Ballantyne & Packer, 1996; Bogner, 1998; Cummins & Snively, 2000; Trowley, 2010). The concept of self-efficacy is central to psychologist Bandura’s (1994, 1997) social cognitive theory. In this theory, he emphasizes the role of observational learning, social experience and reciprocal determinism. This in turn can affect one’s attitudes, abilities and cognitive skills, all very important attributes for active citizenship.

Bandura (1994) defines perceived self-efficacy as “people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave” (p. 2). A strong sense of self-efficacy leads to heightened accomplishments and personal well-being. These people view challenge as tasks to be mastered; they intrinsically engage deeper into activities they participate in through commitment and interest, and they recover quickly from setback and disappointments (Bandura, 1997).

Sources of self-efficacy according to Bandura (1997) include regular successful engagement in mastery experiences. A second source is through social modelling, seeing people in similar circumstances or contexts to oneself succeed through sustained efforts. Observation of such situations can raise people's beliefs that they too hold similar capabilities that will lead to success. Social persuasion is another way to heighten one's beliefs in the ability to succeed. People who are encouraged (persuaded) verbally that they have what it takes to accomplish (realistically achievable) given activities are more likely to be more motivated to put forward sustainable effort. When a person tries harder to succeed, development of skills follows as well as a sense of personal efficacy.

Finally, people rely upon their somatic and emotional states to evaluate their capabilities. A person who experiences high stress and tension can be interpreted as vulnerable to poor performance. Similar interpretations can be related to activities requiring a high level of physical commitment, such as hiking a steep incline with a heavy pack, as signs of physical inability. In cases such as this, a positive mood may enhance perceived self-efficacy, in essence reducing people's stress reactions and altering negative emotional states that may lead to a misinterpretation of physical stress.

ICPs that include experiential education practices often offer many opportunities for students and educators to engage in a variety of projects that can lead to environmental or social action. Extended field experiences, a common feature of ICPs, can provide opportunities to engage in challenging environments, and with proper facilitation, they can lead to nurturing expressions of self-worth and a heightened belief in one's success (Ballantyne & Packer, 1996; Bogner, 1998; Cummins & Snively., 2000; Trowley, 2010). Students in ICPs with an experiential education focus often invest a great deal of time with each other and invest a great deal of emotion as well to complete

tasks and challenges successfully. This learning environment is framed in line with Bandura's (1997) thinking towards the conditions necessary for self-efficacy to be developed. ICPs, as described, can be a formidable approach for developing key skills such as critical thinking and beliefs such as self-efficacy, both very important for long-term active citizenship.

This chapter discussed the concept of active citizenship extending into the context of education. It addressed current active citizenship research relating to education as well as the theoretical background of ICPs and finally current research on ICP programs with an experiential education focus that demonstrated outcomes toward active citizenship components or concepts. The next chapter's theme centers around learning approaches to include experiential education and experiential learning as well as a contemporary view on learning related to active citizenship concepts.

Chapter 3. Review of Literature: Experiential Education, Experiential Learning and Contemporary View on Learning

Experiential Education and Experiential Learning

It was important for me to include scholarship within experiential education and experiential learning for a few obvious reasons. Experiential practices are a dominant feature within the ES 10 program, and experiential learning methods to include the experiential learning cycle were utilized. In addition, experiential education has been cited as a formidable educational approach for educational aims of active citizenship and social justice (Breunig, 2008; Itin, 2008). Finally, experiential learning has been cited in the active citizenship literature as a key learning feature within active citizenship educational practices (Hoskins & Mascherini, 2009; Ireland et al., 2006; Mayo & Annette, 2010; Packham, 2008; Potter, 2002).

Within my research of experiential education, I was quick to discover that there was no commonly accepted definition and that the terms experiential education and experiential learning are often used interchangeably. More than likely this is due to the numerous ways the terms are used and practiced, coupled with a fragmented history. However eclectic experiential learning theory may be, almost all scholars agree that people seldom learn from experience unless the experience is reflected upon and assessed, allowing for people to assign their own meaning and understanding in relation to goals, ambitions and expectations. The meanings of what is learned at a given moment should shift or change as a result of what is learned today and similarly will need to be unlearned tomorrow to allow for continued growth (Dewey, 1938). For the purposes of this dissertation, I will use the currently accepted definition of experiential education as proposed by the Association for Experiential Education, which defines it as

a philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities. (Association for Experiential Education, n.d., para. 2)

A more detailed definition on experiential education will be included in the discussion to follow. The distinction between experiential education as a methodology and experiential education as a philosophy is central to this definition, which suggests there is a difference between experiential education and experiential learning (Breunig, 2005, 2011).

To help illustrate the difference between experiential education and experiential learning, one can refer to the process of experiential learning as explained by Knapp (as cited in Breunig, 2011) as consisting of four distinct parts:

- (a) active student involvement in a meaningful and challenging experience, (b) reflection upon the experience individually and in a group, (c) the development of new knowledge about the world, and (d) application of this knowledge to a new situation. (p. 59)

Figure 3.1, which is an adapted version of Kolb's (1984) model, illustrates how the segments in Knapp's description interact within experiential education teaching practices in what is known as the experiential learning cycle. The experiential learning cycle will be discussed more in depth later in this chapter.

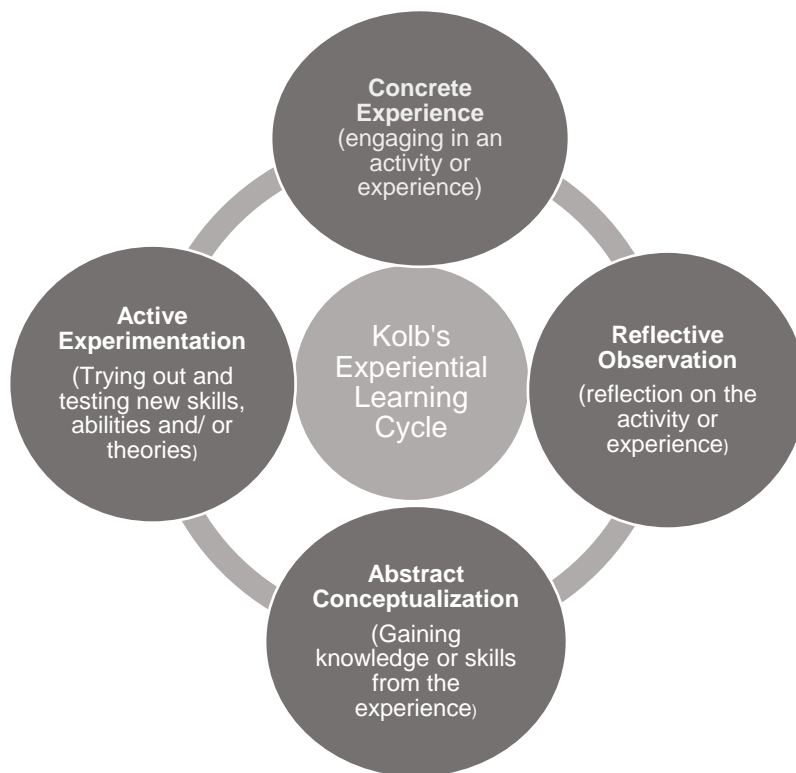


Figure 3.1 An adaptation of Kolb's (1984) experiential learning cycle

Breunig (2005) points out that many experiential education initiatives follow this cycle but do so without intended learning outcomes or aims, suggesting experiential learning as a methodology. In this example, experiential learning represents a certain way of teaching, which also represents the process of change that occurs for an individual (Itin, 2008). Through the eyes of Chickering and Sehno (as cited in Itin, 2008), experiential learning is best described as the “change in an individual that results from reflection on a direct experience and results in new abstractions and applications” (p. 136). Experiential learning is considered an individual process. Education, on the other hand, represents the transactive process between an educator or larger forces, such as the education system, and the student (Itin, 1999). The transactive process describes the exchange that occurs between teacher and student (Itin, 2008). In this description, students learn from teachers, and teachers learn from students as well as learning from the environment and affecting change to it (Itin, 2008). “Experiential education as philosophy employs both methodology (experiential way of teaching) and philosophy as part of the educative process. Experiential education as philosophy implies that there is an intended aim toward which the experiential learning process is directed” (Breunig, 2005, p. 2). Itin (2008) suggests viewing experiential education as a philosophy and not just a set of activities or strategies. His definition that views experiential education as a philosophy is included below:

Experiential education is a holistic philosophy, where carefully chosen experiences supported by reflection, critical analysis, and synthesis, are structured to require the learner to take initiative, make decisions, and be accountable for the results, through actively posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, constructing meaning, and integrating previously developed knowledge. Learners are engaged intellectually, emotionally, socially, politically, spiritually, and physically in an uncertain environment where the learner may experience success, failure, adventure, and risk taking. The learning usually involves interaction between learners, learner and educator, and learner and environment. It challenges the learner to explore issues of values, relationship, diversity, inclusion, and community. The educator’s primary roles include selecting suitable experiences, posing problems, setting boundaries, supporting learners, insuring physical and emotional safety, facilitating the learning process, guiding reflection, and providing the necessary information. The results of the learning form the basis of future experience and learning. (Itin, 2008, p. 139)

In summary, experiential learning can be seen as the change in an individual as a result of the reflection on a direct experience leading to formation of new knowledge

and applications. On the other hand, experiential education includes the transactive component between the teacher and learner while taking advantage of the experiential learning process. Those who engage in project-based learning, place-based learning, service learning, adventure-based education and many others are often “expressions of the philosophy of experiential education in action” (Itin, 2008, p. 143). An ICP such as ES 10 has an experiential education focus and uses experiential learning practices embedded in place-based learning and project-based learning as an opportunity to have students engage in a wide variety of concepts that are often representative of active citizenship while they are negotiating the learning process.

In the preceding section of this chapter, I offered a discussion around experiential education and experiential learning, since these are significant elements in many ICPs and particularly ES 10. In the following section, I briefly discuss the philosophical roots of experiential education within themes of active citizenship.

Philosophical View of Experiential Education

Moving into the 21st century, there has been considerable discussion on the need to develop citizens who are “actively” involved in the democratic process and goings on of community while being environmentally engaged with the intent of creating a more just, compassionate and environmental world (Crick, 1998; Potter 2002; Ross, 2012; Schesler et al., 2009). Many believe the philosophy of experiential education can help develop a community that actively involves all in cooperatively solving problems and contributing to the greater good of society (Breunig, 2008; Itin, 2008). However, one wonders why experiential educators have had a difficult time getting this approach accepted into mainstream education. Blenkinsop (as cited in Smith & Knapp, 2011) says it is “because we do not have a comprehensive and consistent enough philosophy of education to do the job that is currently being asked in the mainstream” (p. ix).

It is my hope that studies such as ES 10 can help link approaches together as expressions of the philosophy of experiential education and advance forward educational reforms needed to address 21st century needs. Understanding experiential education as a philosophy will only help advance educational practices in this area as they can help align practice with goals such as those demanded by 21st century needs. In the following section, I provide a philosophical background of experiential education from the perspective of John Dewey, Kurt Hahn and Paulo Freire. I have limited my

discussion to these three individuals because they consistently come up in the literature as prominent voices in experiential education literature related to the theme of active citizenship.

John Dewey

Dewey (1938) provides a much-needed perspective to this dissertation because his integrated philosophical approach to education theorizes the connections that occur between learning, social context, individual development and civic experiences. However, Dewey does not offer education for citizenship as a distinct subject; rather, he advocates for integration of it into education within a democratic society. “His [Dewey’s] integrated philosophical approach theorizes the connections between and among civic experiences, individual development, social context and learning” (Hildreth, 2004, p. 1). Instead of offering a theory of education specifically for active citizenship development, Dewey offers a philosophy of education that is democratic and a democratic theory that is educative. This view of democracy in the classroom is consistent with much of the research on pedagogical practices for long-term learning of active citizenship as discussed earlier in this review of literature (Hope, 2012; Ireland et al., 2006).

Dewey (1938) believed that school curriculum must be derived from the child’s experiences not the other way around, typical of traditional approaches. He believed in the integration of subject matter with the conditions of the local community, characteristic of place-based practices seen today. These conditions include political, historical, economic and occupational conditions. Dewey (2004), in *Democracy and Education*, stresses aims that are based on outside agendas tend to be “fixed and rigid; [they are] not a stimulus to intelligence in the given situation” (p. 106). By not integrating educational directives with education itself, education becomes hard to attain and “remote, divorced from the means by which it is to be reached” (Dewey, 2004, p. 106). In this non-democratic environment,

Instead of suggesting a freer and better balanced activity, it is a limit set to activity. In education, the currency of these externally imposed aims is responsible for the emphasis put upon the notion of preparation for a remote future and for rendering the work of both teacher and pupil mechanical and slavish. (Dewey, 2004, p. 106)

Central to Dewey's (1938) thinking was the understanding that education was about not only the transmission of facts but also the education of the entire person for the preparation to participate in social change. Utilizing the conditions of the local community as an educational resource helps in the process of achieving this aim.

Dewey (1938) has stated in spite of the uncertainties that exist in traditional or progressive education one certainty exists to include: "one permanent frame of reference: namely, the organic connection between education and personal experience" (p. 25). Central to Dewey's philosophy of education is reflective experience. In order to gain a solid understanding of how reflective experience interacts within the learning process, understanding the concept of "experience" from Dewey's view is needed. In essence, experience is the transaction between the individual and the environment.

Hildreth (2004) points out that Dewey's (1938) concept of individual is simultaneously intertwined with his analysis of experience. From Dewey's perspective, the individual is never viewed in isolation but in a social, historical, situational and developmental context (Hildreth, 2004). The connection between self and world is where experience takes place, where individuals' actions controversially interact with their social worlds. The "individual" makes sense of experiences in the presence of social categories, and although individuals have their own unique thoughts, the "content of their beliefs and intentions is a subject-matter provided by association" (Dewey, 1938, p. 25). To illustrate the nexus that people have with their social worlds Dewey (1938) uses the term "associated individuals" and argues

that the human being whom we fasten upon as individual par excellence is moved and regulated by his associations with others; what he does and what the consequences of his behavior are, what his experience consists of, cannot even be described, much less accounted for, in isolation. (p. 188)

While individuals may have singular thought and endeavour to make independent decisions, what they think and strive for, aligning beliefs and actions, is brought by association. It is within the social context that one makes sense of experience and gives meaning to agency, which is where the potential of long-term learning of active citizenship lies. It is interesting that the BC Ministry of Education's (2007) *Environmental Learning and Experience in: An Interdisciplinary Guide for Teachers* has included a model of a learning cycle that is similar to the widely accepted experiential learning cycle model by Kolb (1984) with the exception it includes

negotiation with peers (and others) as an important part of the learning process. This part of the learning cycle is in alignment with Dewey's (1938) view on association as described earlier. Kolb's learning cycle and the one presented by the British Columbia's Ministry of Education will be discussed in more detail later on in this chapter.

While Dewey (2004) advocated for the creation of a democratic classroom leading to a democratic society through experiential education, he also noted that not all experience equated to learning unless certain conditions existed. Notably, experience comes about from two interacting principles: continuity and interaction. In order for an experience to be continuous, it needs to be formulated on previous experiences and the intended outcome of the present one. One's present experience will have an influence on future experiences. Interaction refers to how learners must be actively engaged with their environment. This includes active observation, reflection and experimentation. Dewey (1938) describes how learning transforms the impulse (feeling and desires) of concrete experiences into higher order purposeful action:

The formation of purpose is, then, a rather complex intellectual operation. It involves: 1) observation of surrounding conditions; 2) knowledge of what has happened in similar situations in the past, a knowledge obtained partly by recollection; and partly from the information, advice, and warning of those who have had a wider experience; and 3) judgment, which puts together what is observed and what is recalled to see what they signify. A purpose differs from an original impulse and desire through its translation into a plan and method of action based upon foresight of the consequences of action under given observed conditions in a certain way. . . . The crucial educational problem is that of procuring the postponement of immediate action upon desire until observation and judgment have intervened. (p. 69)

Dewey (1938) makes some key contributions from his educational theories towards educational practices as they relate to active citizenship. Since Dewey's concept of experience consists of the transactions between individuals and their environment, it is the concrete conditions of everyday life that provide the contextual possibility of active citizenship. If an experiential education program utilizes placed-based learning initiatives through investigating real environmental or societal problems, the context for active citizenship becomes apparent. Greene (as cited in Hildreth, 2004) makes the important claim that Dewey's "attentiveness to the actualities of life" allows for a better understanding of how learning, personal growth and transformation come out of the experience (p. 1). Greene refers to this transformation as the "dialectic of freedom . .

. capacity to surpass the given and look at things as if they could be otherwise” (as cited in Hildreth, 2004, p. 1) representing a process of ongoing transformation.

Young people may not be much aware of the political dimensions they operate within in their everyday lives, and since the organization of schools can be seen as an institution for disciplinary control, all have an effect on participatory attitudes and beliefs (Hildreth, 2004). My daughter, for example, may feel unjust that backpacks are not allowed in her classroom while side bags are and silently complain as a result, but she may have missed this as an occasion to exercise political action by openly questioning the practice and gain support from fellow students toward some sort of action because typical school environments may be quite undemocratic. For Dewey (2004), individual autonomy leading to agency is an important part of the educational endeavour. In a democratic learning environment, my daughter, for example, would feel free to initiate a dialogue around the backpack policy with the potential of creating policy change.

Dewey’s (1938) concept of experience helps with understanding how young people can learn to become active, engaged citizens. It is the habits formed by experience that help guide the learner through the experiential process. Dewey believed much of normal human conduct is not deliberate or planned but rather based on habit. Habits in Dewey’s eyes were more than just a way of acting by conscious resolve. Habits are active means that emerge and dominate ways of acting. They are influenced by prior activity and thus acquired and built upon, which leads to ways of ordering elements of action during similar events. Dewey’s situational understanding of experience directs the necessity of concrete conditions of everyday life experience leading toward long-term learning. Dewey’s “attentiveness to the actualities of life” allows for better understanding of the process of long-term learning to include personal growth and transformation (as cited in Hildreth, 2004, p. 1). Experience involves action and meaning; however, as illustrated by the example with my daughter, actions are bound by habitual modes of being within social and natural environmental conditions (Hildreth, 2004). Using everyday experiences offers a starting point, but without reflection, experiences can be non-educative.

Dewey (1933) defined reflective thought as “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (p. 118). From Dewey’s perspective, experience involves intentional action in the world, which ultimately results

in consequences for the individual (and/or groups) and the immediate environment. Through the reflective process of experiential education, learning occurs as one considers actions and consequences. Reflective thought includes building new understanding to inform actions in the situation that is unfolding. Schon (1983) summarizes the reflective experience:

The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomenon before him, and on the prior understandings which have been implicit in his behaviour. He carries out an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation. (p. 68)

By testing out theories, a person is able to develop new responses and thus form new habits. Of significance is that this is done while not following well established ideas or schemas too closely. The learning happens through experience by understanding the meaning of the connections between actions and consequences that happen involving the individual and environment. Since education is also social, it is through communication that experiences can be shared and potentially turned into a form of participation and cooperation. Dewey's (1938) focus on action, concrete experience, learning and cooperation sets the foundation for thinking about the inter-connected relationship existing between experience and active citizenship.

Hildreth (2004) also claims that a civic experience is not enough to lead to active, engaged citizens. It is through Dewey's conception of habit when "read in conjunction with experience, provides a framework to understand how young people can take on an identity of an active citizen" (Hildreth, 2004, p. 1). This thinking goes beyond the singular event toward the identity of the active citizen, which includes active engagement in everyday life. Dewey (1938) believes diverse experiences and the creation of "flexible habits" (of democratic citizenship) can lead to long-term learning (Hildreth, 2004, p. 2). If an educator affords students the opportunity to engage in activities that have opportunities for elements of active citizenship to emerge, it is more likely the students will continually be engaged in this manner. In turn, it is possible through these experiences, the future behaviour, attitudes and actions of these students will continue to be renewed, leading to a more participatory way of life. Experiential education in this sense is more than a methodology; it is a philosophy leading to a way of living one's life. This is consistent with the research found on best practices for long-term learning of active citizenship; if students are actively learning in active citizenship endeavours (real-

life issues), they will be more likely to continue doing such activities (Hope, 2012; O'Connor & Sharp, 2015).

If an educator is concerned about changing the way learners respond to everyday life representative of active citizenship, a closer look at Dewey's (1938) concept of habit is warranted. As learners collectively engage in the world, old habits appear, while reflective practice sparks light to the formation of new ones, a renewal of self so to speak. The individual in Dewey's (1938) eyes is always in a continual process, negotiating this process within the environment while in the presence of social and historical context. It is important to note that while the social and historical context may be somewhat fixed, it is not determinative because of the continual process noted above. To illustrate this point, Dewey (1938) points out "every experience modifies the one who acts and undergoes, while this modification affects, whether we wish it or not, the quality of subsequent experiences" (p. 35). The next paragraph will point out how habits can lead to learning and growth.

Hildreth (2004) points out that there are four dimensions to habits: formation of attitudes, mechanisms of action, good versus bad habits and habitual schemes. Attitudes represent emotional and intellectual response to the conditions of everyday life. All individuals respond and interpret the world based on developed habits, which are a function of learning and growth. Although the conditions may be similar, the response from one individual to another may be different due to attitude. Hildreth (2004) refers to Dewey's (1922) example to illustrate this: a scientist, artist, sailor (and Hildreth adds surfer) all see the same waves crashing on the shore, but all hold a different perspective in the viewing of such phenomenon based on their habitual modes of interpretation.

Mechanisms of actions are ones that are physiologically grounded and come to existence automatically in presence of cues. This is what could be called reaction without thinking. In modern terms, it would be considered the unconscious response to cues. Dewey (1938) believes that mechanisms of actions give rise to skills allowing for things to be done effectively and efficiently. It is through habit that one is able to negotiate experience through execution and testing new ideas. The third dimension includes the differentiation between good and bad habits. How people react to a situation may elicit a good habit or bad habit, depending on prior experience and thought intervention. Bad habits are the result of repeated behaviour in the absence of thought while good habits require thinking to respond. The final dimension of habit is habitual

schemes, which include the life history of the individuals within the environments they live. The emphasis here is on the plural of environment; as Dewey points out (as cited in Hildreth, 2004), “Habits incorporate an environment within themselves. At the same time, environments is many, not one; hence will, disposition is plural” (p. 7). The plural disposition accounts for the fact that individuals live in many social environments over a period of time which gives rise to a complexity of interactions. Dewey (as cited in Hildreth, 2004) concludes, “There is no ready-made self behind activities. There are complex, unstable, opposing attitudes, habits, impulses which gradually come to terms with each one another, and assume a certain consistency of configuration” (p. 7). Hildreth (2004) makes note that the diversity of experiences within complex societies “opens up spaces for agency” (p. 7) due to the fact Dewey places a great deal of faith in how new habits can integrate with old ones, creating a flexibility of use to meet future challenges.

Dewey’s (1938, 2004) educational method highlights the importance of problem solving, cooperative learning, community-based learning, critical thinking, inquiry, reflection and, ultimately, citizenship for civic learning. Dewey’s theoretical framework can help educators make sense of and evaluate active citizenship practices. Since Dewey is focused on the “how” of learning, this is where it is possible to understand the processes and emerging outcomes of active-citizenship-type experiences. When a group of people intentionally work together to solve societal/environmental problems, combined with reflection, cooperation and habit, long-term learning can be achieved. Active citizenship as it is defined is the regular participation in these types of activities. Experiential education in this sense is more than a methodology; it is a philosophy that can lead to a more participatory way of life when practiced as such.

Kurt Hahn

While much of the progressive education movement in United States was influenced by Dewey’s (1922, 1933, 1938, 1964, 2004) writings, it was Hahn’s (1886-1974) educational practices that influenced the progressive education movement to include experiential education. Kraft (as cited in Itin, 1999) states, “No discussion of the theory of experiential education would be complete without some recognition being given to Kurt Hahn the founder of the Outward Bound movement” (p. 15). It is important to note that many experiential education programs today utilize ideals from the Outward Bound movement. Hahn’s thinking was initially influenced by the readings of Plato’s

Republic in which he extracted the idea that if a person is to achieve perfection, he or she needs to become part of a perfect society by creating social harmony, which in turn leads to harmony in the individual. He believed that through compassion individuals are encouraged through experiences to do what is necessary to create a just society (Armstrong & Sakofs, 1996). Hahn was concerned not only with development of the citizen but also with the citizen's ability to serve in the community (T. James, 1995).

Prominent scholar W. James (1995) influenced Hahn as well. It was W. James's (1995) essay "Moral Equivalent of War," which asked if it was possible to create a social spirit and productivity so evident in times of war during times of peace. Hahn's response to this question was the creation of Outward Bound and the United World Colleges, which for Hahn was to counteract the condition of "spectatoritis" (Armstrong & Sakofs, 1996, p. 7), meaning the decline of initiative, skill, care and compassion. Hahn's educational methods are found in the "The Seven Laws of Salem," a document outlining the methodological practice within the schools he founded (Veevers & Allison, 2011). Salem was a country day school in Germany in which he was headmaster before WWII. T. James (as cited in Itin, 1999) stated the purpose of Hahn's Salem school was "to train citizens who would not shirk from leadership and who could, if called upon, make independent decisions, put right action before expediency, and the common cause before person ambition" (p. 92). Hahn also believed in service learning; he thought if students were actively involved in communities and politics, service learning would help continue to transform the society; in other words, students can be active agents of change (Kraft as cited in Berv, 2008).

Similar to Dewey, Hahn was concerned with using experience to develop the whole person (Veevers & Allison, 2011). He believed it was the role of schools to cultivate good character traits among youth. He also believed that through challenging experience and service, these good character traits would blossom (Itin, 2008) Through self-discovery and overcoming adversity, one was able to exercise qualities such as compassion, tenacity and responsibility, which Hahn felt were necessary for achieving his aim of education (T. James, 1995). T. James (as cited in Itin, 1999) indicated four central elements in Hahn's approach to education: 1) the utilization of a training plan that included a contract on specific goals and codes of responsibility; 2) structuring time to gently entice students into action; 3) introducing challenging tasks with a perceived level of risk and adventure; and 4) using group dynamics to mimic a mini-community and

using shared experiences to help facilitate cooperation. It is fairly clear for Hahn and Dewey that the intent of education through experience was more than the learning of facts; it included developing the whole person toward a life of active citizenship.

Paulo Freire

The final philosopher that I will discuss is Freire who has gained considerable attention recently from scholars looking for relationships within experiential education philosophy and concepts of social justice (Breunig, 2008; Itin, 2008). Freire, a Brazilian educator, set much of his educational theories within the realm of social change toward the liberation and democratization of the Brazilian people. Similar to Dewey and Hahn, Freire viewed education and the learning and growth of individuals in a social and cultural context to include the sociopolitical environment (Itin, 2008).

Freire (2003, 2004) postulated a theory on the process of learning that required the resolution of conflicts between dialectically opposed modes of adaptation to the world. This theory of transformative learning was referred to as conscientization or consciousness-raising. This is a process of critical consciousness where learners develop an ability to analyze, pose questions and take actions on contexts that may shape or influence their lives. This happens through praxis, which Freire (2003) defines as “reflection and action upon the world in order to transform it” (p. 51).

Freire’s (2003) work centered on the inequalities around the social condition in Brazil, and his ideas around education and liberation has been influential with modern educational thinkers, especially in the realm of education and social justice. Central to his thinking was his idea of praxis, which is the process where learners develop awareness of structures within their society and how these structures shape and influence the ways one may think about themselves and the world. Central to this concept of praxis is the active process of naming the world, since naming it transforms it. It is reflective since the choice of the word gives meaning to one’s world. Freire (2003) believes that transformative learning is emancipatory, allowing individuals to reflect on their world and facilitate change (Dirkx, 1998).

Conscientization as referred to by Friere (2003) raises levels of consciousness, giving rise to engaged purposeful participation. Through transformative learning, purposeful experiential-based initiatives can help push the boundaries of participants with the potential of creating authentic experiences that go beyond common experiences

and beyond the limits that are sometimes imposed by ideologies, culture, belief systems, curriculum and others. Freire was concerned about making a difference in the lives of other people. Education for him should promote critical thinking, the creation of critical consciousness so to speak. This was brought about not by the traditional “banking method” (p. 74) of education, which Friere (2003) criticized but through a problem-posing education model. While Dewey (1938) focused on direct experience as a necessary part of the educative experience, Freire focused on dialogue towards elevated ways of thinking.

Freire (2003) perceives that “in dialectical thought, world and action are intimately interdependent. That is, when it is not dichotomized from reflection” (p. 53). A key feature within Freire’s notion of praxis is the dialogue between action and reflection in the learning process. Learners can develop their critical consciousness through questioning; this, combined with social action, is central to Freire’s praxis. His view on the significance of critical consciousness as follows:

A more critical understanding of the situation of oppression does not yet liberate the oppressed. But the revelation is a step in the right direction. Now the person who has this understanding can engage in a political struggle for the transformation of the concrete conditions in which the oppression prevails. (Freire, 2004, p. 23)

Within dialogue, the word is more than an instrument; it provides the potentiality to move from reflection to action. However, if action is absent within this relationship, learning leads to what Freire (2003) would describe as verbalism, a form of idle chatter. On the other hand, if action is devoid of reflection, this leads to activism. For Freire (2003), neither activism nor verbalisms are as effective as praxis in the learning process as it relates to liberation. It is not enough for people to come together in dialogue for the purpose of gaining knowledge of their social reality; rather, they must act together upon their environment in order to reflect critically upon their reality leading to transformation through further action and reflection. This can be seen as an experiential step in the educative process. Dialogue in this sense is “the encounter of women and men” “mediated by the world in order to name the world” (Freire, 2003, pp. 88–89). In this process of dialogue, the teacher–student relationships take on a different meaning; the teacher is no longer the one who teaches but is similar to the students; both are taught in dialogue. Everyone engaged in this dialogue is collectively responsible for a process toward individual growth. Absent within this dialogical space is authority of knowledge,

and the tendency to dichotomize. The students are “no longer docile listeners – are now critical co-investigators in dialogue with the teacher” (Freire, 2003, p. 81).

Freire (2003, 2004) believed that it was through this praxis that students to become increasingly presented with problems in relation to themselves and the world, while at the same time being challenged to respond. For Freire, education has the potential to reposition students as active agents so they can question “the status quo, to develop their historical imagination of alternatives and their social activism in favour of changing the system currently in place” (Shor & Pari, 2000, p. 8).

Freire (2003) also paid attention to the learning environment necessary for his idea of praxis to operate. Freire (2003) argues in his book *Pedagogy of the Oppressed* that the following conditions must exist in order for true dialogue to take place:

Love for the world and for people.

Humility, dialogue would be fruitless if “I always project ignorance onto others and never perceive my own”

Faith in humankind as a priori to dialogue leads to a common concern among individuals for the fate of the world, and consequences as an action towards making the world a better place.

Trust between each other as a natural result of dialogue.

Hope that through dialogue inequalities and insufficiencies of the human condition can be improved.

Critical thinking must be inherent in dialogue. Critical thinking is embedded in knowledge in the presence of action.

Authentic experiences, some education systems fail to meet their outcomes because they are created upon external views of reality. Reality is to be transformed by the cohesion and unity of the collective, it is formed from within.

Generative themes, by utilizing cultural or political topics of particular concern to generate relevant discussions.

Thematic investigation, students go directly to the environment under investigation and generate a particular theme. For example, if a group of students were investigating the health of stream life in a particular community, they would go directly to that area to gain an authentic understanding of the issues at hand. (p. 90)

Although much of Freire's (2003, 2004) work has been cited in radical or critical pedagogical thought, his ideas are gaining the attention of many experiential educators and when examined closely are consistent with the pragmatic ideas of Dewey (1938) and Hahn (Itin, 2008). This is clearly noted in the following statement by Itin (2008) who comments on all three:

All three are concerned with increasing the capabilities (self-efficacy) of individuals to participate in the democratic process (political awareness and action). Each of voices cited expressed concern for understanding the subject matter within experience (experiential learning), which can really be seen as developing a critical understanding. Each is also concerned with a purposeful process that involves the teacher actively engaging the student in experience. Lastly, each has some concern for reducing the power relationship between student and the teacher. (p. 138)

Dewey's and Freire's philosophy of experiential education can be clearly seen in the following statement by Shor (as cited in Itin, 2008) who referred to empowerment-based education:

The teacher leads and directs this curriculum, but does so democratically with the participation of the students, balancing the need for structure with the need for openness. The teacher brings lesson plans, learning methods, person experience, and academic knowledge to class but negotiates the curriculum with the students and begins with their language, themes, and understandings. To be democratic implies orienting subject matter to student culture – their interests, needs, speech, and perceptions – while creating a negotiable openness in classes where the student' input jointly creates the learning process. To be critical in such a democratic curriculum means to examine all subjects and the learning process with systematic depth: to connect students individually to larger historical and social issues; to encourage student to examine how their experience relates to academic knowledge, to power, and to inequality in society; and to approach received wisdom and the status quo with questions. (p. 140)

The key piece from this discussion by Shor is the importance behind the shared power between the teacher and students. In many experiential education practices, this is a common practice or at least a desired one, and this form of democracy in the classroom is consistent within active citizenship scholarship relating to long-term learning (Breunig & Sharp, 2009; Ireland et al., 2006; Itin, 2008; O'Connor & Sharp, 2015). Through the eyes of Freire and Dewey, teachers contribute to the direction of educational processes from a student-centered perspective. Itin (2008) states, "The hallmark of the philosophy of experiential education is that the teacher and student(s) create the educational

process through their transaction and interaction” (p. 141). This dynamic transaction is an important part of the experience within experiential education practices.

In the previous paragraphs, I outlined various philosophical voices that have had an influence on experiential education, especially in relation to it being a vehicle toward active citizenship. Through the voices of these authors, experiential education as a methodology and as a philosophy has informed many educational practices with a deliberate attempt to address social change as a main educational aim. In North America and particularly Canada, it is not surprising to find other programs that utilize experiential education as pedagogy with similar intentions in mind, including the Montessori Method, service learning, adventure-based programs, ICPs and others (Breunig, 2005). In the next section, I will examine theories of learning and experience, which will help set up a discussion on how experiential learning practices within ICPs have the potential to address the educational aim of moving students toward active citizenship and an overall more sustainable way of life.

Experiential Learning Theory

In this section, I discuss experiential learning theory, which I included because experiential learning is a key component within the learning environment of ES 10, and experiential learning has been cited in the literature as a key learning process for education programs focusing on active citizenship (Hoskins & Mascherini, 2009; Ireland et al., 2006; Mayo and Annette, 2010; Packham, 2008; Potter, 2002). While there are various different models that illustrate the process of experiential learning, there is a general agreement of what comprises experiential as illustrated by Stehno (Itin ,1999) who reviewed seven models of experiential learning and discovered that although there were differences, each included “1) action that creates experience, 2) reflection on the action and experience, 3) abstractions drawn from the reflection, and 4) application of the abstraction to a new experience or action” (p. 91). The experiential learning cycle most cited in active citizenship literature is the Kolb (Mayo & Annette, 2010; Packham, 2008; Potter, 2002). An adapted version of the learning cycle of Kolb (1984) is depicted in Figure 3.1.

As mentioned in Chapter 2, while Kolb’s (1984) learning cycle is the most cited learning cycle in active citizenship research, it is important to note that the field of experiential learning has moved forward somewhat, and there has been some critique of

Kolb's cycle. I discuss some issues raised by scholars associated with the Kolb cycle in the following paragraphs.

Kolb's Experiential Learning Model

Seaman (2008) describes Kolb's (1984) experiential learning cycle (and others) as a stepwise model, a process beginning with experience, followed by reflection and then followed by learning. It has been argued that stepwise models inadequately address the "social, historical and cultural aspects of self, thinking and action" (Hollman, Pavlica, & Thorpe., as cited in Beard & Wilson, 2006, p. 42) and that learning is reduced to a cognitive individual phenomenon. In addition, the sequential aspect of the cycle does not describe the holistic learning processes that are central to learning (Seaman, 2008). "Learning can be considered as a process of argumentation in which thinking, reflecting, experiencing and action are different aspects of the same process. It is practical argumentation with oneself and in collaboration with others that actually forms the basis for learning" (Hollman et al., as cited in Beard & Wilson, 2006, p. 42). Furthermore, coming into question by several authors is Kolb's description of learning styles, a core concept on which his model is based (Seaman, 2008). Miettinen (as cited in Seaman, 2008) argues that Kolb inadequately demonstrates how the four different abilities of learning (concrete experience ability, reflective observational abilities, abstract conceptualizing abilities and active experimentation abilities) correspond and relate with the phases in the cycle. Miettinen summarizes this critique by stating the learning style inventory should be used as a training tool and not be considered as a "typology of underlying learning mechanisms" (as cited in Seaman, 2008, p. 10).

While there are various forms of experiential learning models in the literature—most cyclic in nature—Proudman (1995) emphasizes that the most important factor within these models is the existence of particular phases to include experiencing, reflecting and applying. Perhaps one reason the Kolb model of experiential learning is most cited in active citizenship research is because Kolb's learning cycle can be regarded as a simplistic interpretation of complex operations that occur in learning and therefore are easy to understand and apply, compared to other models that are more complex (Beard & Wilson, 2006). In addition, Kolb's model even with its limitations has been "identified and endorsed throughout history and remains the most enduring of the experiential learning theories (Beard & Wilson, 2006, p. 44).

British Columbia's Ministry of Education's (2007) framework, *Environmental Learning and Experience in: An Interdisciplinary Guide for Teachers*, utilizes experiential theory ideas from Kolb, demonstrating the enduring quality of his experiential learning model. In addition, active citizenship research related to educational practices suggests experiential learning is one feature that is consistent, and Kolb's experiential learning theory is also consistent within this scholarship (Mayo & Annette, 2010; Packham, 2008; Potter, 2002). Kolb (1984) defines experiential learning theory as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the "combination of grasping, and transforming experience" (p. 41). In this definition, experience and learning are represented as being closely related or even inseparable. Beard and Wilson (2006) define experiential learning as the "sense-making process of active engagement between the inner world of the person and the outer world of the environment" (p. 19).

The experiential learning theory as Kolb (1984) presents it characterizes two dialectically opposed approaches of gaining experience, which are the concrete experience and the abstract conceptualization. It also characterizes two dialectically opposed approaches of transforming experience, which are reflective observation and active experimentation. Experiential learning in this theory is a process where the learner constructs knowledge by negotiating through a creative tension among the four learning approaches. This process can be seen as a learning cycle where the learner cycles through all the approaches by experiencing, reflecting, thinking and acting. This is done in a recursive fashion that is related to the specific learning situation at a moment in time. The experiential learning cycle posits that immediate concrete experiences are the basis for observations and reflections, which are "assimilated and distilled" into abstract ideas from which new experiences and actions can be derived (Kolb & Kolb, 2006, p. 48). Within this theory lies the learning style that suggests learning requires abilities that are polar opposites, and learners continuously choose which learning abilities they will use in a given situation. Heredity, past life experiences and demands of the present environment cause individuals to develop a favoured and habitual way of deciding which learning ability to use (Kolb & Kolb, 2006). Kolb (1984) referring to his learning cycle model says, "The dialectic nature of learning and adaptation is encompassed" (p. 29).

Other Experiential Learning Models

While British Columbia's Ministry of Education's (2007) *Environmental Learning and Experience in: An Interdisciplinary Guide for Teachers* utilized experiential theory ideas from Kolb, a key feature was modified in the model to include the social component of the learning process. The active experimentation phase was replaced with the term negotiation. This was not changed to purposely de-value the active experimentation phase but rather to recognize that this process of trying out new ideas includes ideas and opinions of the collective (others involved in the learning process). Including the social component in the learning cycle is supported by theories of social constructionism, which extend constructivist understandings of learning to recognize that learning "is always collective: embedded in, enabled by, and constrained by the social phenomenon of language; caught up in layers of history and tradition; confined by well-established boundaries of acceptability" (Davis, Sumara, & Luce-Kapler, 2000, p. 67). I will discuss the theories of constructivism and social constructionism in more detail later in this chapter.

Joplin (1995) introduced a five-stage experiential education model, which she referred to as an action-reflection cycle, which comprised 1) focus, 2) action, 3) support, 4) feedback and 5) debrief. She describes the five-stage model as one complete cycle re-iterative in nature where the fifth cycle interacts with the first in a continuous fashion. In the five-stage model, similar to Kolb's (1984) experiential model, the central theme is based on the idea that knowledge is constructed through both experience and reflection, but she also considered the roles of the group (community) and the instructor. Considering the roles of the group (community) and the instructor is an important factor since it addresses a major critique of Kolb's model, which does not adequately address the social and cultural processes during learning (Seaman, 2008). Dewey (1938) expressed the importance of the community in the learning process: the "individual [makes sense of experiences in the presence of social categories, and although individuals have their own unique thoughts the] content of their beliefs and intentions is a subject-matter provided by association" (p. 25). Through debriefing, a person's conclusions or actions are verified within what is considered acceptable in the group (community). If the intent behind experiential education is active citizenship, this intent in fact may guide the learning process:

Debrief helps the student learn from experience. Debrief is a sorting and ordering of information, often involving personal perceptions and beliefs. In experiential learning – as opposed to experiential education – debrief may occur within the individual. However, in experiential education, debrief needs to be made public. . . . It is the publicly verifiable articulation which makes experience and experiential learning capable of inclusion and acceptance by the educational institutions. The public nature of debrief also ensures that the learner's conclusions are verified and mirrored against a greater body of perception than his alone. (Joplin, 1995, p. 19)

Reflection and the Debrief

The debrief and/or reflection helps students learn from the experience that they are engaged in. It involves the examination of information, making understanding of it based on personal perceptions and beliefs. The reflection process applied to Joplin's (1995) model occurs in the debrief where learning is recognized and evaluated by ordering and sorting information, which will involve personal perceptions and beliefs that contribute to the generative process of this model. In experiential learning, this happens individually, but within experiential education (experiential education as a philosophy), the debrief is made public (an important part of Joplin's model). Experiential learning models usually involve interaction between learners, learner and educator, learner and self, and learner and the learning environment. These interactions challenge the learner to explore issues of values, relationship, diversity, inclusion and community (Chapman, McPhee, & Proudman, 1995).

For Dewey (1938), a relationship exists within experiences between the individual and his or her environment that includes social and cultural realms. The experience is influenced by this relationship that may include social practices of etiquette or rule following, just because these are seen as natural ways of acting within the social context (Dewey, 1938). Acknowledgement of these social and cultural constructs is missing in many of the experiential learning models. Although Joplin (1995) refers to this model as an "action-reflection" (p. 15) cycle, very little reference is made to what it really means to reflect and how this relates to experiential learning. Reflection from Dewey's (1938, 1944) perspective is more than a sequence of ideas but one of consequence, where consecutive ordering of ideas leads to outcomes. Reflective thought on one idea leads to reflection on the next idea in the process, lending support building to a new train

of thought representing a generative process (which is inherent in Joplin's model).

Rogers (2002) makes note of four criteria necessary in Dewey's concept of reflection:

1. Reflection is a meaning-making process that moves a learner from one experience into the next with deeper understanding of its relationships with and connections to other experiences and ideas. It is the thread that makes continuity of learning possible, and ensures the progress of the individual and, ultimately, society. It is a means to essentially moral ends.
2. Reflection is a systematic, rigorous, disciplined way of thinking, with its roots in scientific inquiry.
3. Reflection needs to happen in community, in interaction with others.
4. Reflection requires attitudes that value the personal and intellectual growth of oneself and of others. (p. 845)

Reflection according to Rogers (2002) should (similar to the re-iterative nature of Joplin's five stage model) not be thought as an end in itself but used as a method in the

transformation of raw experience into meaning-filled theory that is grounded in experience, informed by existing theory, and serves the larger purpose of the moral growth of the individual and society. It is an iterative, forward-moving spiral from practice to theory and theory to practice. (p. 863)

Dewey's (1938, 1944) process of reflection is quite rigorous in the sense that it includes steps consistent with scientific method (observation, describing experience, analysis of experience, generation and experimentation of theories). Experimentation involves interactions between self, others and the environment, which lends hand to subsequent experiences, the continuation of experience, which Dewey would refer to as continuity. This reflection can happen in solitude but practice as such can lead to narrow minded thinking; reflection done in community, partially or in whole, will broaden one's understanding of an experience.

Itin (2008) states that the central premise of the philosophy of experiential education is that the teacher is responsible for providing opportunities for experiences by helping students access these experiences, setting appropriate learning environments, placing boundaries on objectives, sharing information and facilitating the experiential learning process. Many scholars stress that learning is not a separate experience but involves the entire person within the context of learning environments that include social, cultural, political and historical aspects (Beard & Wilson, 2006; Itin, 2008; Joplin, 1995;

Seaman, 2008). Through the reflection process as described earlier, learners are challenged to move beyond what they have known. If active citizenship is a goal of the educative process then experiential education can play a key role toward providing purposeful processes to include experiential learning to challenge students' understanding and their role in the world that ultimately can effect change of sorts. Itin (2008) believes that moving into the 21st century makes it imperative that education is aimed at developing citizens who can actively participate in democratic processes and, while doing so, create a just and compassionate world, and the philosophy of experiential education can help answer this call.

In the previous section, I discussed experiential education as it relates to active citizenship. I also discussed experiential learning as well as outlined some of the major theorists who set the ground work for learning theory and the development of the learning cycle. In the next section, I will provide discuss a contemporary view on learning.

Contemporary View on Learning

Education demands have changed a great deal since the early 20th century, where acquisition of literacy and numeracy skills to include simple reading, writing and calculating was paramount. While there may have been pressure from scholars such as Dewey to teach students to think and read critically, be able to validate an opinion and solve complex problems in science and math, the educative practices of typical schools were not reflective of this. The 21st century has brought about new challenges where students are expected to learn higher aspects of numeracy and literacy so they have the intellectual skills to negotiate the complexities of life.

Information and knowledge are growing at rates faster than ever before. Nobel Laureate Herbert Simon (as cited in (Bransford et al., 2000) wisely stated, "The meaning of knowing has shifted from being able to remember and repeat information to being able to find and use it" (p. 5). Knowledge is now easier than ever to access through electronic sources that in essence make it harder than ever for education to try to cover it. Instead, the goal for education should be helping students develop the intellectual tools and learning strategies that are needed to acquire knowledge so students can think productively within multidisciplinary content areas (Bransford et al., 2000).

The new K-12 curriculum initiative in British Columbia (Government of British Columbia, n.d.-a) intends to meet the demands of the 21st century through developing students' competencies in hands-on collaborative learning, critical thinking and communication. This new initiative includes cross-cutting core competencies at the core of the entire curriculum and assessment process. The core competencies include communication, creative thinking, critical thinking, positive personal and social identity, personal awareness and responsibility and social responsibility (Government of British Columbia, n.d.-b). Important features of the new curriculum are a focus on a concept-based and competency-driven design supported with experiential education practices and flexible learning environments. Many of the goals and features described through this curriculum initiative align with the goals of active citizenship within the realm of education as presented in the literature, including the development of communication and critical thinking skills and social responsibility, all through hands-on, collaborative learning practices (Hoskins, 2006). In the next section, I will discuss a contemporary understanding of how people learn in conjunction with experiential learning theory as it relates to key learning outcomes associated with active citizenship.

Constructivism

Contemporary views of learning recognize that facts are important for thinking and problem solving but emphasize that useable knowledge is much more valuable than a number of disconnected facts (Bransford et al., 2000)—useable in the sense that knowledge is transferrable from one context to another rather than recited. Human beings are regarded as goal-directed agents who actively seek out information (Bransford et al., 2000). They come to learning situations with a range of prior knowledge, skills, beliefs and concepts that has a significant influence on how they interact within environments through perception, interpretation and interaction, which leads to acquisition of new knowledge. This way of thinking is based on constructivism, a theory of learning that states humans generate knowledge and meaning from an interaction between their experiences and prior ideas.

Connections between constructivism and experiential education can be found throughout the literature and Kolb's (1984) experiential learning theory has its theoretical roots based on Piaget's ideas around constructivism (Quay, 2008). Dewey's progressivism, which focused on how the learner constructs knowledge around

experience, reflection and experimentation, can be viewed as Dewey's brand of constructivism (Smith & Knapp, 2011). The contemporary view of learning is that people construct new knowledge and understanding based on their prior experiences, what they already know and believe (Cobb, Piaget, & Vygotsky, as cited in Bransford et al., 2000). The teacher's role in this process is to pay attention to incomplete understandings, the false beliefs, and the naïve renditions of concepts that learners may bring with them to new learning (Bransford et al., 2000). Teachers can assist by building on these ideas to help pave the way toward a more complete understanding of a concept or subject.

A common misconception regarding constructivist theories of knowing is that teachers should never tell students anything directly, allowing them to construct knowledge for themselves. However, if a student is constructing knowledge on previous knowledge that may be ill conceived or be based on a false belief (a superstitious belief for example), then how they interact with the new phenomena may not be as educative as hoped. When teachers pay attention to the knowledge and beliefs learners bring to a learning situation, then this knowledge, used as a starting point for new instruction and future monitoring, enhances learning (Bransford et al., 2000). Evidence from two studies support this claim. In one study, sixth graders in a suburban school who were given inquiry-based physics instruction outperformed on conceptual physics problems when compared to eleventh- and twelfth-grade physics students taught by conventional methods in the same school system. Inquiry-based learning has its philosophical roots situated around constructivist learning theory. In a second study, seventh to ninth grade urban students who were taught by inquiry-based methods were compared to eleventh and twelfth grade suburban students and again showed better results on their ability to grasp the fundamental principles of physics (White & Frederickson, as cited in Bransford et al., 2000).

Constructionism

New evidence in how people learn has also indicated the importance of active learning in the sense that students take control of their own learning. Since the emphasis on understanding is important, learners must recognize when they understand and when they must acquire more information. Acquiring information requires knowing strategies they may use to assess what they already know and to determine what kinds of evidence they need in order to believe a particular claim or phenomena. This leads to

building and testing their own theories of phenomena (Bransford et al., 2000). The active role of learners was emphasized by Vygotsky (1978) who points out the importance of the social and cultural environment as supports for learning. Furthermore, Piaget (as cited in Fosnot, 1996) theorized that “new experiences sometimes foster contradictions to our present understandings, making them insufficient and thus perturbing and disequilibrating the structure, causing us to accommodate” (p. 13). Learning from this perspective mirrors the active adaptation process found in experiential theory. Learning viewed in this way has its limitations when applied to the advancing field of experiential education since the process described applies specifically to the individual person. In the case of a group of individuals mitigating a problem together (a common practice within experiential education practices), the learning process is much more encompassing and must include the social collective. In this case, the term social constructionism can be used where the individualistic constructivist understandings of learning are extended, asserting that “collectives of persons are capable of actions and understandings that transcend the capabilities of the individuals on their own” (Davis et al., 2000, p. 68). The learning process described is not centered within the individual, but rather includes the social world and the context as it exists. Learning is collective, where “characters or identities of collectivities-emerge, defined by joint interests, shared assumptions, common sense” (Davis et al., 2000, p. 68). One of the critiques behind Kolb’s (1984) model of experiential learning was that it was too mechanical and did not represent the complexities behind learning as Davis et al. (2000) are suggesting here through their descriptions of constructionism.

Constructivism views learning as a process that applies specifically to the individual while constructionism extends the basic individualist constructivist understandings of learning by considering the social collective (Quay, 2008). Looking at learning from this perspective, “individual knowing, collective knowledge, and culture become three nested, self- similar levels of one phenomenon” (Davis et al., 2000, p. 70). In essence, culture is the context in which both the individual and group are located within the learning process. Within this context, learners are involved in a continuous process of adapting, changing, testing and evolving in response to the happenings and actions of the individuals and small groups (Quay, 2008). This way of thinking is consistent with Dewey’s (1938) perspective of experience. Vygotsky (1978) best describes this process through something he calls zone of proximal development. Vygotsky, considered one of the major sociocultural theorists, recognized the important

influences of history and sociocultural norms toward learning. Quay (2008) defines the zone of proximal development as “the gap between what a learner can learn on his/her own and what s/he can learn with guidance or through collaboration” (p. 182). Learning goes beyond the individual trying to make sense of the world in isolation; it includes the social situation as well (Quay, 2008).

The constructionist perspective is an important consideration for my research since the community involvement aspect recommended in active citizenship educational practices is highlighted by scholars, as previously mentioned in Chapter 2 (Breunig & Sharpe, 2009; Itin, 2008; O’ Connor & Sharp, 2015).

Teaching Strategies

There are many different teaching strategies, all heavily debated as to which is considered the best, including problem-based learning, experiential learning, cooperative learning, lecture-based learning and so on. Contemporary views of how people learn do not stress one strategy over the other; rather they focus on the key components of how people learn to include choosing activities that start from students’ preconceptions and understanding while encouraging processes such as experiential learning. Perhaps the question of which strategy is the best is the wrong question to ask; rather it should include key learning principles. In other words, perhaps there is no universal best teaching practices: “The point of departure is a core set of learning principles” (Bransford et al., 2000, p. 23); then the selection of teaching strategies such as place-based learning can be purposeful. Educational practices such as place-based learning, prevalent in many ICPs, provide a pedagogy framework that allows educators and learners to engage in the learning process while at the same time follow a core set of learning principles that complement each other.

In this chapter, I discussed experiential education and experiential learning as well as outlined some of the major theorists who set the ground work for learning theory and the development of the learning cycle. While experiential learning has been cited as a prominent method of learning for educational programs with goals of active citizenship, the learning processes in themselves do not lead to a specific outcome of active citizenship; it is the development of various skills, attitudes, knowledge and beliefs through these processes that can have a positive effect toward this outcome. Educators need to pay close attention to these processes, and when combined with teaching

strategies, such as place-based learning through experiential learning, the potential of engaging in active citizenship concepts and or practices exist. In the next chapter, I will review the scholarship on learning environment research as it relates to ICPs.

Chapter 4. Review of Literature: Learning Environments

Since a major component of this thesis research was to explore the ES 10 graduates' perceptions of the unique learning environment features of the program that they felt had influenced them in developing various skills, beliefs and attitudes that persist into the future relating to concepts of active citizenship, it is necessary to include a review of scholarship in learning environments.

Describing Learning Environments

Pickett and Fraser (2010) define the classroom learning environment as “the students' and teachers' shared perceptions” within the learning space created (p. 321). Learning space can be described as the physical setting for a learning environment; this is the place in which teaching and learning occur, which can happen indoors or outdoors. The classroom environment includes all relationships that exist between the participants (teacher, student and other students). The majority of research and evaluation of education includes measures of academic achievement and other learning outcomes without much reference to the educational process (Pickett & Fraser, 2010). More recently, significant progress has been made in the “conceptualization, assessment, and investigation of the learning environments of classrooms and schools” (Pickett & Fraser, 2010, p. 321). Zandvliet (2014) describes research on learning environments “as both descriptive of classroom contexts and predictive of student learning” (p. 18). Zandvliet (2012) asserts that research in learning environments plays a valuable role in the field of education, including evaluation of new curricula or innovation, which is pertinent toward research of innovative programs such as ES 10, since this research can provide “the description of a valuable psychological and social component of students' educational experience” (p. 18). There is convincing evidence that links the quality of the classroom environment in schools (which relates to the interpersonal interactions between the teacher and students) toward student learning, which includes achievement, attitude and behaviours (Pickett & Fraser, 2010; Zandvliet, 2014).

Learning Environment Research

Perception-based research that focuses on learning environment factors provides considerable information and insight as well as contemporary learning theories related to learning environments. The intent of learning environment research is to enable educators to develop a better understanding of how students learn and the complexity of other factors that are involved in the learning process (Pickett & Fraser, 2010). Research in this area focuses on characterizing the learning environment setting through the lens of the actual participants, taking in account the many relationships that exist between the teacher and students or amongst the students themselves. Another focus on this kind of research has been on the difference of perception that may exist between the student and the teacher as well as their own preferences of various features in the learning environment (Fraser & Fisher, 1983). A positive perception of the learning environment from the student's perception is likely to lead to increased student achievement and favourable attitudes and behaviours (Pickett & Fraser, 2010; Zandvliet, 2014).

Learning environment theory can be traced back to the 1930s through the work of Kurt Lewin (Zandvliet, 2014). Lewin challenged field theory of his time, which believed individuals' previous experiences are what informed their future behaviour by ascertaining that a person's environment also influenced a person's behaviour. Fraser (as cited in Zandvliet, 2014) reports further contribution to Lewin's inquiry by the works of Murray, Walberg, and Moos. Moos (as cited in Zandvliet, 2014) added to this line of inquiry by investigating post-secondary academic learning environments through the development and application of surveys and assessments that address students' behaviour. Walberg (as cited in Zandvliet, 2014) further added to this line of inquiry by exploring the behavioural and structural aspects of the class environment in the primary and secondary settings. Zandvliet (2014) notes that it was Walberg's work that gave rise to the exploration of students' perceptions and how these relate to "the context [in] which learning occurs" (p. 19). The works of Moos and Walberg is considered foundational for the relatively new field of learning environment research (B. J. Fraser, 1998; B. J. Fraser, Tobin, & McRobbie, 2012). More recently learning environment research has expanded to include inquiry on interdisciplinary fields to include environmental or place-based forms of education (Zandvliet, 2012), which is significant for my research in this dissertation.

Measuring Learning Environments

Part of my research focused on understanding the factors that contribute to various constructs within learning environments that have had some effect on long-term learning and active citizenship. Learning environments are known to provide strong indicators of learning (B. J. Fraser, 1998). Walberg and Anderson (1968) stipulated the importance of getting students' perceptions of the environment that they are taught in to evaluate it. A common environmental scale was developed by B. J. Fraser (1998), which attempts to identify four major construct categories: the individual, the group, the teacher and the external construct. Each of these categories utilizes different scales to measure more specific items. Included in these categories were items such as personal relevance, critical voice, open-endedness (individual construct), student cohesion, cooperation, shared control (group construct), consistency, integration, teacher support (teacher construct), and models, leadership and community (external construct).

Extending this further, other instruments have been extensively tested to evaluate specific learning environments, such as B. J. Fraser's (1998) Constructivist Learning Environment Survey (CLES) and What Is Happening In this Class (WIHIC). The Place-Based Learning and Constructivist Environment Survey (PLACES; Zandvliet, 2007, 2012), which I utilized, was developed to measure students' perceptions of their actual learning environment and/or their preferred learning environment. I used this instrument to measure the ES 10 graduates' perceptions of their actual learning environment as they remembered it eight to nine years post program. Since learning environment research focuses on the context in which learning occurs compared to other studies on learning that may only focus on results of written tests demonstrating memorization, learning environment research can offer a compelling case that the classroom environment can influence or be predictive of student outcomes such as attitudes, behaviours and learning, which are relevant outcomes for my study.

The PLACES Instrument

The PLACES instrument was developed by Zandvliet (2007, 2012) to expand the learning environment research from a "narrow science and technology education milieu [to include] inter/multi-disciplinary fields of study, such as place-based environmental education" (p. 129). Zandvliet's (2012) research on learning environments was

concerned with the types of environments that contribute to positive environmental attitudes, achievement and desirable social networking skills. PLACES was developed as a robust perceptual measure “unique to place-based environmental education program contexts” (Zandvliet, 2012, p. 129). PLACES was envisioned by Zandvliet (2012) to be utilized not only in the evaluation of environmental programming but also most importantly in contributing to research into learning environment factors that promote various “student outcomes such as attitudes and achievement, as well as collaborative and critical thinking skills” (p. 129).

A study conducted by Zandvliet (2012) validated the place-based learning and constructivist environment. This study reported reliability and validity for PLACES, indicating that it can be used in a variety of settings and offers reliable information about learning environments in both place-based and environmental education contexts. The study focused on validating the PLACES instrument’s performance (in terms of reliability, factor structure, discriminant validity and ability to differentiate among classrooms) through its use in a large number of classroom contexts that employed place-based practices (Zandvliet, 2012). Since ES 10 shares a similar classroom (place-based) context as those studied to validate the PLACES instrument, ES 10 was a good choice for this study.

PLACES (Zandvliet, 2007, 2012) was created through a series of focus groups of environmental educators with the adaptation of other well established learning environment inventories with the intent of developing a learning environment tool relevant to environmental educators. The result was an eight-scale questionnaire that includes the following constructs: Relevance/Integration (RI), Critical Voice (CV), Student Negotiation (SN), Group Cohesiveness (GC), Student Involvement (SI), Student Control (SC), Open Endedness (OE), and Environmental Interaction (EI). The scales of RI, CV, SC and SN were derived from the Constructivist Learning Environment Survey, and the scales of SI and SC were derived from the Environmental Science Learning Environment Inventory. The OE scale came from the Science Laboratory Environment Inventory while the EI scale came from the Science Outdoor Learning Environment Instrument.

Related Research

Koci (2013) conducted extensive learning environment research on the ES 10 program, the same program in my research. Through a mixed method approach, Koci identified the students' perspective of learning experiences related to the learning environment. Quantitative instruments were used to assess changes in these perspectives as well as factors, including students' mindfulness of and behaviour toward the environment. The PLACES instrument (Zandvliet, 2007, 2012) was utilized to measure learning environment features, the same instrument utilized in my study. Koci utilized qualitative data through observation, open-ended questions and interviews to gather a deeper understanding of learning environment features, especially those features that students perceived as being very important. Major findings indicated that group cohesion was regarded as the most important attribute in their actual learning environment, followed by critical voice.

Group cohesion refers to group dynamics, which supports students' perceptions that they give and get from one another. Developing and maintaining a high level of trust among members of the group plays a major role in the effectiveness of group dynamics (D. W. Johnson & F. P. Johnson, 2003). The development and maintenance of trust is always in a dynamic state, which needs continued reinforcement. An effective group is one that shows student cohesion is demonstrative of group members sharing resources, helping one another, sharing workloads and making a contribution to a mutual goal (D. W. Johnson & F. P. Johnson, 2003).

Contemporary views of how people learn suggests that environments that are community centered are favoured for learning where it is the norm for people to learn from one another toward continuous improvement (Bransford et al., 2000). Koci (2013) indicated that the ES 10 cohort that he studied demonstrated a high level of trust amongst themselves, allowing them to articulate their thoughts, feeling, reactions, opinions, information and ideas in a safe environment, while being accepting of others' differences. Relational social justice theorists emphasize that recognition and acceptance of differences among individuals is a key feature in the relational aspect of learning environments, which is needed to work toward justice (N. Fraser, 2003; Young, 1990). Although Koci (2013) did not evaluate outcomes such as social justice, he did

report that the students were very accepting of one another and were able to put aside differences.

The other very important attribute in the students' preferred learning environment was critical voice. Critical voice relates to the amount of input students perceive they have in the learning process and curriculum. Group dynamic theory, as indicated by Jones, Carter-Sowell, and Kelly (2001), noted commitment to the learning process is dependent upon the amount of input participants have; if they have input, they will be committed throughout the learning process, leading to higher levels of learning. Koci (2013) believes that a high level of critical voice was achieved due to the high level of group cohesiveness; in other words, the group dynamics helped students find their voice giving them an opportunity to be part of the learning process in a safe environment.

To extend this discussion, Koci (2013) also reported high ratings for the PLACES construct of open-endedness and shared control. Open-endedness refers to the amount of say the students believe they have over when and what they learn, while shared control refers to the amount of say the students believe they have over their learning relevant to time and topic. A learning environment high in critical voice, open-endedness and shared control can be compared to what Dewey (1944) would call the democratic classroom, an important pedagogical concept as previously discussed in this review of literature toward long-term learning and active citizenship shared by pragmatic thinkers Dewey and Hahn and critical pedagogy thinker Freire.

My discussion in the Review of Literature chapters provided a theoretical base within the frame of active citizenship, ICPs, experiential education, experiential learning, learning theory and learning environments. In the following chapter, I will outline in detail the mixed methods methodology I utilized to measure and investigate learning environments and active citizenship within the ES 10 program. In chapters 6 and 7, I will present the summary of my findings followed by a final chapter where I will discuss these findings utilizing the relevance of the literature review.

Chapter 5. Research Methodologies

In this chapter, I outline and describe the research design, time frame and methods in this study. Research methodology refers to how insight is gained about the world and how research data is collected (Denzin & Lincoln, 1998). In this study, I examined the long-term perceived effects of an ICP as it relates to active citizenship. I begin this chapter addressing my dissertation's primary and secondary questions, which I follow with a brief overview of ES 10, my study focus. I also include a section on research methodology as well as a timeframe overview and description of the research techniques I used to collect data.

Primary Research Question:

What are the perceptions of a group of alumni from a Grade 10 integrated curriculum program (ES 10) in regard to the effects of the program on their citizenship activities?

Secondary Questions:

- A. *Did alumni view themselves as being engaged in their communities or beyond?*
- B. *Do alumni believe their experience in ES 10 contributed to the development of their desire to make contributions to their communities or beyond?*
- C. *Do alumni identify particular skills or attitudes that they view as having been developed or fostered during ES 10 as having positively affected their community participation?*
- D. *What aspects of ES 10 do the alumni remember as having the greatest general impacts?*

Research Focus

In this project, I focused on ES 10, an ICP that has an experiential education focus. A summary of ES 10 is included in Table 5.1.

Table 5.1 Summary of the ES 10 program

Program Name	Experiential Studies 10 (ES 10)
Location	Centennial High School, Coquitlam, BC, Canada.
Grade focus	Grade 10
Course integration	(4 subjects) Science 10, Socials 10, Earth Science 11, Physical Education 10. Subjects taught in an integrated way utilizing various experiential education practices.
Cohort studied (year)	2003/04, (2007*) *The 2007 cohort only participated in the PLACES survey portion of the study.
Outdoor Adventure Component	Mountain Biking, Canoeing, Rock Climbing, Snow Shoeing, Skiing, Hiking, Spelunking, (low ropes and high ropes activities).
Field Studies: Environmental monitoring projects	(Problem and Place Based Learning), Fresh water studies, Shore keeper studies, paleontology studies, forestry mapping studies, various environmental monitoring projects, and service learning opportunities. Range of community projects.
Extended Field Experiences	6 extended field experiences (ranging from two to seven days in duration)
Schedule	Semester long program (February to June). School within a School model (program operates on their own schedule). No bells. Start times and finish times may vary based on experiences taking place. Students had input into the schedule and curricular decisions.

This study was retroactive in nature, focusing on three cohort years. At the start of the data collection, participants in the 2003 and 2004 cohorts had graduated from ES 10 nine and eight years, respectively, while the participants from the 2007 cohort had graduated from ES 10 five years earlier. The primary focus of the research was to investigate the long-term perceived impacts of ES 10 on its participants as it relates to active citizenship. I chose this focus because it aligns very well with stated educational goals from British Columbia's Ministry of Education, many school districts and the most recent 21st century learning initiatives that have been adopted by many of the provinces in Canada and throughout United States. My main objective in this project was to

explore whether ES 10 graduates' believed the unique learning environment features of the program had influenced their development of various skills, beliefs and attitudes that had persisted into the future relating to concepts of active citizenship and their current level of civic and community engagement.

The ES 10 program was first implemented in 2003, and it integrated four of British Columbia's high school curriculum courses: Science 10, Earth Science 11, Social Studies 10 and Physical Education 10. The cohorts I studied in this project all completed programs with the same course structure. These subjects were integrated in such a way as to give purpose to the subject material through experiential learning. Outdoor initiatives were used as vehicles to empower the learning experiences and foster attainment of the program goals. These outdoor initiatives included some adventure-based activities, while others included field studies such as ecological monitoring or earth science investigation. Field studies sometimes took place in the local community, while others took place on the several overnight field experiences. Students were exposed to many learning opportunities, often working with community members, other students and professionals, including biologists and paleontologists.

The adventure-based activities aimed to help students gain basic outdoor skills while at the same time develop cooperative skills and more self-confidence. The field studies aimed to engage students with the curriculum while exposing them to real-life problems and phenomena. The experiential component of ES 10 helped create unique opportunities to extend students' knowledge, while reflective practice, which was encouraged regularly through discussions and journaling, allowed students to think outside the extant paradigm and shift into a more comprehensive, integrated and creative worldview. This was an important goal of ES 10. I chose to study ES 10 not only because I was its founder and teacher but also because of my interest in the concept of active citizenship. The results of this study can help validate the ES 10 program in terms of meeting goals, including active citizenship, and identifying key learning environment features related to attaining various skills, beliefs and attitudes.

Overall Approach to the Research

I chose to do a retrospective case study with cohorts from ES 10. Retrospective case studies are considered a type of longitudinal case study design in which the data

collection is done after the fact (Street & Ward, 2010). Retrospective case studies have three common factors: collection of data occurs after a significant event, researchers have access to first-person accounts and archival data, and final outcomes are available that are presumably influenced by the variables and processes under study (Street & Ward, 2010).

My study of ES 10 required participants to recall experiences that occurred in the program eight to nine years earlier and relate these to present day outcomes, therefore making it retrospective in nature. The case study approach can provide good sources of ideas and study phenomena. Case studies allow for a rich collection of data and of greater depth than that of other research designs. Retrospective case studies are considered an efficient method to evaluate long time lines, as in the case of my study. Retrospective case study designs also allow for effective data triangulation relative to historical case study designs, predominately because first-person recounts can add rich context and understanding to historical context (Street & Ward, 2010). Since my goal in this study was to determine the long-term perceived effects of ES 10 on active citizenship as well as understand various contributing factors of the program, the research methods must allow for the collection of various data sources. In addition, although case studies tend to collect mainly qualitative data, they also allows for the collection of quantitative data as well, moving toward a mixed methods approach.

Case studies are enquiries about an individual, group or situation. Case studies as defined by Yin (1994) are empirical enquiries that “investigate a contemporary phenomenon within its real-life context especially when the boundaries between phenomenon and context are not clearly evident” (p. 13). Case studies are used fairly extensively in education research as they provide a good opportunity to investigate real world phenomena with all of its complexities. However, as Hammersley (as cited in Atkins & Wallace, 2012) points out, case studies, similar to other qualitative approaches, can be vulnerable to criticism of generalizing and making claims or assumptions about cause and effect, which go beyond the evidence presented. Furthermore, retrospective designs are subject to validity threats associated with recall and spoiler effects.

Street and Ward (2010) define recall effects as inaccuracies due to imperfect recall of historical events and spoiler effects as inadvertent skewing of results when researchers have prior knowledge to the outcomes associated with a sequence of events causing an overemphasizing of supporting data and underemphasizing non-

supportive data. To address the recall effect, Steel and Ward (2010) suggest limiting questions relating to hard facts and acknowledging possible emotional attachments that may influence the accuracy of the respondents' recall. The spoiler effect can be addressed through member checking and confirming results through peer debriefing and triangulation methods (Ward & Street, 2010). I include more detail on methods to limit reliability and validity concerns later in this chapter.

In education context, case studies provide a good method of conducting smaller scale investigations to allow researchers to examine a research question. More importantly, a case study approach can allow the researcher to go beyond simple the questions of what or how many. It can provide a formidable method to investigating relationships, patterns, connections and context (Atkins & Wallace, 2012). In this study, I adopt both qualitative and quantitative methods to provide a better understanding of the results and to make conclusions more credible. The goal of this mixed methods approach "is not to replace either of these approaches but rather to draw from the strengths and tend to minimize the weakness of both in single research studies and across studies" (R. B. Johnson & Onwuegbuzie, 2004, p. 14). The use of multiple sources of evidence that converge on similar facts allows for triangulation to occur, which can lead to construct validity (Yazan, 2015). In essence, a mixed methods approach can lead to confirmation of some phenomena through cross validation between methods. R. B. Johnson and Onwuegbuzie (2004) define mixed methods research as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (p. 17). In this study, I chose the quantitative elements to help evaluate and interpret results from a principally qualitative study.

Time Frame Overview

Phase 1: Literature Review and Groundwork

The initial phase of this project included a literature review, developing research questions, selecting research questionnaires, developing criteria for defining active citizenship, and obtaining official ethical permissions for conducting this research.

Phase 2: Recruitment of Participants

During the spring of 2012, I made initial contact with prospective participants of all three cohorts. Since I was the teacher of all three cohorts and have remained in contact with many of the students, initial contact via email or face to face was established. Some participants were difficult to locate, but with help from other students I was able to gain contact with a large number of participants. Initial contact included a brief description of my project and an invitation to participate.

Phase 3: Collection of Data

I began data collection in the summer of 2012 and continued until the winter of 2014. After initial contact was made with a participant via email or face to face, I sent a follow-up email, which included the informed consent. Once I obtained a completed copy of the informed consent, I emailed the participant the two quantitative surveys, which included the ISSP's (2012) 2004 Citizenship survey and Zandvliet's (2007, 2012) learning environment survey (PLACES), as well as the open-ended questionnaire. I received the majority of the completed surveys and questionnaires by email while two were returned to me as a hardcopy by mail. The group interview took place in December 2013. At this time, I collected all of the other surveys and questionnaires. Two people who could not attend the group interview met me separately in person in January 2014.

Phase 4: Data Analysis

In the initial data analysis, I looked for trends and/or outliers in both the quantitative survey and open-ended (qualitative) questionnaire. Outliers were considered qualitative responses that were unique from the common themes that emerged. The emerging theory from this coupled with the secondary questions helped me to finalize the group interview questions. I compiled and analyzed the quantitative data from the surveys using Microsoft Excel software. I compared the data from the PLACES (Zandvliet, 2007, 2012) survey relating to the 2007 cohort with the data collected in 2007 from Koci's (2013) dissertation: *Factors Influencing Learning Environments in an Integrated Experiential Program*. This comparison helped determine the consistency of the PLACES instrument based on long held beliefs and perceptions.

I presented the preliminary analysis of the PLACES (Zandvliet, 2007, 2012) quantitative data and qualitative data from the open-ended questionnaires at the 2013 Environmental Education and Communication (EECOM) conference. I compared the data from the ISSP Citizenship 2004 survey to normative data available through the International Social Survey Programme (ISSP; 2012) data base. This normative data comparison included comparison to the general population and the age group (23–24) for both countries that participated and for the Canadian population separately. I chose to predominately focus my comparison to Canadians of the same age group of the study participants (age 23–24).

I systematically analyzed the data collected through the open-ended questionnaire and the group interview through routine procedures, first using Microsoft Excel software and later using the qualitative analysis software NVivo. The methods here included becoming familiar with the data set, making observations, developing themes, coding, preparing hypotheses and provisional interpretations, counting frequency, and looking for disconfirming evidence. I rewrote information from the open-ended questionnaires in Microsoft Word and then later organized it in categories in Microsoft Excel. This process allowed me to become familiar with the data.

I also rewrote my rough notes recorded from the interview matrix in Microsoft Word, which I later organized in Microsoft Excel. I transcribed audio recordings of the consensus part of the group interview in Microsoft Word and then categorized them in Microsoft Excel. This multiple-step process allowed me to engage with the data, which helped me develop categories and look for themes.

The NVivo program helped me organize the data further by sorting the coded data and making it easier to provide searches and cross referencing as well as frequency counting. This qualitative methodology was well suited to determine ES 10 graduates' perceptions toward lasting effects relating to active citizenship. The quantitative methodology provided some evidence relating to levels of active citizenship from the study group when compared to normative data and important learning environment features as they relate to this study. I first focused my writing on the first chapters for my dissertation (Introduction, Literature Review, and Methods) followed by the final chapters (Results and Discussion of Results) while continuing with reviewing additional literature throughout the duration of the project.

Overview of Methods

The majority of the study involved me investigating the 2003 and 2004 cohorts from the ES 10 program. I selected these cohorts because they had graduated from ES 10 a minimum of eight years at the time of data collection, yielding adequate “long-term” perceptions and outcomes. My rationale for using this time line is that a large percentage of these students have chosen or started their professional pathway, since the participants’ average age was 24 years old. From these two cohorts, I successfully contacted 38 out of a possible 47 past students; therefore, 36 (77%) of possible participants participated in this study.

I also included a 2007 cohort because of the availability of preprogram and post program data from Koci’s (2013) study as it relates to Zandvliet’s (2007, 2012) learning environment tool PLACES, which I used in the quantitative portion. The results from this helped me to determine consistency of the instrument relating to long held perceptions (beliefs), which is significant for learning environment research and this study. The average age of this cohort was 21 years old. Out of the possible 24 students, 18 participated in this portion of the study representing a 75 % participation rate.

Methodology included both qualitative and quantitative methods to increase validity of the evaluation. The evaluation methods included interviews and questionnaires that measure citizenship indicators, professional pathway goals and learning environment features. I systematically selected each method in this evaluation to address the objects in a timely and efficient manner. Each method does have limitations; however, individual biases are reduced and validity is improved through triangulation of the various methods. The qualitative portion consisted of a group interview with past students from the 2003 and 2004 cohorts as well as an open-ended questionnaire. A more detailed description of the methods, rational and reliability/validity considerations are included in the subsequent pages.

All procedures in this study followed proper ethical protocol in accordance with Simon Fraser University’s 2012 ethical guidelines. Ethics approval was granted by Simon Fraser University. Prior to the start of any data collection, participants completed a consent to participate form (see Appendix A). I sent an introduction email to describe the study and invite graduates to participate (see Appendix B).

Being the initial founder and teacher of the ES 10 program gives me considerable insight into the program but also opens up the potential for bias. To minimize bias, I adhered to procedures in the study design, which I describe in detail later in this chapter.

I chose the ISSP Citizenship 2004 survey (International Social Survey Programme [ISSP], 2012) because it contained many active citizenship components and the ISSP data base provided access to data from 47 participating countries as well as Canada. The main components (variables) utilized from the ISSP Citizenship 2004 survey were Good Citizen, Political/Social Action, Status of Belonging, Rights in Democracy, Voice, Political Interest, and Informed Citizen and Tolerance. I chose Zandvliet's (2007, 2012) PLACES survey because previous data available from the 2007 cohort and many of the constructs from this survey are consistent with active citizenship research. The eight constructs within the PLACES instrument are as follows: Relevance/Integration (RI), Critical Voice (CV), Student Negotiation (SN), Group Cohesiveness (GC), Student Involvement (SI), Student Control (SC), Open Endedness (OE), and Environmental Interaction (EI). I chose the qualitative methods (open-ended questionnaire and group interview) to identify long-term outcomes and beliefs, which reinforce the quantitative measures.

Methods

Each method was systematically selected to address the objectives in a timely and efficient manner. The qualitative portion consisted of a group interview with past students from the 2003 and 2004 cohorts as well as an open-ended questionnaire. The quantitative portion consisted of two separate one-time questionnaires: one measured active citizenship outcomes and components while the other measured learning environment perceptions. The 2003 and 2004 cohorts completed both questionnaires while the 2007 completed only the learning environment questionnaire. A more detailed description of the methods, rationale of instruments and reliability/validity considerations are included in the subsequent pages.

Instruments

Quantitative Data

I used two research tools: the ISSP Citizenship 2004 survey (ISSP, 2012) and Zandvliet's (2007, 2012) learning environments tool (PLACES).

ISSP Citizenship 2004 Survey

During the time of my research, a specific survey tool for active citizenship was yet to be developed. However, I the ISSP Citizenship 2004 survey (ISSP, 2012) that contained many active citizenship indicators as represented in the literature. The ISSP is a continuous program of cross-national collaboration, which runs annual surveys on topics important for the social sciences. There are 47 participating countries, including Canada. In 2004, The Carleton University Survey Center was involved in administering and collecting data from the ISSP Citizenship 2004 survey. The original survey was drafted in English, and Canada played a significant role in developing the survey. Stratified random sampling by province and age were utilized to collect data in Canada. There were 1,211 participants from Canada and 52,550 worldwide. The normative data from Canada provided a useful comparison to the study groups in question. The limitation with this survey is that in its entirety it does not represent an overall survey on "active citizenship," although it has significant components related to it. Questions relating to six constructs were utilized: 1) community participation 2) political action 3) empowerment (self-efficacy for social/political change) 4) informed citizen 5) tolerance and 6) voice. These constructs are consistent with the recent research relating to active citizenship (Durr, 2004). I used a total of 45 items from this survey. I eliminated open-ended questions from this survey relating to education, employment and residency as these were collected in the open-ended survey. A copy of the ISSP Citizenship 2004 survey (ISSP, 2012) is included in Appendix C.

A variable list available from the ISSP Citizenship 2004 survey is as follows:

Good Citizen: Relates to the level of community and civic engagement.

Political Action: Relates to the level of political action from signing a petition, boycotting products to attending a rally or demonstration.

Status of Belonging: Relates to level of belonging to community organizations such as volunteer groups.

Attitude (Self efficacy towards voice): Relates to the level of belief your voice is heard.

Rights in Democracy: Relates to opinions based on various rights.

Unjust law (willingness to act): Relates to level of willingness to act if an unjust law was enacted.

Political Interest: Relates to the level of interest you have towards politics and international affairs.

Informed Citizen: Relates to how much one feels they are informed about political, social and international life.

International issues opinion: Relates to opinions on human rights and the United Nations.

Tolerance: Relates to the level of tolerance one has towards others

Table 5.2 Statements from the Selected Variables from the ISSP Citizenship 2004 Survey

Variable	Statement
Good citizen	There are different opinions as to what it takes to be a good citizen. As far as you are concerned personally, how important is it to help people in the rest of the world worse off than yourself?
Political action	Here are some different forms of political and social action that people can take. Have you boycotted, or deliberately bought, certain products for political, ethical or environmental reasons?
Status of belonging	People sometimes belong to different kinds of groups or associations. For each type of group, please indicate your level of belonging. A trade union, business, or professional association.
Attitude (Self-efficacy toward voice)	To what extent do you agree or disagree with the following statements? People like me don't have any say about what the government does.
Rights in Democracy	There are different opinions about people's rights in a democracy. How important is it: That people be given more opportunity to participate in public decision- making?
Unjust law (willingness to act)	Suppose a law were being considered by Parliament that you considered to be unjust or harmful. If such a case arose, how likely is it that you, acting alone or together with others, would be able to try to do something about it?

Variable	Statement
Political Interest	How interested would you say you personally are in politics?
Informed citizen	To what extent do you agree or disagree with the following statements? I feel I have a pretty good understanding of the important political issues facing Canada.
International Issues Opinion	If a country seriously violates human rights, the United Nations should intervene? Or Even if human rights are seriously violated, the country's sovereignty must be respected, and the United Nations should not intervene.
Tolerance	When you meet people you strongly disagree with, how important is it to do or say something to show you tolerate them?

Note. Groups of questions ask for responses on a 7-point Likert scale, 5-point Likert scale, 4-point Likert scale and a 2-point Likert scale.

Learning Environment Survey (PLACES)

I administered PLACES (Zandvliet, 2007, 2012), a questionnaire for measuring students' perceptions of a learning environment, to all participants in the study. I used this tool because it has close links to both constructivist learning and experiential learning theory; both are theoretical underpinnings for the ES 10 program. The tool was utilized to measure student preferences relating to learning environments and, more importantly, constructs that exist within an ICP such as ES 10.

The PLACES instrument has eight scales constructed from other instruments, which include Science Outdoor Learning Environment Instrument, Environmental Science Learning Environment Inventory, What is Happening in Class, and the Constructivist Learning Environment Survey. Table 5.3 provides examples of the questions that are related to each scale from the PLACES survey. The PLACES survey has been extensively utilized throughout six countries and administered to over 3,000 students (Zandvliet, 2007, 2012). Furthermore, three of the constructs from the tool (voice, relevance and cohesiveness) are significant learning environment factors necessary for long-term active citizenship (Ireland et al., 2006). Finally, data from the same 2007 ES 10 cohort I studied was available from Koci's (2013) dissertation—*Factors Influencing Learning Environments in an Integrated Experiential Program*—that extensively utilized the PLACES tool.

In my study, I used the tool to measure the students' preferred and actual learning preferences while in the program. In Koci's (2013) study, he utilized two versions of the PLACES (Zandvliet, 2007, 2012) instrument: the first version asked students questions about their preferred learning environment and was written in the present tense while the second version was written in the past tense to measure the learning environment features as they actually experienced it. In my study the PLACES survey (Zandvliet, 2007, 2012) was written in the past tense (the same survey Koci, 2013, utilized) to measure what they believed their actual experience was while in ES 10 as it related to these learning environment factors.

Administering this survey to the 2007 ES 10 cohort five years after completion of the program and comparing it to Koci's (2013) data indicated consistency in the responses from the PLACES instrument, even five years post program. Administering this survey to the 2003 and 2004 cohorts allowed for deeper understanding of learning environment features as they related to long-term outcomes, especially when they were compared to the qualitative data.

Instruments

PLACES Instrument

The PLACES instrument (Zandvliet, 2007, 2012; see Appendix D) is divided into eight primary constructs or scales:

- **Relevance:** refers to the students' understanding of the relevance of the subject content to their current lives/situation.
- **Critical Voice:** relates to the amount of input students perceive they have in the learning process and curriculum.
- **Student Negotiation:** deals with the students' perceived ability to discuss their ideas with other students.
- **Group Cohesiveness:** deals with the group dynamics and support that students perceive they give and get from one another.
- **Student Involvement:** relates to the amount of interaction the students feel that they have with the teacher during instruction time.
- **Shared Control:** deals with the amount of say the students believe they have over their learning relevant to time and topic.
- **Open Endedness:** deals with the amount of say the students believe they have over when and what they learn.

- Environmental Interactions: looks at the amount of interaction students perceive they have with the outside environment.

Table 5.3 gives examples of the questions that are related to each scale (Zandvliet, 2007, 2012). All the questions ask for responses on a 5-point Likert scale. The most positive response to each question (*always*) is scored with 5 points, the least positive response (*never*) is scored with 1 point, and the middle response (*sometimes*) is scored with 3 points.

Table 5.3 Statements from the Selected Scales for PLACES Questionnaire

Scale	Statement
Relevance/Integration (CI)	I want my lessons to be supported with field experiences and other field-based activities.
Critical Voice (CV)	It would be okay for me to speak up for my rights.
Student Negotiation (SN)	I want to ask other students to explain their ideas and opinions.
Group Cohesion (GC)	I want students to get along well as a group.
Student Involvement (SI)	I want to ask the instructor questions when we are learning.
Shared Control (SC)	I want to help instructors plan what I am to learn.
Open-Endedness (OE)	I want opportunities to pursue my own interests.
Environmental Interaction (EI)	I want to spend most of the time during local field trips learning about my environment.

PLACES and ISSP Administration

Participants were initially contacted through email. Both the PLACES and ISSP Citizenship 2004 survey were administered electronically through email. Fillable PDF forms were used for all surveys and questionnaires. Participants emailed back the completed forms.

Qualitative Data

Open-Ended Questionnaire

The open-ended questionnaire contained sections related to active citizenship components and professional pathways. Questions included level of education

completed, employment history, professional memberships or certifications, volunteerism, affiliation, long held beliefs about high school experiences and participatory practices. This section was qualitative in nature and open ended. Only the 2003 and 2004 cohorts were included in this portion. The questionnaire utilized in this study was developed in consultation with O'Connor and Sharp (2013, 2015) who conducted a similar study with another ICP called Experiential Science 11. The questionnaire was field tested by me and by O'Connor and Sharpe prior to use. See appendix E for the complete questionnaire. This questionnaire was administered via email with the two quantitative surveys.

Qualitative Study (Focus Groups)

The other qualitative portion of the study included a focus group interview utilizing the Interview Matrix method (Chartier, 2002). The 2003 and 2004 ES 10 cohorts formed a large focus group. I attempted to recruit as many participants as possible from each cohort as the interview matrix is a useful tool to build dialogue for groups of up to 40 participants. The methodology allows for full engagement in dialogue, equal participation, focused discussion and consensus building. My goal was to have up to 24 participants in the focus group portion of the study. I interviewed both cohorts at the same time to help limit recall effects associated with a single "familiar" group reuniting after several years. It was the hope that combining these cohorts would limit the "reunion" feel of a meeting and thus help limit the tendency for certain types of socially acceptable opinions to take form and permit certain individuals to dominate the process, which is a concern in group interviews (Smithson, 2000).

Out of the 36 participants who were successfully contacted and participated in the email section of the study, 21 were able to participate in the large group interview. Reasons for non-participation of the other participants ranged from conflicting schedules and physical locality of the interview since some participants were living in another region or country at the time. Two of the participants who could not attend the group interview agreed to a one-on-one interview at separate times utilizing the same questions.

Based on Chartier's (2002) document, *Tools for Leadership and Learning: Building a Learning Organization*, I developed an interview matrix using four basic questions that I pre-determined prior to the session. I carefully constructed questions

that would not lead the respondents. I intended the questions to give me an idea of respondents' long-held perception of ES 10's learning environment factors that they perceived to have affected them most as they relate to active citizenship components. These questions were guided by the secondary questions of this study and are consistent with Ireland et al.'s (2006) active citizenship education research, which highlighted key underlying factors evident in school and daily life necessary to foster and sustain active citizenship.

The four interview matrix questions I asked included factors such as voice, relevance, community and skills:

1. Do you believe the ES 10 program helped foster the development of skills in regard to one's ability and/or desire to make a contribution of sorts to the community or beyond?
2. Sense of community and belonging to include the desire to be part of a strong, safe community based on networks and friendships that foster trust, concern for well-being, sense of self-worth and encouragement towards individual and collective social responsibility. Could you comment on the ES 10 program that you were involved with as it relates to sense of community as described above?
3. Did the program in any way allow you to have a voice in matters that affected you? If so, how? Do you think this had any effect on the way you think and act today?
4. What is it that you remember the most about the program in terms of unique learning environment features? This could also include "specific" experiences that may have affected you in some way. These examples could be positive or negative.

The particular cohort group gathered in a classroom space at Douglas College in New Westminster, British Columbia. This was a suitable space to accommodate the numbers (up to 24). The group was broken into smaller groups of four where each person is assigned a number from 1 to 4 corresponding to one of the four questions. Each participant was given a template with their question number and space to record interview responses. Each participant acted as an interviewer three separate times to interview the other three participants in the group. Each participant was also interviewed three separate times. Each interview round was about five minutes long with the sequencing as follows: Round 1(1-2, 3-4) Round 2(2-3, 4-1) Round 3(2-4, 3-1) Round 4(3-2, 1-4) Round 5(3-2, 1-4) Round 6 (2-1, 4-3).

The second part of the session was the editing stage. All the number 1s from each group got together to compare notes; all the number 2s from each group got together to compare notes, and so on. This took place at each of the four corners of the room, each with a flip chart to allow participants to record common themes and unique inputs that emerged from their discussion. This stage took up to 30 minutes to complete. The third and final stage was to have the entire group visit each corner (question), and a discussion was encouraged to allow for clarification, additions and consensus. This stage lasted more than one hour (approximately 15–20 minutes per question). The final stage was audio recorded to allow for future clarification, coding and analysis relevant to the evolving theory.

I met with two participants separately who could not attend the group interview at a later date and conducted an interview using the same questions. I also contacted various participants to verify responses from the open-ended questionnaire and group interview as a form of member checking.

Data Collection (confidentiality, security)

As the researcher, I kept all data (raw and electronic) from the questionnaires and interviews in a locked cabinet. Electronic data was kept on a portable memory device and backed up regularly. Confidentiality of all data and materials collected was held such that personal names of subjects were not be used in this publication. To ensure confidentiality of identities, I assigned participants an alias and referenced them as such. I kept this information secure. All participants were required to sign a “consent to participate in this study form” prior to involvement in any part of the study. These were either mailed or scanned and sent electronically to me. All raw data will be kept for a minimum of three years and then destroyed via confidential shredding. All participants in this study were of legal signing age (19 years or older). Participants completed the two quantitative surveys (PLACES and ISSP Citizenship 2004 survey) and the open-ended questionnaire electronically, which were sent to me via email. These were completed prior to the group interview.

Reliability/Validity Considerations

Internal Validity Considerations

- *History* (changes that may occur while conducting the study):

The qualitative portion was completed relatively close to the quantitative portion.

- *Maturation* (other factors also contribute to long-term behaviour outside the programs in question):

Leading questions were limited, where possible, and consensus was established in the group interview portion.

- *Measurement Issues* (methodology, tools etc.):

Both quantitative surveys (PLACES, ISSP Citizenship 2004 survey) have been extensively utilized and tested.

Qualitative questions were tested utilizing college students of similar age

- *Group differences* (grade levels, course selection, acceptance procedures, etc.):

For the most part the cohorts selected share more commonalities than differences. However, while participants within a specific cohort knew each other well, this was not the case between separate cohorts. Participants of one cohort year typically were not friends of participants of another cohort year. Mixing the cohort years for the interview matrix was done intentionally to limit the “reunion” feel of a group of past students getting together which could potentially skew some respondents’ recall of experience while in the program.

External Validity Considerations

- Ability to generalize to other groups not in the study:

The review of literature helps make generalizations more valid. A large study group (77% of possible participants for quantitative portion and open ended qualitative portion) increases validity here. All cohorts utilize British Columbia curriculum and since there are a relatively small number of ICPs in British Columbia, the sample space from this study will a good general representation of these kinds of programs in British Columbia.

A large number of participants in the qualitative portions of the study increases validity here.

Setting characteristics, face to face interviews facilitate a richer conversation than a phone interview or other methods as prevalent in the group interview portion of this study.

Construct Validity

Clearly defined constructs and components. Based on current research.

Adequate measurement of constructs (components of active citizenship)

Tested for discriminant validity (PLACES)

Paired *t*-test was utilized to calculate P values for determining the comparison difference between the ES 10 graduates and their Canadian counterparts (same age) for parts of the ISSP Citizenship 2004 survey.

Pilot tested open ended survey to College aged students prior to actual administration.

Open ended survey questions were adopted from a similar study that was also field tested.

Using a multi-methods approach and triangulating results increased confidence.

Reliability (Internal)

Cronbach alpha was utilized for the PLACES survey

External Reliability

Replication:

Consistency in methods and thoroughly described.

Trustworthiness

Qualitative:

Systematically analyzed through conventional methods as well as using N-Vivo analysis software.

Quantitative:

Previously tested research tools were utilized.

Credibility of researcher:

Consideration of biases (researcher was also the teacher of all of the ES 10 cohorts)

Committee members (all committee members are highly respected (as researchers and academics) within the realm of environmental and experiential education).

Truth Value

To ensure credibility of methods and findings leading to “truth value”:

Prolonged engagement:

Over a year to collect all the data.

Triangulation:

The Multi-methods approach helps increase validity and confirm concepts, and ideas.

Peer debriefing:

Sharing ideas with colleagues and committee members’ added value by allowing a different perspective by being a “devil’s advocate.”

Member checking:

With some of the participants from the qualitative portion of the study follow-up questions were utilized to verify responses and conclusions.

For the story composites in the summary of results chapter, I sent drafts to each participant for their review to check for accuracy.

For some of the participants from the qualitative portion, I followed up with face-to-face and email conversations to expand on comments that were made.

Chapter 6. Quantitative Research Study Results

Overview of Chapter

In this chapter, I review the quantitative results of both the learning environment and the citizenship measures as well as characteristic event data to include topics such as post-secondary education pathways, volunteerism and travel. Charts and graphs are utilized to display the quantitative data. I used qualitative and quantitative methods to increase the validity and reliability of the study by triangulating the qualitative results with the quantitative results (Creswell & Plano Clark, 2007). I summarize the qualitative data in Chapter 7.

PLACES Questionnaire

The PLACES (Zandvliet, 2007, 2012) results are divided into two sections: data from the 2007 ES 10 cohort to include pre- and post-program results compared to perceptions five years out, which relates to Koci's (2013) study, and data from the ES 10 2003/04 cohorts based on perceptions nine to 10 years out, which is the main focus for my study. The comparative data from the 2007 cohort was only used to determine the persistence of the PLACES (Zandvliet, 2007, 2012) survey tool over an extended time period based on long held beliefs about perceptions of learning environment elements. A total of 18 (2007 ES 10) graduates out of a possible 24 participated in this questionnaire.

The PLACES (Zandvliet, 2007, 2012) survey tool was also utilized for the ES 10 2003/04 cohorts to assess students' perceptions of their learning environment while in ES 10, administered nine to 10 years after being in the program. The information from the PLACES (Zandvliet, 2007, 2012) survey indicated learning environment features that students feel are important that lead to long-term learning and active citizenship. A total of 36 out of a possible 47 (2003/04 ES 10) graduates participated in this questionnaire. Only the ES 10 2003/04 cohorts' results will be used for discussion around active citizenship.

ISSP Citizenship 2004 Survey

I utilized the ISSP Citizenship 2004 survey (ISSP, 2012) to measure active citizenship components from the ES 10 (2003/04) cohorts and compare them to normative data from Canada (predominately the same age group of the 2003/04 graduates). The ISSP is a continuous program of cross-national collaboration running annual surveys on topics important for the social sciences. There are 47 participating countries, which includes Canada. In 2004 The Carleton University Survey Center was involved in administering and collecting data from the ISSP Citizenship 2004 survey. The normative data from Canada and the world provides a useful comparison to the study groups in question. Questions relating to six constructs were utilized: 1) community participation 2) political action 3) Empowerment (self-efficacy for social/political change) 4) Informed citizen 5) Tolerance 6) Voice. These constructs are consistent with the recent research relating to active citizenship (Durr, 2004). The data

Demographic Information of ES 10 Students

Demographic information of the ES 10 students for the 2003/04 cohorts is included in Table 6.16. This information was included to provide some background information on the participants of the study in terms of socio economic status, ethnicity, number of males and females and how they were selected into the ES 10 program.

Characteristic Events

From the open-ended surveys, data was collected on education pathways as well as outdoor interest levels, volunteerism and travel. This information is included to demonstrate long-term trends that can lend support to various indicators toward active citizenship. These indicators include self-efficacy, cultural understanding and community participation, which is consistent with the research on active citizenship (Durr, 2004; Hoskins, 2006). The results from this section will be represented in a table format.

PLACES Questionnaire Results

I used the results for the PLACES questionnaire (Zandvliet, 2007, 2012) from Koci's (2013) dissertation, *Factors Influencing Learning Environments in an Integrated*

Experiential Program, to compare perceptions after being out of the program for five years compared to what it was while in the program for the 2007 cohort (the same cohort Koci studied). This data was included to determine the consistency of the PLACES (Zandvliet, 2007, 2012) survey tool over an extended time period based on long held beliefs about perceptions of learning environment elements.

The 2007 ES 10 participants were asked to recall their experiences in ES 10 as they related to the learning environment features indicated on the survey. The same PLACES (Zandvliet, 2007, 2012) was utilized to measure perceptions of learning environment features with the 2003/04 cohorts while in the program but measured nine to 10 years later. The 2003/04 ES 10 participants were also asked to recall their experiences in ES 10 as they related to the learning environment features indicated on the survey. The exact wording at the beginning of the PLACES (Zandvliet, 2007, 2012) questionnaire was as follows:

For each of the statements below (check the box) which best reflects your feeling or experiences as you remember them within your program (ES 10). Remember, there are no right or wrong answers; it is your opinion that is wanted. (p. 1)

The results from this survey from the 2003/04 ES 10 graduates indicate learning environment features significant to the program and when compared to the qualitative data indicate certain features important towards long-term learning and active citizenship. Figure 6.1 illustrates how the questionnaire was utilized for clarification.

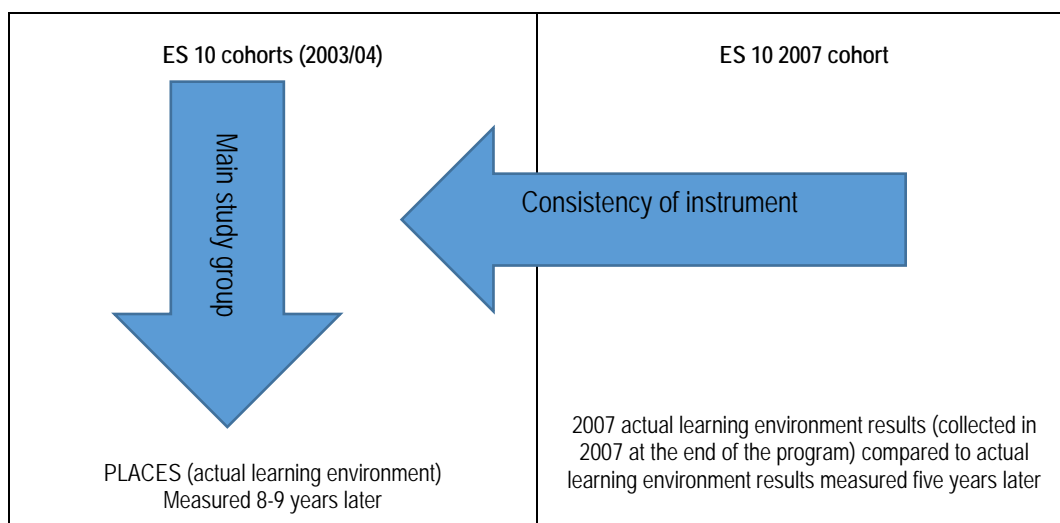


Figure 6.1 Utilization of the PLACES questionnaire with ES 10 cohorts.

The PLACES survey tool has exhibited exceptional reliability and validity in a range of settings (Zandvliet, 2007, 2012). Tables 6.1, 6.2, 6.3 and 6.4 display the reliability and validity of the administration to the 2003/2004 cohort (post 8-9 years), 2007 cohort (post 5 years) and the actual data from Koci's (2013) study for the 2007 cohort collected just after completion of the program and just before starting it. Cronbach alpha (CA) was utilized to measure internal consistency while discriminant validity (DV) was utilized to measure validity. CA measures the internal consistency of the items within each scale or construct, which indicates that all the questions within the same construct are responded to similarly. Higher numbers represent better internal consistency with 1.0 indicating perfect. High consistency indicates the questions within the scale are measuring the same concept. Values of 0.6 or less are considered poor or unreliable (George & Mallery, 2003). The DV is used to determine if each of the eight constructs is measuring a unique concept. Constructs that measure something conceptually different than other scales have values of 0.4 or less (Revelle & Zinbarg, 2009). The results (Tables 6.1, 6.2, 6.3) display mean scores for each scale as well.

Table 6.1 Main Study Group: ES 10 2003/04 Cohort (Post 9-10 Years)

Scale	Mean	σ	CA	DV
Relevance/Integration	4.4	0.39	0.7	0.3
Critical Voice	4.7	0.33	0.7	0.36
Negotiation	4.3	0.5	0.8	0.37
Cohesiveness	4.7	0.3	0.7	0.32
Involvement	4.4	0.46	0.7	0.3
Control	3.5	0.65	0.9	0.39
Open Endedness	4.5	0.44	0.7	0.31
Environmental Interaction	4.5	0.37	0.7	0.33

Table 6.2 ES 10 2007 Study Results

Scale	Mean	σ	CA	DV
Relevance/Integration	4.2	0.62	0.8	0.32
Critical Voice	4.8	0.3	0.8	0.11
Negotiation	4.3	0.54	0.9	0.31
Cohesiveness	4.7	0.59	0.9	0.15
Involvement	4.2	0.49	0.7	0.4
Control	3.8	0.77	0.8	0.17
Open Endedness	4.5	0.46	0.6	0.33
Environmental Interaction	4.4	0.4	0.6	0.23

Note. Table data are from Koci (2013).

Table 6.3 ES 10 2007 Cohort (Post Five Years)

Scale	Mean	σ	CA	DV
Relevance/Integration	4.5	0.42	0.7	0.29
Critical Voice	4.9	0.26	0.8	0.22
Negotiation	4.1	0.48	0.8	0.41
Cohesiveness	4.7	0.43	0.8	0.3
Involvement	4.3	0.49	0.7	0.34
Control	3.9	0.5	0.7	0.21
Open Endedness	4.6	0.32	0.6	0.31
Environmental Interaction	4.6	0.28	0.6	0.34

Table 6.4 ES 10 2007 Cohort Perceptions for Traditional Classroom

Scale	Mean	σ	CA	DV
Relevance/Integration	2.6	0.59	0.6	0.29
Critical Voice	3.6	0.82	0.7	0.32
Negotiation	3.2	0.79	0.8	0.32
Cohesiveness	2.8	0.7	0.8	0.39
Involvement	3.2	0.73	0.7	0.27
Control	1.7	0.74	0.8	0.21
Open Endedness	3	0.5	0.6	0.32
Environmental Interaction	3.5	0.55	0.7	0.17

Note. Table data are from Koci (2013).

The standard acceptance for the CA measure is 0.7, and almost all of the scales were in this range with only six in the 0.6 range, which is within the questionable value range. Since CA is calculated on each questionnaire individually, a small sample size ($N = 18$) for the 2007 ES 10 cohort (post 5 years) and ($N = 24$) for all other 2007 ES 10 cohort results could be an attribution towards the scales that were in the 0.6 range. It should be noted that with the 2003/04 cohorts, the sample size was much larger ($N = 36$) and all scales were 0.7 or greater. Overall the measures indicate good reliability for the PLACES instrument in this context. The DV measures in all four tables are within acceptance values below (0.4).

The overall mean score (sum mean of all data) for the 2003/04 cohort was 4.4, indicating a positive perception of the ES 10 learning environment by the graduates of this program. Comparing the 2007 cohort results from Koci's (2013) study to the same group of students five years later (2007 cohort post 5 years) shows striking similarity in values. The overall mean score for the 2007 cohort from Koci's (2013) study was 4.4 while the over mean score from the same group of students six years later was 4.5. Table 6.4 is data collected from the 2007 cohort administered at the beginning of the ES 10 program, which gathered the students' preferences on what they would like the learning environment to look and feel like. These perceptions were based on students' prior experience within the traditional education model. This data is included to show that the learning environment perceptions in the other data sets are indeed related to the ES 10 experience and not just a continuation of the students' prior educational experience (Koci, 2013). The overall mean score from this set was 2.85, which would indicate a generally negative perception of the traditional learning environment by the students. After completing a semester in ES 10, this perception of preferred learning environments changed dramatically, demonstrated by the 4.4 overall mean score for the same group of students. The high overall mean scores from Tables 6.1, 6.2, 6.3 indicate a generally positive perception of the ES 10 learning environment by the participants.

Figure 6.2 is a visual representation of the 2003/04 cohort (eight to nine years post program) independently, while Figure 6.3 is a visual representation of the 2007 cohort's results collected near the end of the program by Koci (2013) compared to the results of the same cohort five years later, which I collected. The values from all of these data sets are remarkably similar with only slight differences. In relation to the scales, a score below 3 indicates *unsatisfactory* while values between 3 and 4 indicate

satisfactory and values above 4 indicate *above satisfactory*. The results for the 2003/04 cohort indicated *above satisfactory* (above 4) with the exception of one at 3.5 (shared control scale), which is in the *satisfactory* range.

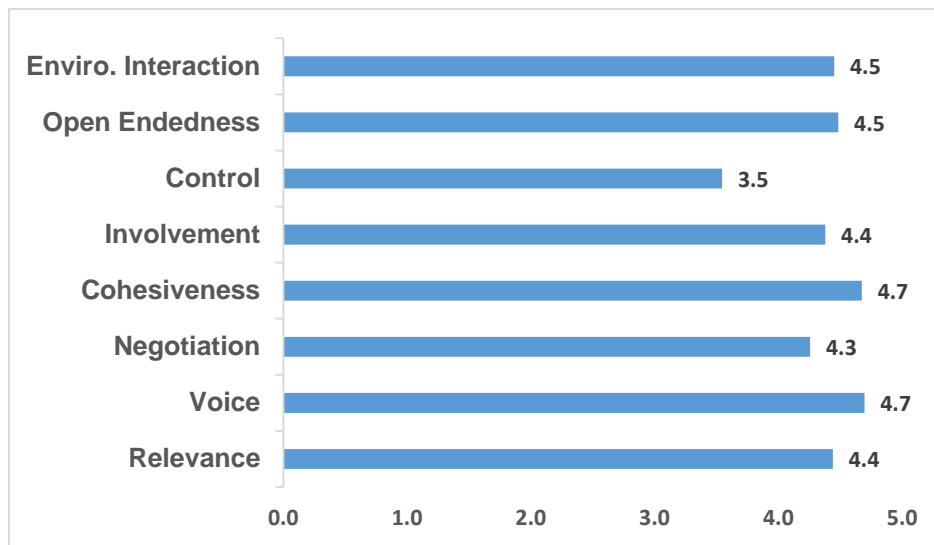


Figure 6.2 ES 10 (2003/04) cohorts PLACES results

Figure 6.3 is a visual representation of the 2007 cohort illustrating the PLACES (Zandvliet, 2007, 2012) results collected by Koci (2013) near the completion of the ES 10 program versus the same cohort's results that I collected five years later. The most significant findings in the PLACES (Zandvliet, 2007, 2012) research for the 2007 cohort was how the results measured near the end of their program matched up in similarity five years later. In other words, these same students had the same perceptions of the learning environment features while in the ES 10 program five years later. These results indicate the persistence in the results of the PLACES instrument relating to the participants' long-held beliefs toward the measured constructs of the PLACES (Zandvliet, 2007, 2012) questionnaire.

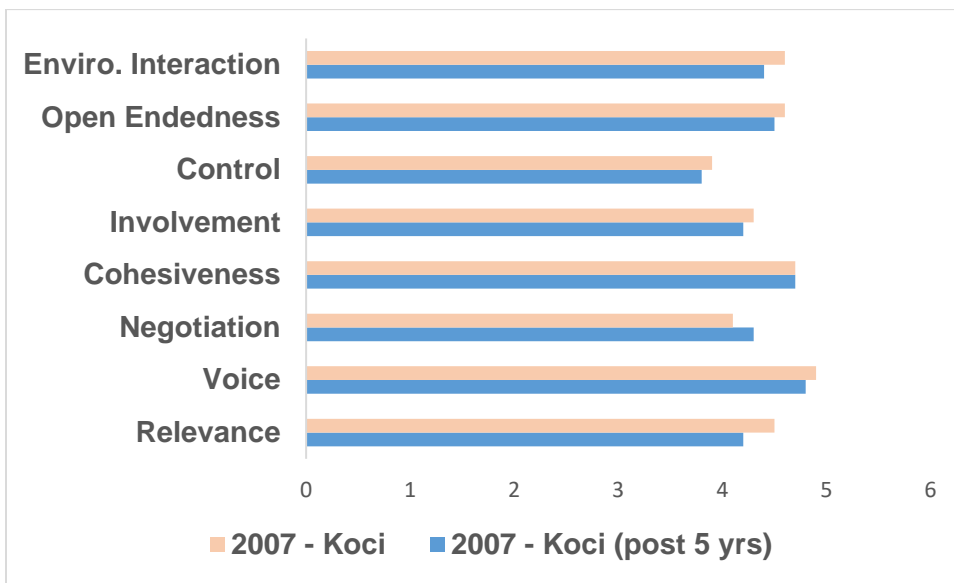


Figure 6.3 2007 cohort PLACES results

The International Social Survey Program (ISSP) Citizenship 2004 Survey

The results from the ISSP Citizenship 2004 survey (ISSP, 2012) were utilized to compare values from the ES 10 group to data collected in 2004 on 47 countries, including Canada, as part as the ISSP. Comparisons include the ES 10 results compared to all ages in Canada and more importantly data from the same age group (23–24 years of age). The results from this survey indicate areas where the ES 10 group score higher or lower than the comparison groups. Since the variable list for the ISSP Citizenship 2004 survey includes constructs that can be used as indicators of active citizenship, the comparison provides an indicator of the long-term effects of the ES 10 program relating to active citizenship. These indicators include community participation, political action, empowerment, informed citizen, tolerance and voice, which is consistent with active citizenship research (Durr, 2004).

Table 6.5 displays values in the Good Citizenship variable category. The ES 10 graduates scored a mean average of 5.68, slightly higher than that of the comparison groups. Figure 6.3 displays the overall mean average for all the groups in a graph format. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the study of the same age group (age 23, 24) resulted in a two-tailed *P* value equal to 0.0135, indicating the difference to be considered statistically significant by conventional criteria.

For the individual questions, the ES 10 group scored somewhat higher in most questions, notable were questions 5, 6, 7 and 9. Question 5 deals with how active one is with social and political associations, which corresponds with the active citizenship indicators of political action and community involvement. The ES 10 graduates scored a value of 5.0 compared the values of 4.1 and 4.6, which are representative of their Canadian counterparts (same age) and of Canada (all ages). Question 6 deals with the understanding of and reasoning of other people's opinions, which corresponds with the active citizenship indicator of tolerance. The ES 10 graduates scored a value of 6.4 compared to the values of 6 and 5.7, which are representative of Canada (all ages) and their Canadian counterparts (same age). Question 7 deals with environmental/ethical behaviour relating to consumerism. Environmental action and sustainability are constructs within active citizenship (Hoskins, 2006; Schusler et al., 2009). The ES 10 graduates scored a value of 5.8 compared to values of 5.0 and 4.3, which are representative of Canada (all ages) and their Canadian counterparts (same age). Question 9 deals with the willingness to help those worst off globally, which corresponds with the active citizenship indicator of community participation. The ES 10 graduates scored a value of 5.7 compared to values of 4.9 and 5.2, which are representative of Canada (all ages) and their Canadian counterparts (all ages).

Interestingly, Question 8 deals with the willingness to help those worst off as well but in Canada, and the ES 10 graduates scored similar values (only slightly higher) than the other groups. It appears the ES 10 graduates state they are more willing to help those worst off globally than all of the comparison groups. The two questions where the ES 10 graduates scored lower than the other groups were Questions 3 and 10. Question 3 deals with obeying laws and regulations, while the ES 10 value was similar to Canadians of their same age group (5.8 compared to 5.9), the Canadian (all ages) value was 6.5, a little higher than that of the graduates and the ES 10 Canadian counterparts. It would seem that younger age groups are more willing to take a risk with regulations and laws than older age groups. Question 10 deals with willingness to serve in the military in times of need. The ES 10 graduates scored a value of 4.0 with this question compared to 4.4 and 4.7, which are representative of Canada (same age group) and Canada (all ages), respectively. It appears the ES 10 graduates prefer non-military means of action compared to the other groups.

Table 6.5 ISSP Citizenship 2004 Survey: Category (Good Citizen)

Good Citizen (1-7, higher value = more importance)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value ES 10
1	Always vote in elections	6.3	5.4	6.2
2	Never try to evade taxes	6.3	5.7	6.4
3	Always obey laws and regulations	6.5	5.9	5.8
4	To keep watch on the action of government	6.3	5.2	5.6
5	To be active in social or political associations	4.6	4.1	5
6	Understand the reasoning of people with other opinions	6	5.7	6.4
7	To choose products for political, ethical environmental	5	4.3	5.8
8	To help those worst off (Can)	5.8	5.7	5.9
9	To help those worst off(world)	4.9	5.2	5.7
10	Serve in military times of need	4.7	4.4	4
Category overall mean		5.64	5.16	5.68
Paired <i>t</i> -test results (ES 10 vs Canada same age): The two-tailed value = 0.0135				

Note. Canadian normative data retrieved from ISSP (2012).

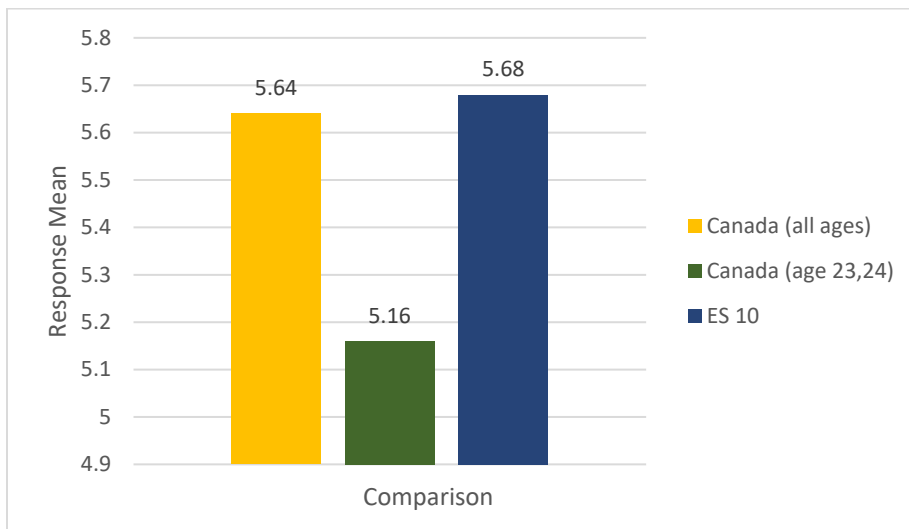


Figure 6.4 ISSP Citizenship 2004 Survey: Category (Good Citizen – Overall mean comparison)

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.6 displays values of the political and social action category. The ES 10 graduates scored an overall mean average of 1.86 in this category, which was much higher than all comparison groups. The mean value for Canada was 1.31 (all ages) and 0.91 for Canadians (same age) that participated in the ISSP Citizenship 2004 survey. The overall means for all groups are displayed in Figure 6.4 as a graph. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed *P* value of less than 0.0001, indicating the difference to be considered extremely statistically significant by conventional criteria.

The ES 10 graduates scored higher in all questions with the most notables being question 12, 13, 17 and 18. Question 12 deals with boycotting products for political, ethical or environmental reasons. The ES 10 graduates scored a value of 2.5 compared to values of 1.0 and 1.5 for the Canadian (same age) and Canadians (all ages), respectively. Question 13 deals with taking part in a demonstration. The ES 10 graduates scored a value of 1.6 compared to a value of 1.0 for both of the Canadian groups (all ages and same age). Question 17 deals with expressing of one's view through the media. The ES 10 graduates scored a value of 1.4 compared to values of 0.9 and 0.6, which are representative of Canada (all ages) and Canada (same age). Question 18 deals with one's participation in political forums or discussion groups through the Internet. The ES 10 graduates scored a value of 1.5 compared to values of 0.4 and 0.6, which are representative of Canada (all ages) and Canada (same age). All of the questions in this category (political and social action) are indicators of active citizenship since all of the questions deal with one's active political and/or social participation at various levels and in various forms. The active citizenship indicator of voice is also addressed in some of the questions in this category, particularly Questions 11, 17 and 18.

Table 6.6 ISSP Citizenship 2004 Survey: Category (Political/Social Action)

Political/Social Action (1-4 - higher value = more frequency)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
11	signed a petition	2.1	1.4	2.5
12	boycott products (political, ethical, environmental)	1.7	1	2.5
13	took part in demonstration	1	1	1.6
14	attended political rally/meeting	1.3	0.9	1.5
15	contacted or attempted contact (politician, civil servant)	1.5	0.7	1.6
16	donated money to social or political	1.6	1.1	2.3
17	contacted media or appeared to express views	0.9	0.6	1.4
18	joined and internet political forum/discussion group	0.4	0.6	1.5
Category overall mean		1.3125	0.9125	1.8625
Paired t-test results (ES 10 vs same age): The two-tailed value is less than 0.0001				

Note. Canadian normative data retrieved from ISSP (2012).

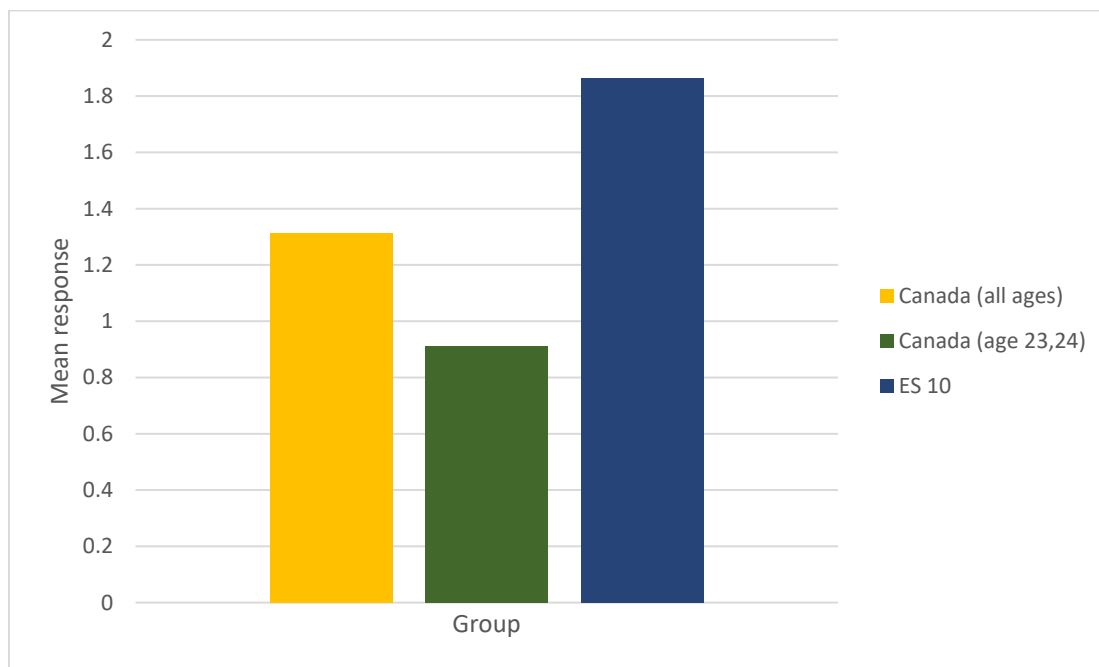


Figure 6.5 ISSP Citizenship 2004 Survey: Category (Political Social Action – Overall mean comparison)

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.7 displays values of the status of belonging category, which measures one's participation or membership in various groups, associations and organizations. The ES 10 graduates scored a mean value in this category of 1.4, higher than all comparison groups. The Canada (all ages) group scored 1.18 while the Canada (same age) group scored a value of 0.66. Figure 6.5 displays the overall means of each group in a graph. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed *P* value equal to 0.0941, which is considered not quite statistically significant by conventional criteria.

Comparing the ES 10 graduates to their same age group from Canada, the ES 10 graduates scored much higher on all questions with the exception of belonging to a church or religious organization where the ES 10 group scored 0.8 compared to 1.0. Most notable where Questions 22 and 23, where the ES 10 graduates scored considerably higher than their Canadian counterparts (same age). Question 22 deals with one's participation in and/or belonging to sports or leisure clubs. The ES 10 graduates scored a value of 2.4 compared to a value of 1.1 for their Canadian counterparts (same age). Most interestingly is the ES 10 graduates' value for Question 18, which deals with belonging to a volunteer organization. The ES 10 graduates scored much higher than their Canadian counterparts with a value of 2.3 compared to the values of 0.6 and 1.3, which are representative of Canada (same age) and Canada (all ages), respectively. It would appear that the ES 10 graduates are much more actively involved in other volunteer opportunities not specifically listed in the ISSP Citizenship 2004 survey. Figure 6.6 displays the responses to each question in this category in a graph form.

Table 6.7 ISSP Citizenship 2004 Survey: Category (Status of Belonging)

Status of Belonging (1-4, higher the value = more active)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
19	Political Party	0.6	0.2	0.7
20	A trade union, business or professional association	0.7	0.4	0.8
21	a Church or other religious org.	1.8	1	0.8
22	A sports or leisure club	1.5	1.1	2.4
23	Another volunteer organization	1.3	0.6	2.3
Category overall mean		1.18	0.66	1.4
Paired <i>t</i> -test results (ES 10 vs same age): The two tailed value equals 0.0941				

Note. Canadian normative data retrieved from ISSP (2012).

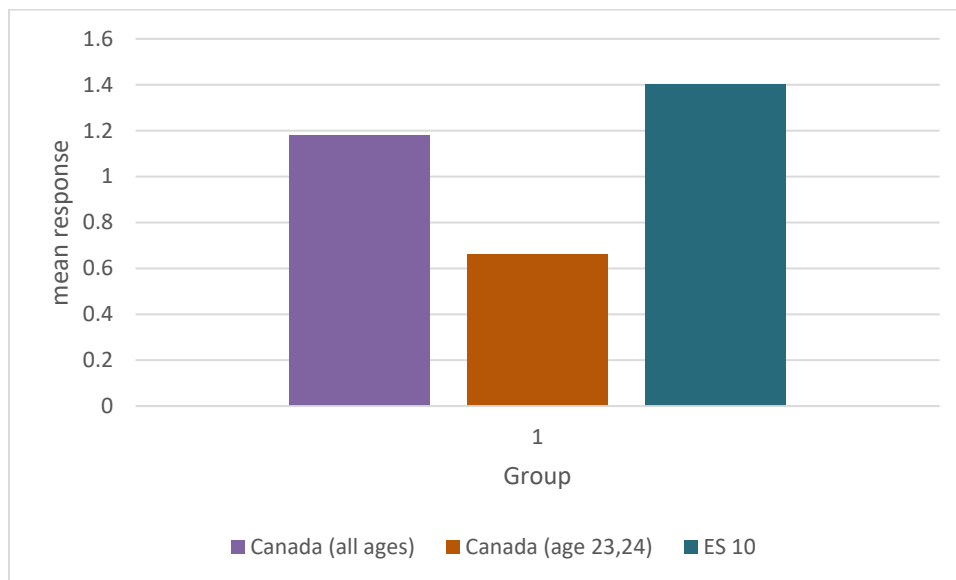


Figure 6.6 ISSP Citizenship 2004 Survey: Category (Status of Belonging – Overall mean comparison)

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.8 displays values of the rights in democracy category, which measures one’s opinions regarding various areas dealing with individual rights under various circumstances. The ES 10 graduates mean average value in this category was only slightly higher than all of the other groups. In fact, the values for almost all of the questions were very similar with all the groups indicating a general agreement among all the comparison groups. Figure 6.6 displays the overall means of each group in a graph. A paired *t*-test calculation using the ES 10 mean results and mean results from those

Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed P value equal to 0.1801, indicating the difference in this category to be considered not statistically significant by conventional criteria.

The only value that stands out as being somewhat different was related to Question 29, which deals with civil obedience being okay when one opposes government actions. In this case, the ES 10 graduates scored a value of 5 similar to their Canadian counterparts (same age) while the Canadian all ages group was much lower at 4.1. A higher value in this question would indicate one's willingness to exercise his or her voice even through civil disobedience if a government action was viewed as wrong.

Table 6.8 ISSP Citizenship 2004 Survey: Category (Rights in democracy: Opinions)

Rights in democracy: Opinions (1-7, higher value = higher importance)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
24	All citizens have adequate standard of living	6.2	6.4	6.4
25	Government authorities respect and protect rights/minorities	6	6.2	6.4
26	Government authorities treat everyone equal	6.4	6.4	6.6
27	Politicians take account of citizen's views; decision making	6.5	6.4	6.8
28	People be given more opportunity to partake: public decision	6	6.1	6
29	Civil disobedience okay when they oppose government actions	4.1	5	5
Category overall mean		5.86	6.083	6.2
Paired t -test results (ES 10 vs same age): The two-tailed P value = 0.1801				

Note. Canadian normative data retrieved from ISSP (2012).

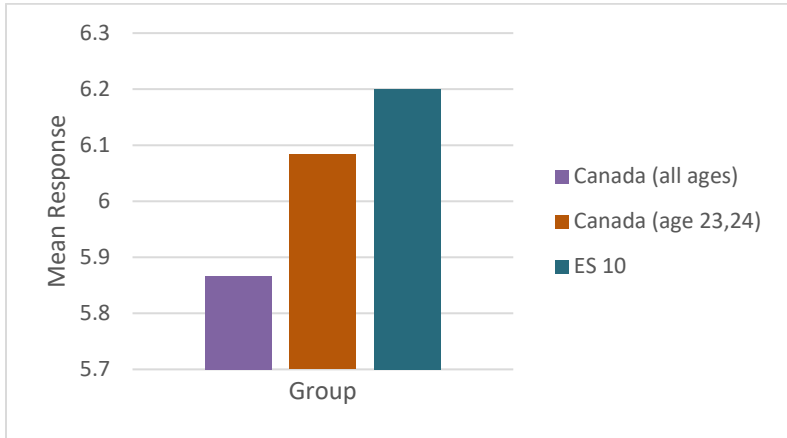


Figure 6.7 ISSP Citizenship 2004 Survey: Category (Rights in democracy – Overall mean comparison)

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.9 displays values of agreement towards voice category, which measures one’s perception on how much his or her voice matters and how informed he or she is on issues. The ES 10 graduates scored a mean average of 3.3 in this category compared to the other groups, which scored values all within the 2.7 range. Figure 6.7 displays the overall means of each group in a graph. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed *P* value equal to 0.0351, indicating the difference in this category to be considered statistically significant by conventional criteria.

Notable were Questions 30, 31 and 33. Question 30 deals with one’s belief on how much influence his or her voice has on affecting government decisions. The ES 10 graduates scored a value of 3.6 compared to values of 2.9 and 2.6, which are representative of Canadians (same age) and Canadians (all ages) respectively. Question 31 deals with one’s perception of how much he or she believes the government values his or her opinion (voice). The ES 10 graduates scored a value of 3.3 compared values of 2.6 and 2.5, which are representative of Canadians (same age) and Canadians (all ages) respectively. Higher scores for Questions 30 and 31 for the ES 10 graduates indicate they have a higher belief that their voice matters and can have influence. Question 33 deals with how informed one believes he or she is compared to others. The ES 10 graduates scored a value of 3.6; the Canadian (same age) value was 2.9 while the Canadian (all ages) value was closer to the ES 10 graduates mean value

of 3.6. The higher mean values in this category indicates the ES graduates have a stronger belief that their voice matters and is valued compared to the other groups.

Table 6.9 ISSP Citizenship 2004 Survey: Category (Agreement: Voice)

Agreement on Voice (1-5, low value = agree, high value = disagree)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
30	People have no say of what gov. does	2.6	2.9	3.6
31	Government does not care what people think	2.5	2.6	3.3
32	I have a good understanding of issues	2.4	2.6	2.7
33	Most people are better informed than I am	3.4	2.9	3.6
Category overall mean		2.725	2.75	3.3
Paired t-test results (ES 10 vs same age): The two-tailed value equals 0.0351				

Note. Canadian normative data retrieved from ISSP (2012).

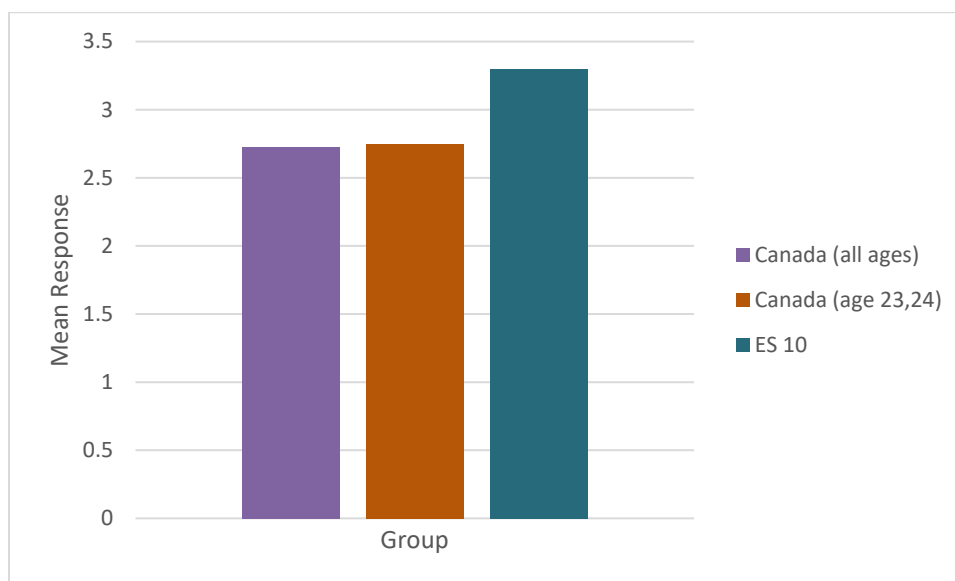


Figure 6.8 ISSP Citizenship 2004 Survey: Category (Agree: Voice – Overall mean comparison)

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.10 displays the unjust/harmful law category. This category measures willingness to do something about an unjust law and belief that parliament will give serious attention to one’s demands. The ES 10 group scored a mean value of 1.7 in this category compared to a value of 1.05 for their Canadian counterparts (same age). The Canadian (all ages) mean value was 1.3. Figure 6.8 displays the overall means of each

group in a graph. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed *P* value equal to 0.1444, indicating the difference in this variable category to be considered not statistically significant by conventional criteria. Question 34 deals with one's belief in their voice being heard by parliament to result in a change towards an unjust/harmful law. The ES 10 graduates scored a value of 2 compared to a value of 1.2, which is representative of Canadians (same age) while the Canadians (all ages) mean value was 1.6. Question 35 deals with one's belief that his or her actions would be taken seriously by parliament. The ES 10 graduates scored a value of 1.4 here compared to a value of 0.9, which is representative of Canadians (same age) while the Canadians (all ages) value was 1.0.

Table 6.10 ISSP Citizenship 2004 Survey: Category (Unjust/Harmful Law)

Unjust/harmful law (1-4, low value = unlikely, high value = likely)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
34	Do something about it	1.6	1.2	2
35	Parliament takes serious attention to your demands	1	0.9	1.4
Category overall mean		1.3	1.05	1.7
Paired <i>t</i> -test results (ES 10 vs same age): The two tailed <i>P</i> value equals 0.1444				

Note. Canadian normative data retrieved from ISSP (2012).

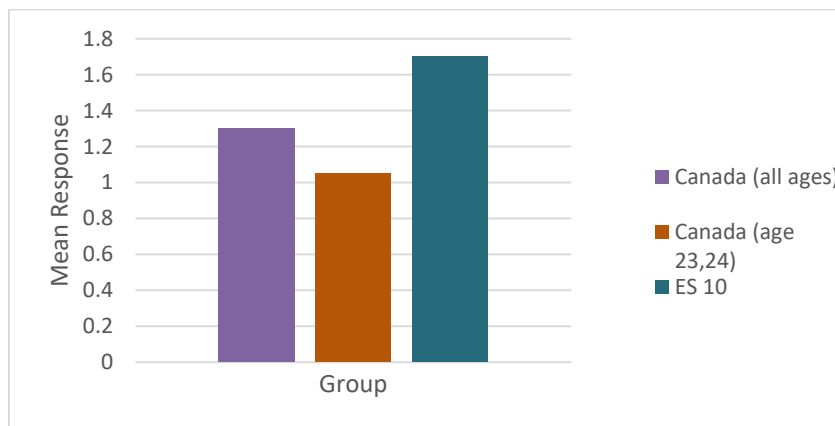


Figure 6.9 ISSP Citizenship 2004 Survey: Category (Unjust Law (action) – Overall mean comparison)

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.11 displays the interest in politics category, which contained only one question that corresponds with the active citizenship indicator of informed citizen. The ES 10 graduates scored a valued of 1.7 compared values of 1.2 and 1.6, which are representative of Canadians (same age) and Canadians (all ages), respectively. It would appear that the ES 10 graduates level of interest in politics is similar to Canadians (all ages) but somewhat higher than that of Canadian (same age). However, the interest levels here for all groups were fairly low with mean averages well below the highest value of 4 attainable.

Table 6.11 ISSP Citizenship 2004 Survey: Category (Interest in Politics)

Personal Interest in politics (1-4, low value = low interest, high value =high interest)	Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
Interest	1.6	1.2	1.7

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.12 displays the international issues category, which contains only one question. This question deals with one’s opinion on how much power the United Nations has. The ES 10 graduates scored similar mean values with this question compared to the other groups.

Table 6.12 ISSP Citizenship 2004 Survey: Category (Opinion on International Issues)

Opinion on International Issues (1-4, low value = too much, high value = too little)	Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
37 Level of power of United Nations	2.4	2.4	2.3

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.13 displays the International affairs category, which measures one’s opinion on decision-making responsibilities and level of involvement of United Nations toward human rights issues. Question 38 deals with how much individual citizen organizations should be involved in decision making versus government. The ES 10 graduates scored similar values to comparison groups, which all had a stronger belief that individual citizen groups should be more involved in decision making versus the

government. Question 39 deals with how much involvement the United Nations should have if a country violates human rights. Interestingly, the ES 10 graduates all agreed that the United Nations should intervene if a country seriously violates human rights while both the Canadian groups only somewhat agreed, indicating that most but not all Canadians who participated in the ISSP Citizenship 2004 survey agreed with United Nations getting involved. It appears that the ES 10 group was quite adamant about this one question since all participants answered it the same.

Table 6.13 ISSP Citizenship 2004 Survey: Category (Preference: International Affairs)

Preference: International affairs (1-2, see below)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
38	Decision should be left to national government representatives (value: 1) vs. Citizens organizations being directly involved in decision making (value:2).	1.5	1.6	1.7
39	If a country seriously violates human rights, the United Nations should intervene (value:1) vs. If human rights are seriously violated, the country's sovereignty must be respected, United Nations should not intervene (value: 2)	1.2	1.4	1

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.14 displays the frequency of political media use category, which also corresponds with the active citizenship indicator of informed citizen. Each question deals with how one may obtain information about politics through various forms of media use. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed *P* value equal to 0.8201, indicating the difference in this variable category to be considered not statistically significant by conventional criteria.

Interestingly, the ES 10 graduates scored much higher than all the other groups in the Internet use as a source to obtain political information, even compared to Canadians (same age). Not surprisingly, Canadians (all ages) appeared to favour television and newspapers for political media use, taking into account older population groups. It would appear that the ES 10 graduates prefer the Internet as a source of

political information over television, newspaper or the radio. Since these questions deal more with how one obtains political media information rather than how much, the questions themselves do not indicate which group would be more informed over the other.

Table 6.14 ISSP Citizenship 2004 Survey: Category (Political Media Use/Frequency)

Political media use frequency (1-5, low value = less frequent, high value = more frequent)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
40	Read political content: newspaper	2.1	1.4	1.5
41	Watch political news:TV	2.6	2.4	1.5
42	Listen to political news: radio	1.9	1.4	1.2
43	Internet for political news	0.7	0.6	2.1

Note. Canadian normative data retrieved from ISSP (2012).

Table 6.15 displays the final two questions in the ISSP Citizenship 2004 survey, which relate to the level of tolerance and respect one demonstrates toward meeting people. The ES 10 graduates scored an overall mean value of 5.55 in this category, slightly higher than Canadians (all ages) who scored a mean value of 5.35 and all of the other groups who scored similar mean values of 5.25. The overall mean comparison of all groups for this category is displayed as a graph in figure 4.10. A paired *t*-test calculation using the ES 10 mean results and mean results from those Canadians who participated in the ISSP Citizenship 2004 survey of the same age group (age 23, 24) resulted in a two-tailed *P* value equal to 0.2048, indicating the difference in this variable category to be considered not statistically significant by conventional criteria.

Question 44 deals with how much respect one would show another upon a first time meeting. The ES 10 graduates scored a value of 5.9, very similar to Canadians (all ages) with a value of 5.8 and slightly higher than Canadians (same age) with a mean value of 5.5. Question 45 deals with the level of tolerance one gives towards another in situations of disagreement. The ES 10 graduates scored a value of 5.2 compared to a value of 4.9 for Canadians (all ages), 5.0 for Canadians (same age) and the world (all ages). It would appear that the values from this variable list are very similar for all groups.

Table 6.15 ISSP Citizenship 2004 Survey: Category (Tolerance/Respect Toward People)

Meet people/respect and tolerance (1-7, low = not important, high = very important)		Mean value: Canada (all ages)	Mean value: Canada (age 23, 24)	Mean value: ES 10
44	Shown respect towards people you meet for first time	5.8	5.5	5.9
45	Tolerance towards people you meet who you strongly disagree with	4.9	5	5.2
Category overall mean		5.35	5.25	5.55

Note. Canadian normative data retrieved from ISSP (2012).

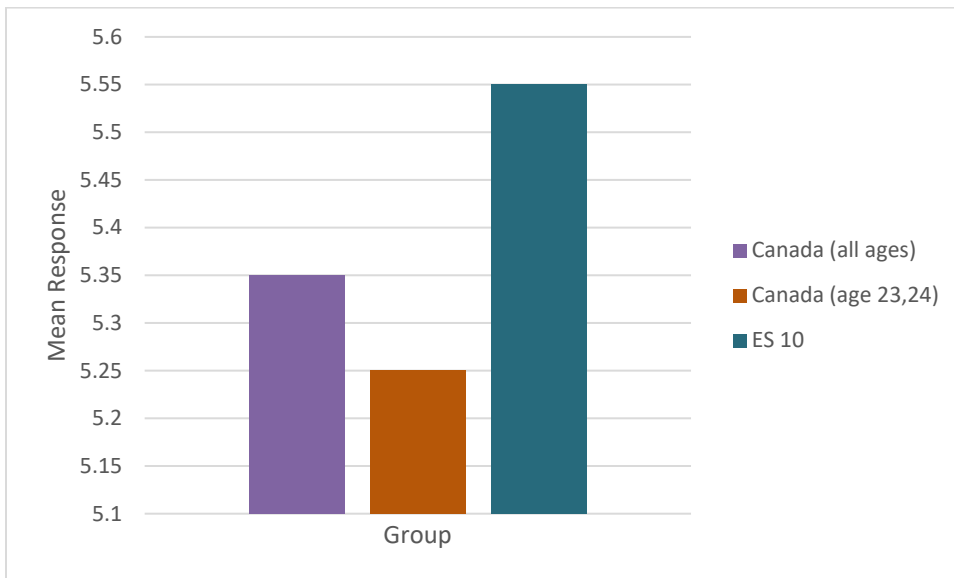


Figure 6.10 ISSP Citizenship 2004 Survey: Category (Respect/Tolerance – Overall mean comparison)

Table 6.16 Demographic of Participants

Demographic of the 2003/04 ES 10 cohorts		
	2003 Cohort	2004 Cohort
Total number of students	24 students (12 male, 12 female)	23 students (7 male, 16 female)
Ethnicity of students	Majority of the students were born in Canada and were Caucasian. A small percentage (5/24) of students were immigrants, all attaining Canadian Citizenship at the time of the study. Ethnicity of immigrants: (Chinese (2), Korean (1), Russian (1), Chile (1)).	Majority of the students were born in Canada and were Caucasian. A small percentage (4/23) of students were immigrants, all attaining Canadian Citizenship at the time of the study. Ethnicity of immigrants: (Chinese (3), German (1)).
Socio-economic status of students	Most of the students came from middle class families with a small percentage (1-2 in each cohort) from the lower middle class family. Note: Majority of people living in Coquitlam (in the Centennial High School area) are considered middle classed (Tri-Cities Chamber of Commerce, 2014).	
Academic profile of students	Although there was an application process for students accepted into ES 10, academic achievement was not a criterion. The students in this cohort represented an average level of academic achievement. However, since this was a unique program and students do apply to be part of it, suggests that it is self-selecting and may attract more self-motivated students. Note: Two seats were reserved for students that were identified by counsellors and/or administrators that were having difficulties in regular school usually associated with achievement, and attendance.	
Other notes	<p>The application process consisted of a written letter by the applicant indicating why they would like to be part of a program like ES 10, a phone interview, and a referral from previous teachers/coaches etc. Selection criterion centered around the applicant's willingness to be part of a unique program and having interest in learning in an experiential way.</p> <p>A total of 28 students applied for the 2003 program while 24 applied for the 2004 program. One student in the 2004 program moved back to the regular program after the first day of classes for reasons unknown. At the present the program typically receives over 30 applicants but now accepts 28 – 30 students due to the increased demand.</p> <p>There was an activity fee of \$350 for the 2003/04 cohorts. The school had a policy to cover fees for families unable to. For the 2003/04 cohorts, no family needed to access school funds.</p>	

Characteristic Events

In this final section in the quantitative data summary chapter, I will include some information on characteristic events relating to the 2003/04 ES 10 graduates. The information in this section includes professional pathway information to include level and type of education attained as well as travel, outdoor experiences and volunteerism.

Table 6.17 displays some characteristic events relating to the ES 10 graduates' educational pathways. Eighty-one percent (81%) of the graduates completed an undergraduate degree of some form with most of these in the science area. Twenty-two percent (22 %) of graduates completed diplomas in various areas from electrical, business to recreational management. The individual who completed a diploma in recreational management also completed a university degree. Forty-two percent (42%) of graduates went beyond their undergraduate studies to a professional degree or graduate level work. Four of the graduates have become teachers with one of these in the process of completing a master's degree in education. Four of the graduates are in medical programs with most nearing the completion of their residency. Other areas in which ES 10 graduates have chosen to continue their post-secondary education included nursing, engineering, law, theoretical physics, biology and speech pathology. In regard to whether the ES 10 program had influence on their post-secondary pathway decisions, 22% of the ES 10 graduates said it did, 33% responded that it influenced them somewhat, 22% responded that another high school experience influenced them, 17% responded that their post-secondary pathway was not influenced by any high school experience, while 6% were unsure.

Table 6.18 displays some characteristic events relating to the ES 10 graduates' general outdoor interest, volunteerism and travel experience. Outdoor interest was included to determine whether ES 10 had any long-term effect on their interest level. Travel experience was included to determine how much the graduates enjoy learning about other cultures through travel. In addition, higher self-efficacy could result in one's willingness to travel abroad at a young age. Finally, volunteerism is included as a characteristic event because volunteerism is a major component of active citizenship. All ES 10 participants travelled throughout North America (Canada, USA, Mexico), with a large percentage of them (75%) travelling abroad (to other continents). It would appear that the ES 10 graduates are not averse to travel and/or adventure as many travel

abroad. Interestingly, 11 participants indicated ES 10 influenced their desire to travel, with having more confidence and interest to explore being most common. In addition, nine participants indicated they travelled internationally to further interest and/or involvement in active citizenship.

Finally, all the ES 10 graduates volunteer in their community or beyond. Some of these (33%) coach a sport team while a large percentage (73%) volunteer at various levels in the community through various ventures to include youth groups, environmental groups, outreach initiatives, church groups, homeless and poverty initiatives, women’s shelters, social justice initiatives, youth engagement (civics) and medical initiatives (cancer, diabetes). Twenty-two percent (22%) of the graduates volunteered on a global scale to include Red Cross, global health initiatives, International Aid volunteer, Houses without Borders, Africa Accountability Canada Coalition, and Oxfam. Table 6.19 provides a brief description for some of the global volunteer initiatives the graduates reported getting involved in. More details on types of volunteerism will be included in the qualitative section of this dissertation.

Table 6.17 Characteristic Event: Educational Pathways

Characteristic Event: Post-Secondary Education		
	% complete or underway	Areas of Study (in brackets represents exact number)
Undergraduate Degree	81%	59 % completed science related degrees, 31% completed social science related degrees, 10 % completed an arts related degree.
Diploma	22%	Electrical, Business, Veterinary technology, Marketing, Recreation management, Forensic Science, water distribution
Graduate Degree Professional Degree	42%	Teacher (4), Lawyer (1), Medical Doctor (4), Nurse (2), Engineer (1) M. Education (1), M. Biology (2), M. Theoretical Physics (1), M. Language Pathology (1)
Did ES 10 help decide education pathway?	22% yes, 33% somewhat, 22% other high school experience, 17% no high school experience, 6 % unsure.	

Table 6.18 Characteristic Events: (Travel, Outdoor interest, Volunteerism)

Characteristic Event	Notes
Travel	<p>All participants (36) travelled throughout North America. 27 out 36 (75%) travelled to another continent Out of those that travelled to another continent, 11 indicated that ES 10 influenced them (interest to explore and confidence was most reported) Out of those that travelled to another continent, 9 indicated they visited places to extend their interest and/or involvement in active citizenship (environmental, social justice, humanitarian and medical outreach were most reported)</p>
Outdoor Activities	<p>All graduates enjoy outdoor activities and all attribute their interest to this was due to ES 10. A few indicated they had interest prior to the program but was heightened by ES 10. Many of the graduates re-create ES 10 trips with fellow classmates (graduates).</p>
Volunteerism	<p>All graduates volunteered at the community level or beyond. 33% of graduates coached a sport 67% of graduates' volunteer in the community at various levels (environmental organizations, youth groups, outreach initiatives, church groups, homeless initiatives, poverty initiatives, women's shelters, medical initiatives, Social justice, youth engagement in democracy) 20% of graduates' volunteer in global initiatives (Red Cross, Africa Canada Accountability Coalition, OXFAM, Houses without borders, Global Health Initiatives, International Aid Worker)</p> <p>Note: Fifteen graduates reported getting involved with school organizations related to active citizenship in their grade 11, 12 years. Out of these fifteen, fourteen reported actively engaged in social justice, humanitarian, health, or environmental themed initiatives at the time of the study (6-7 years after completion of high school).</p>

Table 6.19 Examples of Volunteerism

Volunteer Initiative/Association	Brief description of involvement
Red Cross	The Canadian Red Cross is a leading humanitarian organization through which mission is to improve the lives of vulnerable people by mobilizing the power of humanity in Canada and around the world.
Africa Canada Accountability Coalition	An advocacy group founded by an ES 10 graduate that engages Canadians with issues in Africa and why we must be concerned and proactive. Their focus has been on informing ourselves and the public about these issues, bringing them to the attention of media and political officials, and working towards an understanding of our responsibilities as human beings and consumers.
OXFAM	Oxfam Canada is part of a global movement for change made up of 17 Oxfam affiliates working in more than 90 countries to mobilize the power of people against poverty. Women's rights and overcoming inequality are central tenants of this organization.
Houses without borders	A network of ecological builders and other volunteers dedicated to natural building. Their focus is educational and organizational, connecting We a network of professionals and volunteers with those in need especially in poverty stricken areas.
Global health/environment initiatives	Promotion of sanitation practice and environmental awareness in Africa. Medical outreach in Africa. Sustainable forestry practices advocacy in Brazil.
International Aid work	Reto Juvenil Internacional/Youth Challenge International in Costa Rica
Juvenile Diabetes Research Foundation	Various educational, fund raising, campaigning for juvenile diabetes research.
Environmental Youth Alliance Society	Society's focus is to engage and empower youth to create meaningful, positive action for local communities and environmental health.

Chapter 7. Qualitative Research Study Results

Overview of Chapter

This chapter presents the findings from the qualitative research, which was based on data collected from graduates of the ES 10 2003/04 programs. The data collection consisted of an open-ended questionnaire involving 36 participants and a group interview involving 22 participants. For two participants who could not attend the group interview, separate one-to-one interviews were conducted; data from this is included as well.

The chapter is organized into three sections: 1) open-ended questionnaire results, 2) focus group interview (interview matrix questions) results, and 3) story composites of six graduates based on qualitative data. These findings will inform the argument of the discussion in the next chapter. It is important to note that an extensive amount of data was collected for this study and that only the highlights are presented in this chapter. More detail on the data collected from the group interview is presented in table format with sub themes built in; these can be found in Appendices F-I. I have cited the participants' quotes verbatim as much as possible in an effort to preserve the integrity of their voices. The individual names corresponding to participants throughout this thesis are pseudonyms to preserve confidentiality.

Open-ended Questionnaire Survey Results

In this section, I present the findings based on the open-ended questionnaire. A copy of the open-ended questionnaire administered to the graduates can be found in Appendix E. The open-ended questionnaire was designed to collect information on students' perception of their overall high school experience in terms of influence towards professional pathways and experiences leading to lasting attitudes, values, skills and/or knowledge. One question directly related to an active citizenship, indicator of voice, was included. Included in the open-ended questionnaire as well were questions regarding residency, recreation and travel, education and training attained, employment history and volunteerism. A great deal of this information was included in the Quantitative chapter under characteristic events. The following section represents highlights of the

responses from the graduates pertaining to the specific open-ended questions on the questionnaire.

Question: *Did your high school experience influence your choice of programs you followed? If so, please elaborate.*

The majority of the students responded yes to this question with most of them referring to the ES 10 program as the experience that influenced them the most. Some of the students who indicated the ES 10 program having influence in this area also included other high school experiences. Two students did not attribute their high school experience as influencing their choice of programs they followed. Responses to this question indicated some key influences: environmental considerations, social justice considerations and new interests. The following represents examples of these key findings to those who attributed ES 10 as being influential with this question.

Theme: Environmental consideration

My high school experiences in ES10 reaffirmed and defined my environmental values, leading me to choose the Environmental field when entering University. (Katrina)

ES10 was instrumental in developing my love of travel and environmental education. Not only have I volunteered in Africa to promote sanitation and environmental awareness, but I also pursued a career in teaching environmental education. (Sharon)

ES sparked my interest in environmentalism, cultivated my interest in politics and my discussions with other students in the program developed my interest in philosophy in a profound way. (David)

Theme: Social justice considerations

Following ES, I was asked to be the President of the leadership group IMPACT. This volunteer group also allowed me to synthesize my passion for social justice. These two things encouraged me to find a degree to help influence in social justice. (Kerry)

ES 10 influenced my interest in Science and was the main reason why I pursued a BSc. Through the Red Cross club at Centennial, I kept in touch with my interests in human rights. (Sarah)

The ES 10 program inspired me to constantly challenge myself and create opportunities for myself. After ES 10 I challenged myself by joining the Red Cross Club. My experience with the Red Cross club and the Canadian Red Cross exposed me to the importance of

humanitarian issues and prepared me with opportunities to develop leadership and facilitation skills. These experiences are instrumental in building a foundation and opening doors, which lead to my decision to pursue an MC, and likely helped facilitate my successful application. (Peter)

Theme: New Interests

I was planning on going into Law before ES and even after it, but once I realized how much I hated it, I looked at what courses were offered and chose recreation and tourism and I don't think I would have ever done that without the experience in ES that solidified my love of the outdoors and recreation. (Lucy)

My experience in ES cultivated my love of outdoor activities, ecological concerns, sustainable development, democracy and multiculturalism. (David)

Question: *Are there any specific high school activities/experiences that left you with lasting attitudes, values, skills and /or knowledge that influenced your educational decisions? If so, please specify.*

The majority of the graduates indicated ES 10 as a specific high school experience that left them with lasting attitudes, values, skills and or knowledge toward their education decisions. Some of these students also indicated other experiences as well. One student referred to another high school experience other than ES 10 while three graduates answered no to this question in respect to their educational decisions. Major themes emerged from the responses to include self-efficacy, self-confidence, self-awareness, life skills and value of community.

Theme: Self-awareness

ES10 was the best part of high school looking back. I still talk about it today. I think grade 10 is such a vulnerable time and age. My friends outside of ES10 were drinking alcohol more, experimenting with drugs, behaviors that had I have gotten too caught up in may have changed my life's path. ES10 was a great distraction from that for me. I didn't skip class in ES10 whereas with regular classes I found it easier or like I was less accountable. (Sue)

Theme: Life skills

The ES 10 program inspired me to constantly challenge myself and create opportunities for myself. I also helped me begin to explore concepts of critical thinking, and self-learning. Also, it helped me

develop more self-confidence, social skills, communication skills, and team work. Finally, I gained interest in self-reflection. (Peter)

All of the group activities/team sports were huge influences on my person. ES 10 was also a huge influence onto my future decisions. It provided me with numerous academic and non-academic lessons that helped to develop my respect for education and people. Also, the above experiences helped develop my values, confidence, basic life skills and how I perceived myself within the larger community. (Drake)

Theme: Value of Community and perseverance

Absolutely, I can say that there are two main experiences that have without a doubt have been a vital part of my personal development, values and goals from a professional perspective. The first is my ES 10 experience, which completely opened to me a new way of thinking about my community and learning. The experiences I had in ES 10 continue to come up in my life and have taught me what I am able to achieve when I am focused and work hard, and very importantly the undeniable value of having a healthy and vibrant natural environment that provided me with so many positive and unforgettable experiences in that course. In addition to ES 10, I was also fortunate enough to attend the Lester B Pearson Seminar on Youth Leadership (PSYL) between my grade 11 and grade 12 summer, as well as the summer following gr. 12 graduation. PSYL was similar to ES in that it was very hands on and dynamic, but it had a slight more focus on social justice and political issues surrounding the local community. PSYL change my drive in life and challenged me to pursue a degree in political and now in law that could allow me to make a positive contribution to many of the social problems facing society today. (Kerry)

Theme: Value of community and self-efficacy

ES10 changed my life forever. The people in the program shaped who I am today. The activities gave me confidence and I learned so much more than just what books can teach. I learned how important it is to help one another and be a part of the community. I learned what I am capable of (which is a lot) and that small groups of people can make a difference. (Emily)

Theme: Self-confidence towards risk taking

ES 10 allowed me to develop skills that could not be acquired in a traditional classroom setting. After ES I was; confident speaking in front of large audiences, more flexible, willing to take risks and comfortable in my own skin. Taken together, this skill set gave me the confidence to move to China and start my own company at the age of 19. This influenced my educational decisions insofar as I was willing to complete my first bachelors through distance education (which required flexibility and a certain amount of risk given that I was

studying from China and the communist government there made it difficult to access online articles and resources necessary for papers). (Lisa)

The experiences I gained during ES gave me a bolder attitude that has allowed me to try things that make me nervous or unsure. (Celeste)

Question: *Did your high school experience influence the kind of work you looked for? If yes, please elaborate.*

For this particular question, eight graduates indicated that their high school experience had little or no influence on the kinds of work they looked for. Three graduates indicated that their high school experience influenced in small ways but was not the sole contributor. A large number of students attributed much but not all of their high school experiences toward their future employment choices, while two graduates attributed their high school experiences as a major contributor toward the kinds of work they looked for and did not refer to anything outside this. Of the graduates who attributed some or a great deal of their high school experiences having an influence on the kinds of work they looked for, 11 referred to the ES 10 program as a major contributor. Major themes from the responses to this question include jobs with purpose, experiential (hands-on) employment skills, community, environment, fellow classmates, environment and confidence.

Theme: Jobs with purpose

My science and humanitarian issues focus outlined the areas of work I am interested in, but I did not limit myself to the area in order to explore diverse opportunities. My experience in ES helped me seek employment and volunteer work with purpose, such that each position is meant to help me develop skills I identified thus I needed. It also helped motivate me to seek progressively challenging positions. (Peter)

ES led me to choose work experiences that reflect my values in their purpose and how they are performed. My employers post Zellers have all aligned with my values and ethics over potential monetary gain. This trend is likely to continue. This public service oriented direction in my life can be directly tied to my experiences in ES. I have chosen employers with collaborative team based work environments with flexible hours. I prefer unionized jobs where available and am active in internal worker's advocacy groups where unions have not been set up. I believe we should have democratic control as to how we learn and work. This is instilled in ES. ES led me to choose work experiences

*that reflect my values in their purpose and how they are performed.
(David)*

Theme: Importance of relationships

Yes, my high school experience influenced me. I looked for employment with companies that were interesting and jobs that could incorporate some of my passions such as working with children, being social, being active, and learning new things. My friends from high school also influenced my job choices as I wanted to work with them. The reason I travelled to China to teach was because of my passion for travel, education and that my friend, (a fellow ES 10 student) was starting a company and I wanted to help her out and have an adventure! (Sharon)

Theme: Environment

Yes. I developed by love an appreciation of the environment during ES. I remember thinking that it would be pretty cool if I could use my knowledge and skills to better the environment. I now currently work in environmental site investigation/remediation at a consulting firm. Although we are working "for the client", I ultimately strive to clean up our land, one property at a time. (Jessica)

Theme: Community

The experience of getting involved with the community through ES showed me how to be a positive member of a community and the ways I could volunteer through work and help the employer be a good community member as well. (Lucy)

Theme: Experiential (hands on)

I am sure in some ways it did but exactly how I am not sure. Maybe being so hands on and loving ES10 it shaped me to be someone who can't sit behind a desk for 8 hours a day. I like to work with people and have a fast-paced environment. (Sue)

No, not necessarily. However, my experience as a student has a large influence in the way that I teach. I try to be as hands on as possible. ES 10 helped me here. (Matt)

Theme: Confidence

After ES I became much more social/outgoing and was drawn to jobs that involved working with people. I felt confident going up to just about anyone and striking up a conversation. All of my jobs after high school have involved a lot of "talk time." (Lisa)

Question: *Are there any specific high school activities/experiences that left you with lasting attitudes, values, skills and /or knowledge that influenced your employment decisions? If so, please specify.*

For this particular question two graduates mentioned that there were no high school activities or experiences that left them with lasting impressions in terms of attitudes, values, skills and/or knowledge influencing them in their employment decisions. Two graduates mentioned high school experiences having some lasting effect while the rest related to specific experiences having been very influential in those terms mentioned above. The majority of the graduates indicated experiences relating to the ES 10 program. Major themes from the responses to this question include environmental values, teamwork, self-confidence and self-efficacy, higher aspirations, community, employment skills, independence and sustainability.

Theme: Environmental values

When I graduated from university with a geological engineering degree, it was very tempting to move to the Calgary and work for an oil company. I felt (and feel) that I would rather preserve the environment and not exploit our natural resources. The values that materialized out of my experiences while living in BC during high school, influenced my decision to stay out of the oil business. (Jessica)

Beach Surveys (looking at change to our environment). Outdoor camping trips - created a value and importance for the environment (These happened in ES 10) (Gerald)

ES 10 and IMPACT had big influences on my employment decisions. Law in many respects can involve working for corporations that do business with companies that are not environmentally sound. There is no doubt that these issues have been at the forefront of my mind, when I was thinking about the kind of firm I want to work for. (Kerry)

Theme: Teamwork

Being part of a team like much of what we did in ES 10 has driven me to be involved in extracurricular activities and contribute at my workplace. (Matt)

ES 10 was great for team building and self-discovery which probably helped with me being able to have the confidence to build my own business and be an entrepreneur. I am a go getter and I seek out work and don't fear talking to people. Teamwork is important in my business this I learned in ES. (Jake)

All of the group activities/team sports were huge influences on my person. ES 10 was also a huge influence onto my future decisions. I think as a youth I was a very team oriented individual, and particularly enjoyed anything that had to do with group work or team success. I think this has influenced my career path as I look to develop my career within a profession that is characterized by human interaction and working together to achieve a common goal. (Drake)

Theme: Higher aspirations/expectations

The atmosphere of ES where schedules and priorities are a discussion, not a top down endeavour really expand a person's expectations as to what they can expect from life. This applies to work in that one would choose a more democratized work environment or work to change a work environment so that it values teamwork and diverse skill sets. (David)

I have developed and embraced an open attitude to new experiences and to open my doors to activities and employment outside of a traditional academic realm. I am not able to pinpoint any specific activities in my life that have specifically done this for me, but each and every new activity reinforces the benefits of embracing an open attitude. My experience in ES was one of the first of many life experiences that opened me up to new possibilities and challenged the expectations of what my life should look like. (Mike)

Theme: Self-confidence/self efficacy

I think that field trips I did in E.S helped me discover that I was capable of doing things that I had never thought about before. For example, rock climbing when I have a fear of heights. It also gave me more confidence to be more outgoing, meet new people and try new things which makes it easier to work with the public and try new jobs. (Olivia)

ES 10 really helped me constantly to challenge myself and create opportunities. ES 10 helped me gain the self efficacy to pursue my dreams. (Peter)

My experiences with sports helped me stay active and I wanted a job that allows that. My experiences with ES has helped me in areas of confidence and communication skills both very important for my job today. (Lily)

Theme: Employment skills

A course like ES 10, where you're taking your learning outside the classroom provided me life skills like problem solving, communication skills, and conflict resolution and these have helped me in my line of work. (George)

Theme: Independence

Being able to do many assignments without supervision is a huge asset for my supervisor. Being in ES 10 was a huge help. As much as we had to work in a team environment there were times where we had to learn to do huge assignments by yourself. (Shelly)

Theme: Community feel

In our ES portable we had a fridge, our table groups were allowed to decorate the nearby wall space, we could wear slippers and park our cars right outside the door. These are just a few things that helped make the portable feel more like a home away from home. I loved every minute in that portable because it was comfortable and the small, close-knit group felt familiar and safe. I chose to work for the City of Port Moody for similar reasons and have now gone into teaching in hopes that I can replicate the feeling of that portable. (Lisa)

Theme: Social and Environmental Sustainability

ES 10 had a significant impact on my opinions with respect to sustainability practices, public programs and health. A specific example of this would include a trip to a sustainable logging practice which was one of many trips which left a lasting lesson that there are alternative and more sound methods of approaching social and environmental programs which have the potential to benefit a community more so than current practices. (David)

Question: *Do you regard yourself as settled or unsettled with respect to employment, or your present professional pathway? Please explain.*

With this question, seven graduates responded *unsettled* while six were *somewhat settled* but not certain while the rest believed they were *quite settled*. For the *unsettled* graduates, responses varied from uncertainty of job prospects to not finding the right job. For four of the *unsettled* graduates, they felt comfortable about being *unsettled*. Their responses are below:

I think I'll always be unsettled. I am constantly learning, about the world and about myself. When I feel settled, I feel trapped. I like being open to new opportunities. I am happy where I am and proud of myself but there is always room to grow. (Emily)

Unsettled I suppose. Currently I'm working seasonal jobs. I do plan on going back and getting my Masters next fall and from there look for something a little more permanent. The unsettled is my choice though, I like moving lots and having shoulder seasons to travel. (Lucy)

Unsettled in the sense that I do not ever want to settle. I am passionate about my current position and believe in the pedagogical and ethical frameworks that underpin the program. At this time in my life I am ambitious and want to stay with this position as long as I believe that I am learning from it and contributing value to it. Within the next 1-2 years, I plan to pursue a Master degree and a new position. (Sarah)

Unsettled, but on my way. I consider my career as a long-term task of becoming the person I want to be. Very interested in teaching - programs like ES 10. (Katrina)

For those graduates who were *somewhat settled* with respect to employment, their responses varied from being open to new opportunities of learning and growth to using a career path as a tool towards a greater purpose. Responses relating to some of these graduates are below:

Fairly settled. I am happy with the career I have chosen. I find it engaging and relevant. As I gain experience, I feel like I will have room to grow and evolve my career. However, I am not convinced that my education is complete... I am considering completing a Masters in some kind of environmental science. (Jessica)

I regard medicine as a tool and not a destination. I am in the process of acquiring that tool. Once I have done so, the task I not finished as I will then use the tool to work on humanitarian issues, through ways which may evolve me. (Peter)

For those graduates who were *settled* with respect to employment, responses varied from being certain that their career path was the correct one while many recognized that while they were settled that circumstances may change, and they feel they will be able to ready themselves for it. Responses relating to some of these graduates are below:

I am extremely settled, I have secure employment with a continuing contract in teaching and will start a master's program in July. (Lisa)

I believe that I am fundamentally settled with respect to the kind of profession I want to have. The career path that I have chosen to follow today actually began when I was in elementary school. However, I do acknowledge and realize that being flexible and open to trying new things is an important part of a growing human experience. I am never afraid to try new things and like to be spontaneous. (Alex)

I am clear in my professional pathway to a point. I know that I want to work in professional politics in communications, strategy and fundraising. I am going obtain one or two master's degrees to help me in this devour in political management and public policy. I know that life

is unpredictable. I am prepared to have my mind changed by what I continue to learn in school, work opportunities that might arise from nowhere and what issues are most pressing in my community/the world. (David)

Question: *Please outline the service activities you have taken part in followed since leaving high school. These could include volunteer work, coaching, teaching, taking part in community activities and/or following employment that provides a service to a larger community. Did your high school experiences impact such service?*

Parts of this question were already summarized in the Quantitative summary chapter under Characteristic Events. The summary in that section for this question outlined how many graduates were volunteering and the kinds of volunteering they were engaged in. This summary will be included here as well. All graduates volunteered at the community level or beyond with one third coaching a sport while all the others volunteered in the community at various levels. Community volunteering included environmental organizations, youth groups, outreach initiatives, poverty initiatives, women's shelters, medical initiatives, social justice initiatives, youth engagement in democracy and dry grad support for a local high school. A number of the graduates volunteered in global initiatives including Red Cross, Africa Canada Accountability Coalition (advocacy organization), OXFAM (International confederation to fight poverty), Housing Without Borders, Global Health Initiatives and International Aid. A large number of these graduates were involved with humanitarian initiatives.

Many of the graduates indicated volunteering for the same organization: JDFR (Juvenile Diabetes Research Foundation). These graduates who indicated volunteering with this organization were all from the 2003 ES 10 cohort. They got involved early on in the 2003 class through a fellow ES 10 student who had diabetes. Many of these graduates still volunteer with that organization. Major themes in the responses to this question relating to high influence towards volunteerism and/or contributing to a larger community included the ES 10 experience as well as other opportunities to get involved post ES 10. The following represents some of the voices in the response to this question relating to the major themes:

Theme: ES 10 influence to volunteer

The volunteering our class did in ES 10 had an influence on the worth of volunteer to the community, because we gave our time during the

semester and it only reinforced the importance of giving back. (George)

These activities are all in the theme of humanitarian issues which started developing in high school. It was through ES 10 that I found my courage and voice to become deeply involved. (Peter)

My interest in philosophy, sustainable development, ecology and the public interest can be traced back to ES in a big way. (David)

Theme: Post ES 10 opportunity to volunteer

In my grade 11 and 12 years I volunteered with many of my ES 10 classmates with the Tijuana project. I co-coordinated the project to raise money and build classrooms in Tijuana Mexico. I am a JDRF diabetes walk for the cure committee member. I worked with underprivileged children and people with disabilities in Lima, Peru (after High school). I volunteer for local not-for-profits in various roles directed towards community development (these include; Kitsilano Neighbourhood House, Muscular Dystrophy (Canada) development). My high school experience affected these activities in helping to create values for community interaction and development. As well as creating a sense of wonder and urge to explore. (Gerald)

I look at my experiences in ES 10 and the Centennial Red Cross club when I make sense of my engagement path. In ES 10 I learned about the importance of civic engagement and in Red Cross some basic event planning competencies. (Sarah)

After ES 10 I got involved with Centennial's Salmon club. Since the salmon club my interests in salmon enhancement have continued, and I have been still actively involved. (Carson)

Question: *Do you feel you have a voice on matters that affect you?*

For this question, all the graduates indicated they believed they have a voice on matters that affect them in varied amounts. Some of the graduates indicated that this was dependent upon the circumstances, while others indicated how important voice was in their daily living. Common themes from the graduates' responses to this question included ES 10 influence, importance of being informed and how barriers such as government issues affect voice.

Theme: ES 10 influence

Yes, I feel that you can use your voice (and actions) to make a difference. Communication is key to any relationship and I have found that many issues can be resolved by expressing your concerns in a

constructive, respectful way. ES was unique in providing an environment where I felt I had a real say in what happened during the class. Suggestions/input were always encouraged and considered. Not only did I feel that my opinion mattered, but that everyone's opinion mattered. I wanted to actively participate in the discussion, because maybe I could contribute something great. (Jessica)

Theme: Being informed and ES 10 influence

Despite all of the challenges that we face as a civilization that would oppress a single voice from making a difference I would say that I personally and one generally can make a difference. The key is education (developing Eros or the love of the truth), teamwork and courage. ES teaches all of that. In spades. (David)

Theme: Being informed

It takes a lot of conviction and effort to express one's voice, especially if the matter is public or political and not specifically outlined in a clear manner. Having the knowledge of practical ways to be heard is often very helpful. (Matt)

Theme: Barriers affecting voice

On a personal level, I believe I have a choice and a voice. (Personal level being voting, conscientious consumerism, etc.) On a global or political level Citizens are pandered to during elections and then are disregarded. Furthermore, when it comes to impacting change the citizens do not have access to all the necessary information on a global or political issue because it is not made public therefore they are unable to make informed decisions and consequently are not taken seriously and in turn are disregarded as ignorant. One example would be the BC Pipe line. This is an issue of serious contention however in the end public opinion will not signify. When I can I do make a point of making an informed decision to form an opinion. (Chloe)

I think that it is circumstantially different. In small matters that take place in the work place or through volunteer work, I do feel I have a voice. When looking at the bigger picture, relevant to government, not quite as much. This may be because I am not very educated or involved politically. (Kevin)

It depends on the nature of the issue and where it occurs. I believe we should always exercise our voice, and then discovering any barriers that may arise. Some common barriers I come across are: political climate (or majority government), organizational structure, issue not recognized by mainstream media, lack of public awareness and support. (Peter)

Question: *Are there parts of your high school that you feel were outstanding and deserve being expanded for more students to take part?*

For this question, all the graduates indicated the ES 10 program in a favourable manner. Responses varied from life changing experiences, level of engagement to lasting attitudes and skills. Some graduates indicated other programs such as IMPACT and the salmon club as being influential and deserve expansion. The following are some samples of responses that relate to programs of value, particularly ES 10, as mentioned by graduates:

To this day, I believe that ES10 was an innovative and engaging program that allowed students to not only learn through activities but also encouraged students to explore their natural curiosities in life. If this program could be expanded, I am certain that it would benefit the students in ways that is tailored to individual needs. (Alex)

Programs like the ES10 program deserve to be expanded. It teaches proper interpersonal skills and facilitates the development of positive personal identity for youth. This style of program should definitely be offered at every school. They really have the power to change the course of people's lives, and only for the better. (Katrina)

The experiential studies course was outstanding, and gave me lasting skills and attitudes. It gave me a hands-on connection to the sciences, and enhanced my skills in collaborating with other students through emphasis on group learning. It also showed me the value of a community, through the community atmosphere which our class formed. (Mia)

I was never an academic student but ES 10 allowed me to find my true value in an academic setting. I felt that my contributions mattered and were appreciated. This helped me do better at school as I gained the confidence I needed. Ironically, later on in college I was part of the Douglas College Sport Science Experiential Education Program, a program run by my ES 10 teacher Gord Sturrock. Again, I shined, and felt like a valued member of the group. Experiential programs like these should be made more available, they really help students develop life skills and lasting relationships that today I continue to enjoy. (Lily)

Question: *Did I miss something? Did you have something else you would like to add?*

For this final question, less than half of the graduates responded. For those who did respond, some recalled some of their ES 10 experience while others commended the program in terms of how valuable it was to them. All the responses related to the ES

10 program in some form or another in a favourable manner. The following are some of the responses to this question:

ES 10 deserves widespread recognition. It is the type of program that is needed during the early high school years, when peer pressure is high and students crave opportunities for independence and validation. For me, ES made school personal again, and that was just what I needed to recover from an eating disorder at the time. (Lisa)

I think that one of the big upsides to programs like ES 10 for youth is the autonomy that kids learn throughout the semester. I remember appreciating the decision-making powers that our instructor granted us, and feel that the trust he placed within our group allowed us to achieve some things well beyond our years at the time. (Drake)

In school, I wasn't very physically active. I hated PE and felt uncomfortable and insecure doing sports. I am not very athletic and didn't feel like there was a lot of effort put in for people like myself. In ES 10 I felt like we were able to get outdoors and be active without being in a particular sport. I felt like we could go for walks or hikes or snow shoeing, rock climbing, things that are fun to do and don't feel like you're on a volleyball team and look like an idiot because you suck! Ha Ha. I liked being able to go at my own pace but still be part of the group. I liked learning about stalactites and stalagmites, digging out snow caves and sleeping in them. Sleeping in school gyms with tons of students and watching the sunset on the beach in Tofino! (Kaitlyn H)

The ES 10 class has had a large impact on my life in many ways. I have fond memories and feel this class has impacted me the most out of any high school experience. It is a class that should be expanded upon to a 2-year program or optional for each high school year. (Gerald)

Focus Group Interview (Interview Matrix) Results

The following section will present the findings of the focus group interview, which involved the interview matrix method. The interview matrix methodology allows for full engagement in dialogue, equal participation, focused discussion and consensus building. The last portion of the questions for the interview matrix were designed to get an idea of respondents' long held perception of learning environment factors that were prevalent in ES 10, which they perceive to have affected them most as they relate to active citizenship components. The following four questions were used in the interview matrix:

1. *Do you believe the ES 10 program helped foster the development of skills, in regard to one's ability and or desire to make a contribution of sorts to the community or beyond?*
2. *Sense of community and belonging to include the desire to be part of a strong, safe community based on networks and friendships that foster trust, concern for well-being, sense of self-worth and encouragement towards individual and collective social responsibility. Could you comment on the ES 10 program that you were involved with as it relates to sense of community as described above.*
3. *Did the program in any way allow you to have a voice in matters that affected you? If so, how? Do you think this had any effect on the way you think and act today?*
4. *What is it that you remember the most about the program in terms of unique learning environment features? This could also include "specific" experiences that may have affected you in some way. These examples could be positive or negative.*

The following represents some of the individual responses as well as consensus responses from the graduates to the four questions in terms of major themes. The data collected here was quite extensive; therefore, I have included a smaller sample of responses, focusing on major themes. A more detailed summary of responses to the interview matrix question can be found in the Appendices (F-I), which is presented in chart format for easy reference. The consensus responses represented comments by individual graduates that met agreement of all other graduates participating in the interview matrix. In other words, the consensus statements represented the overall view of the graduates who participated in this part of the study.

Response to Interview Matrix Questions

Question 1: *Do you believe the ES 10 program helped foster the development of skills, in regard to one's ability and or desire to make a contribution of sorts to the community or beyond?*

The responses to this question yielded a variety of skills and attitudes, all beneficial toward one's ability and/or desire to make a contribution of sorts to community

or beyond. Major themes included self-efficacy, self-confidence, ability to take risks, conflict resolution, research skills, critical-thinking and problem-solving skills, tolerance, teamwork skills and leadership skills. All graduates responded favourably toward the ES 10 program in terms of gaining valuable skills that help them today. Notable in the responses toward these valuable skills were references to program features that allowed these to develop. Program features most mentioned by the graduates included non-judgemental environment and how problem solving was approached. The following represents individual graduate responses to Question 1 relating to some of the themes above. A more detailed summary of these responses can be found in Appendix F.

Some of these responses are included below:

Confidence was big in ES - the curriculum and the way it was experiences provided a time and space to practice skills which are useful today. I had an interest in debating, other people's cultures, environment, and religion. ES provided a space for me to follow these interests in a healthy way. I never had a good opportunity to explore these interests until ES. Through ES I became more comfortable and competent with these skills and more confident to continue (still today) as in my later life I am involved in policy work. (David)

I big piece for me was how non-judgemental the environment was. We were free to be ourselves and there was a great deal of trust and respect. I was more tolerant and I believe this helps me today. I was very comfortable with being myself in the classroom but more importantly beyond the classroom. I was able to come out of my shell and became less concerned about what others thought. (Mia) (one on one interview)

Hands on developed research skills, we didn't have the chance to do before, we did research out in the community on a regular basis (examples: forestry studies, tidal zone studies, community issues studies) We did the hands-on work, then followed up with other sources (texts, internet, interviews with professionals). (Mason)

Problem solving skills was big, as was critical thinking. We were challenged to view issues from both sides and come up with solid reasoning based on facts when picking a side. We were taught to be able to argue both sides so we could really understand the issue before we choose where we stood. (Mia) (one on one interview)

The Consensus Responses to Question 1

The consensus responses to this question also resulted in a variety of skills and attitudes all beneficial towards one's ability and/or desire to make a contribution of sorts

to community or beyond. Major themes in this set of responses included self-efficacy, self-confidence, ability to take risks, conflict resolution, critical-thinking and problem-solving skills, creativity, diversity, communication skills, purpose and making a difference.

All graduates were in agreement that the ES 10 program allowed them to gain valuable skills and attitudes that help them today in all aspects of their lives. Notable in the responses was how tight knit the group was in terms of getting along and performing tasks. It was pointed out through the many students' comments that this group cohesion helped in the attainment of various valuable skills. Also notable in the responses was how the graduates had a great deal of control over the overall learning process, which again allowed them to explore new interests while developing skills. The following represents consensus responses to Question 1 relating to some of the themes above. A more detailed summary of the consensus responses for this question can be found in Appendix F.

Getting open ended tasks, developing them in personal directions, we learned more about ourselves this way. We were allowed to go in directions our interests wanted to take us. (Celeste)

ES taught how to relationship build, through advocacy and the building of confidence while interacting with peers and adults in the community. ES helped with the acceptance of others which in turn helped in communication with others. (Drake)

Learning how to push our comfort zones - the outdoor challenges which we would not have been exposed to helped us understand how we can push ourselves. The group competition that was created through various initiative tasks, the time pressures in some of the academic challenges, coupled by the encouragement for each other helped push us to higher limits. The bar was always raised. There was a group trust, risky questions can be asked as well. (Sarah)

Question 2: *Sense of community and belonging to include the desire to be part of a strong, safe communities based on networks and friendships that foster trust, concern for well-being, sense of self-worth and encouragement towards individual and collective social responsibility. Could you comment on the ES 10 program that you were involved with as it relates to sense of community as described above?*

The responses to Question 2 resulted in a variety of attributes of ES 10 relating to the creation of a sense of community. Some of these attributes included comments

around acceptance of one another; how much voice people had; how supportive, trusting, caring and safe the environment was; and how the program led to lasting friendships. Some graduates also indicated how being together for extended periods of time led to the idea of social responsibility and the benefits of giving back. Notable in the responses was how close the group was, creating a supportive and safe environment. Many of the graduates attributed this quality to the amount of time spent with each other, especially on the extended field experiences. Many of the graduates referred to the group as a “family” that attributed to the amount of trust that was built. Some of the graduates attributed the program’s accepting and caring environment as leading to their own development of self-worth and confidence. Responses relating to some of the preceding comments can be found below. A more detailed list of responses can be found in the Appendix G.

ES was accepting, I could be myself and the ES community encouraged me to do things I would not have done before, it taught me I was awesome, this was hugely important to me, it gave me tons of confidence. (Emily)

ES was our own family, within the community of the school. We had as sense of pride. We all wanted to be there and not miss a day (no skipping). We did not want to miss out on anything. We would show up on Professional days even on days that we had off because of extended trips. This made all the time spent together even more special. There was no bullying - just a great acceptance of difference and unique contribution - not sure if regular school can do that. (Sue)

The volume of time we spent together leads to trust. We overcame challenges as a group which created a sense of community. Most people in the program built relationships based on honesty and mutual trust not status or abuse. All of these people formed long lasting relationships while other high school acquaintances are ghosts to you in the future. The shared experience of ES makes you care about people. (Jake)

The Consensus Response to Question 2

The consensus response to this question also resulted in a variety of attributes of ES 10 relating to the creation of a sense of community. These responses included how respectful, safe and accepting the environment was for all, which in turn led to social responsibility and personal development. Once again, ES 10 was referred to having characteristics of a “family,” which led to cooperation and conflict resolution. The participants in this part of the study also indicated many benefits of being part of the ES

10 community to include shared values and personal growth as well as sense of responsibility. Responses relating to some of the preceding comments can be found below. A more detailed list of responses can be found in the Appendix G.

We respected differences for the benefit of the “functioning group”. We broke down barriers to allow for a better understanding and caring of each other, we respected others diversity for who they truly were. There was a respect and caring of what others thought because classmates were more like a brother or sister. We would often debate among one another with civility and respect. It was an insulated environment where we built up values, acceptance and empathy was the norm. (Sarah)

It was a crucial development point in our youth, we were allowed to experiment in a safe environment. Personal development through exploration grew to have strength in self which lead to sense of responsibility.... There were demonstrated tangible benefits to include: communities based on values, personal growth, and a support network based on mutual trust developed skills leading to higher level of confidence and belief in oneself. Being responsive and taking responsibility was encouraged. We met people in the community which taught us skills and the importance of being welcomed. Experiencing small communities like on the Vancouver Island trip helped us realize that relationships were based on shared values rather than proximity. Working through real-life problems with community members gave us something to care about. (Peter)

Question 3: *Did the program in any way allow you to have a voice in matters that affected you? If so, how? Do you think this had any effect on the way you think and act today?*

The responses Question 3 not only resulted in considerable discussion not only on how ES 10 allowed the graduates to have a voice on the matters that affected them but also on various features of the program that helped foster voice. A key theme in this regard was democracy in the classroom to include having a say on many important classroom decisions including the schedule, how something is learned and what is learned. Another key theme in this regard was the openness of the learning environment, which some graduates indicated encouraged philosophical discussion and self-discovery. Many of the graduates also responded that having a voice in ES 10 helped them gain confidence that would persist into the future. In addition, some of the graduates have attributed finding their voice in ES 10, which led to subsequent and present involvement in various community and global initiatives. The following represents a sample of the responses corresponding to some of these key themes. A

more detailed summary for Question 3 of the interview matrix can be found in Appendix H.

This was a unique program, you had a lot of say in how you learn, what you learn. There was a freedom of structure. (David)

Yes, there was voice. This was done through guided learning, we were supported by we had a say. Decisions were made by groups of people rather than one person; this gave us more of a voice. There was a democratic leadership. (Mason)

I voiced my opinion frequently and confidently there was an ease to do this in this group, it was comfortable to do so. Definitely different than in a regular class setting where trust was not big. ES helped me find “self” and solidify my “individuality” through this supported voice. I am much more confident today. (Lily)

Sturrock always pushed you to think about what’s next, to think forward. In ES, you had a voice and it actually meant something. I learned you can actually do something with your voice, for example I went to Africa to reach out and understand the real issues around human rights. I learned that you can make a difference and that your voice matters. (Sarah)

I like how the atmosphere was more free form, often there was no right or wrong answer it encouraged us to talk, it was very open. ES was structured so much different than a regular class, which fostered interaction among each other. I enjoyed the issue analysis project where we had a creative way to voice our opinion, an opinion based on knowledge and some critical thought. We were allowed to research any issue and could choose our own ways to investigate like interviewing people, we were also allowed to present it in a creative way of our choice. (Celeste)

The Consensus Response to Question 3

The consensus response to Question 3 indicated some key themes relating to ES 10 features leading to voice. The one theme that was prominent was how democratic and open the classroom environment was in terms of much of the decision making around schedules, curriculum and how people wanted to learn and demonstrate their learning. There was consensus that academic freedom and open discussions on a variety of topics allowed for self-discovery in terms of finding true interests and passions. There was consensus that the ES 10 learning environment encouraged voice, which increased students’ confidence to use their voice that persisted in the future. There was consensus that the high level of participation in ES 10 provided “training” for how to be

responsible for one's voice, which led to social responsibility. There was also consensus on how the ES 10 program led a desire to exercise voice more in the future and how this related to some long-term active citizenship behaviour as well as creating some friction with future teachers. The following represents responses relating to some of the key themes indicated above. A more detailed summary relating to consensus responses to Question 3 of the interview matrix is included in Appendix H.

There was a high level of trust in each other, felt safe even if there was risk. We were part of the process, we had a say in everything; the schedule, curriculum, projects, activities. (Mason)

Voice meant something, it was valued. Could make a difference in class, there was a value in this, we were not speaking to just fill time we were speaking because you could make a difference. (Sue)

Voice and agency, you expected to be heard, this helped with attitudes towards advocacy well after the program. This did cause some of problems though in our grade 11 year with our expectations of this being so high and our teachers not being ready for it. Us ES'rs would want to exercise more voice but many of our teachers would not give up control. (Tanja)

ES had a profound impact on me, without ES I wouldn't have had the courage to make a global impact through my involvement through Red Cross. I headed Centennial Red Cross and felt strongly that you can make a difference and encourage others to do so. (David)

Question 4: *What is it that you remember the most about the program in terms of unique learning environment features? This could also include "specific" experiences that may have affected you in some way. These examples could be positive or negative.*

Question 4 resulted in some common themes being memorable and unique. All responses were positive in nature. Most graduates commented on how flexible the schedule was and how they had a say in this. Most graduates also recalled the flexibility and freedom on other learning features, including input on curriculum, grading practices, and learning preferences. Many of the graduates referred to the variety of field experiences as being memorable and contributing to learning. Many of the graduates commented on the hands-on learning that took place in ES 10 and how this increased engagement, made things relevant and contributed to long-term learning. Some of the graduates commented on the variety of learning experiences that often continued even after the activity through journaling and self-initiated discussions. Some graduates

commented on how the social cohesiveness of the group helped them develop skills and attitudes persisting into the future.

Another theme indicated by some graduates was reference to challenging experiences, most particularly the snow trip, which required them to snowshoe some distance with considerable elevation gain and then build snow caves to sleep in. This to many was very hard but very memorable and for some life changing. The following represents some responses to Question 4 relating to the themes presented above. A more detailed summary of these responses can be found in Appendix I.

It was liberating to have choices at that age. Surprising and rewarding to be so successful at directing our own learning and schedule which brought out maturity. (Lydia)

Love that the schedule was different – never got bored; field trips were great and it was very free form – open with new ideas that we could contribute to. We developed grading rubrics, they were easy to follow. The teacher control was good, it was free form, we were allowed to do our own thing, activities, science, and such. (Celeste)

Outings – were big – still remember them. All these shared experiences, I experienced things I would not have otherwise. The outings helped expose us not just to science and other areas of study but to self-identity which was big, this still sticks today. (Kerry)

The program promotes thinking around our own actions – how these affect others, the community, the environment, the future etc. Sturrock had great trust for the group – would leave us in the room during a test, trusted us in the community on our own etc. Gave us ownership. This promoted self – directed growth – we were given freedom but with responsibility and expectations. At first some did not appreciate these methods but later we did. (Sharon)

Journals were great and group discussions were great. Good to reflect with a journal, and have something to look back on. I think most of us still have our journals. (Lily)

Building and sleeping in the snow caves was a memorable experience; it was challenging and life changing. (Kerry)

Socially – very unique, friends with people you would never have been friends with, you gain respect for people with different beliefs and values than your own. (David)

The Consensus Response to Question 4

The consensus to Question 4 resulted in very similar responses to the individual ones. The graduates all had fond memories of all the places they visited on the various extended field experiences. Many of the graduates have made a point to go back to some of the same places in their adult life with fellow ES graduates. The graduates all agreed that the structure of the program with its flexible schedule, flexible deadlines, flexible testing methods, and flexible assignment methods as well as having a say in all of this was a favourable feature. The graduates recalled the variety of learning methods and activities, which was another favourable feature. They were in consensus that ES 10 helped contribute to the development of “self” and independence. The graduates also were in consensus that ES 10 helped develop many skills useful today, including outdoor skills, various social skills (tolerance, acceptance, and communication skills) outside their normal realm.

There was consensus that learning was relevant and attached to real-life phenomena, leading to more engagement in the learning process. The graduates also felt open-ended questions made knowledge carry more value. The lasting relationships that were formed from within ES 10 were considered unique compared to regular school. The graduates were in consensus that opportunities to reflect on learning were also reported as being unique, which they believed led to long-term learning and a more philosophical way of thinking. Another unique feature the graduates all agreed upon was how they learned to challenge themselves. Finally, the graduates all agreed that ES 10 was enjoyable, and they were all sad when it ended. The following represents consensus responses to Question 4 relating to some of the themes above. A more detailed summary of these responses can be found in Appendix I.

We loved all the trips, the places we visited, we slept, cooked, studied and played. We loved the bus, we spent a lot of time on that bus. Many of us have recreated some of these trips by returning to the same place. (Drake)

We had opportunities to teach each other, and social skills like learning tolerance and accepting differences was learned. (David)

The structure promoted creativity because it was flexible and democratic. We had flexible schedules, and flexible deadlines which relieved pressure which facilitated learning. Some time pressure was also given which challenged and motivated us, we showed we can perform under pressure. (Carmen)

People in program were exposed to opportunities in self-governance. This helped in the development into individuals that are not risk adverse and are able to make good choices in adult life. (Peter)

Problems presented in class were sometimes ill defined, they were real problems not made up ones, real issues attached to what we were experiencing. (Sarah)

Reflection was a big part, as a group but alone and with our journals – Journals were much appreciated after the fact. All of us still have them and they serve as a good memory. “Authentic” learning and journals helped bring that out. (Kerry)

Established long term relationships – still remember everyone (can’t be said of normal classroom) (Jake)

Our reflections and discussions in the class opened up a more philosophical way of thinking. Really opened our eyes and ideas outside of our normal way of thinking. (David)

Composite Stories

The following represents the last section in the Qualitative Summary chapter. This section includes story composites of six ES 10 graduates. I wrote the story composites using the graduates’ voices from their own responses to the open-ended questions and interview matrix. All words in *italics* are the graduates’ words, not mine. The stories represent the graduates’ personal journeys while in the ES 10 program until the time they participated in the study.

Graduates for the composite stories were chosen to represent a balance number from each cohort and equal number of males and females. All of the following graduates were Caucasian except for one who was an immigrant from Taiwan at the time he (Peter) was in ES 10. From a socio-economic perspective, all the graduates in the composite stories were middle class, apart from one (Peter) who represented a lower middle class status at the time of the ES 10 program. Overall, from a demographic perspective, this sampling is consistent with the makeup of the entire cohorts, except for the overall male and female ratios, where one cohort had more females than males.

The composite story graduates were also chosen to illustrate the variety of active citizenship related outcomes demonstrated by participants as well as a varied level of participation in these. One participant, Jake represented somewhat of an outlier in terms of professional pathway, which was entrepreneurial compared to other graduates. In

addition, Jake's participation in active citizenship activities aligns closer to the norms of other Canadians of similar age while the other composite stories demonstrate more of a range of activities outside the typical norms of their Canadian counterparts. All the graduates in the composite stories section had an opportunity to review and respond to their composites prior to the final writing of these to verify, update and authenticate their own story. The following graduates' real names were replaced with pseudonyms to preserve confidentiality and I have cited the participants' quotes verbatim as much as possible in an effort to preserve the integrity of their voices.

Lydia

Lydia initially enrolled in the ES 10 program for the challenge and hope for more "real-life" learning opportunities. It was the experiential components of ES 10 and one of her senior biology class that helped shape much of her educational and professional pathway.

I took an interest in science in high school which influenced my educational decisions thereafter. My high school biology teacher was very creative and hands-on in his teaching which peaked my interest in the subject. For example, he routinely carried out dissections, more so than the average high school biology class, such that we were able to physically handle and visualize what we were learning about thus making the topic more interesting. Further, ES 10 provided the opportunity to learn about the environment and science topics in a hands-on and often self-directed manner. This allowed me to physically interact with what I was learning about thus making the learning come across as a fun, exciting education. For example, biking the KVR to learn about rock formations and geography or snowshoeing Red Heather and learning about climate and weather phenomena. The occasional self-directed study provided the opportunity to learn about topics of interest that I would not have had the chance to otherwise learn about in school which eventually led to my interest in gynecology. (Lydia)

ES 10 allowed Lydia to explore her interests, have a say in some of the science curriculum through self-directed projects and inquiries. It was the ES 10 program that kicked started her educational and professional pathway choice.

My high school experience significantly influenced my choice of program. In grade 10 (ES 10 to be specific) I developed a keen interest in entering the medical field. After doing a project on gynecology and obstetrics I took an interest in the career path. I chose to pursue a degree in biochemistry as it was an appropriate segue into a medical career. Since completing my degree I have taken on full time work with the HIV/AIDS department at

St. Paul's Hospital". Lydia has since been accepted into UBC's Doctor of Medicine program and hopes to graduate in 2018. "After being in the program for two years, I have changed gears a bit and am working towards becoming a hospitalist at this point. (Lydia)

ES 10 helped shape Lydia in an "active citizenship" manner as well. It was the many field experiences of the program that linked the students with community and the environment that helped Lydia form validated opinions on sustainability and "making a difference."

ES 10 had a significant impact on my opinions with respect to sustainability practices, public programs and health. A specific example of this would include a trip to a sustainable logging practice which was one of many trips which left a lasting lesson that there are alternative and more sound methods of approaching social and environmental programs which have the potential to benefit a community more so than current practices. In regard to my education and career decisions, this reinforced my desire to enter a field that would be supportive of and influence community social programs. For example, at present my education has lead me to my current career working with the HIV dept. at the hospital downtown. The program here is significantly involved in influencing health policy- for example through supporting programs like 'Insite' or launching the new 'N-PEP' (non-occupational post-exposure prophylaxis) program which provides anti-HIV medication to people who have been in risky exposure encounters. These types of programs and this form of innovative problem solving in relation to social issues are concepts I would like to continue on with as a medical professional. (Lydia)

This attitude of "making a difference" is backed by much of the volunteer work and initiatives that Lydia gets involved with. As a community advisor for Simon Fraser University (SFU) Residence, she was involved in several service programs to include hunger and environmental awareness programs, sexual health week initiatives and coordination of subsidized HPV vaccinations for students. Also, while at SFU, she has been an active volunteer and collective member for the SFU Women's center, volunteered various times for SFU pocket farmers market, immunology lab (Choy Lab), as well as being recognized as an SFU Golden Key Volunteer (a high distinction), which honours the three pillars of academics, leadership and service. While at this capacity she was involved in programs such as Books for Africa Drive and a program encouraging at-risk youth to seek higher education. She volunteered as an international Aid Worker with Reto Juvenil International/Youth Challenge International in Costa Rica, which promotes community development in Costa Rica. She has been involved as a volunteer for the Banfield Pavilion Long Term Care Unit Cognitive Social Program. More recently, Lydia volunteered for the Battered Women's Support Services, Frontline

Support Pilot Program. This program provided mobile outreach for women experiencing violence in the downtown East side of Vancouver. *“I engaged with multitude of health care services at the time with this program.”* More recently, Lydia also volunteered with the Dr. Peter’s AID’s center, providing evening accompaniment for patients with HIV and debilitating comorbidity requiring residential level care. Currently she is involved with the YWCA mentorship program meeting with female high school students interested pursuing medicine or related careers to provide governance.

Lydia genuinely wants to make a difference in her community and beyond. This has also been demonstrated by how she has embraced her professional pathway. Most recently she was in Africa understanding firsthand the social-health complexities that exist through a research initiative involving UBC and the Foundation of Hope Rehabilitation Centre in Kisumu, Kenya.

Myself and 3 other medical students are here doing a summer student research project with Kenya Partners in Community Transformation in collaboration with UBC Global Health Initiative (GHI). Nutrition in breastfeeding mothers and mental health education are the two primary focal points of our project. Our work primarily involved holding focus group discussions with community members and community health workers to assess local perceptions of mental illness, barriers to care and management protocols. Right now, myself and my team are working with a new group of 1st year medical students to develop a culturally sound and community appropriate mental health module-based education program to be delivered to CHWs this summer with the goal of reducing stigma and increasing access to mental health care in rural communities near Kisumu, Kenya. We are also in the process of presenting our research data at various conferences in the US and in Vancouver. (Lydia)

For Lydia, ES 10 helped set her on an adventurous path; she is an avid traveler and an outdoor enthusiast, and she has a zest for engaging in social issues while getting involved to make a difference.

ES 10 was a very beneficial and influential part of my high school education that I wish more students had the opportunity to enjoy. It provided an incredibly unique learning experience with regard to not only my education but also personal development. The program provided the opportunity for me to learn to be independent, plan for activities and have a greater say in my education- essentially given me the chance to develop my maturity. I attribute ES 10 with helping me discover my own personal capabilities at a younger age which prompted me to take on various leadership opportunities in my latter years in high school from which I am still benefitting. For example, in grade 11 I started a business program at the high school and in grade 12 I ran a humanitarian program

which involved coordinating a volunteer trip for a group of 50 people. The business program I created and ran was later recognized on a national level and has been adopted by Junior Achievement of BC as an official program which is now run across the country. If I had not taken part in ES 10 I don't know if I would have had the confidence to take on the leadership role involved in running those programs. Since my participation with those activities, I have received over \$25,000 in scholarships which are partially or largely attributable to my leadership and involvement with those clubs in high school. (Lydia)

At the time of writing this, Lydia is back to her University of British Columbia (UBC) medical school studies with the plan to fully graduate in 2018. Her high school experiences in ES 10, which led to subsequent enriching experiences in her senior years through clubs and initiatives, helped her on a path of active citizenship, which looks as if it will continue with her present professional pathway choice.

Peter

Peter was really set on becoming a teacher in high school and followed this goal into university. He believed that as a teacher he could make a difference in the lives of others. His goal remained set at completing his undergraduate degree at SFU (BSc) followed by a Bachelor of Education or PDP in preparation for teaching high school. He planned on completing a M. Ed in clinical counselling and to pursue a PhD in education after 10 years of teaching. It was many high school experiences that put him on this path, which included the ES 10 program. ES 10 introduced him to a different way of learning and inspired him in many ways.

The ES 10 program inspired me to constantly challenge myself and to create opportunities for myself. It helped me begin to explore the concepts of critical thinking and self-lead learning. It also helped me develop more self-confidence, social skills, communication skills, and team work. I always enjoyed advocacy and ES 10 gave me the confidence and the ability to advocate to all my peers and this has helped me become what I am today. I also gained an interest in self-reflection a practice I continue today. (Peter)

The ES 10 experiences not only included various outdoor challenges, there were other challenges that sparked interest in Peter. Projects such as the various environmental monitoring partnerships with biologists and working alongside another experiential group from the Yukon showed him the value of learning in the field. Peter remembers clearly the time when his class was in charge of adults over three days of physical and psychomotor testing for potential fire fighters:

This experience showed how capable one really can be. . . . In ES 10 Sturrock challenged us to problem solve and use critical thinking about how to improve health and social policy, something I am much involved with today. (Peter)

All of these challenges and experiences made Peter realize he wanted to do more, and when the ES 10 program was over, he got heavily involved in the Canadian Red Cross. It was with the Canadian Red Cross that Peter really started to make a real difference and continue to shape his pathway:

My experience in ES helped me to seek employment and volunteer work with purpose, such that each position is meant to help me develop skills that I identified I needed. The ES program helped motivate me to see progressively challenging positions. (Peter)

These skills helped Peter get deeply involved with the Canadian Red Cross in High School which he continues to this day.

In the Red Cross Peter, has held many positions from conference facilitator focusing on global issues for youth, facilitator trainer, and national representative for youth engagement, regional council member, disaster management team and fund development. In fact, one particular year, Peter was recognized nationally as a major contributor in the Red Cross for all the humanitarian work he has done. In addition to the Red Cross, Peter also volunteered a great deal of time with Oxfam and was part of their steering committee. Oxfam Canada is part of a global movement for change made up of 17 Oxfam affiliates. Oxfam works with more than 90 countries to mobilize the power of people against poverty as well as women's rights and overcoming inequality. The Canadian Red Cross experience starting in high school exposed Peter to the importance of humanitarian issues and provided many opportunities to grow his leadership and facilitation skills, which all started with the ES 10 program:

These experiences are instrumental in building a foundation and opening doors, which lead to my decision to pursue an MD, and likely facilitated my successful application. Many skills developed in grade 10 ES which were very foundational pieces are an important part of me today. (Peter)

Peter's professional pathway came clear during his second year as an undergraduate student as he changed his education pathway away from teaching toward a major in health sciences, which eventually led to medicine: *"Being a doctor of medicine allows me to combine my interests in teaching, health, and humanitarian*

issues which all started developing in high school.” Peter is currently completing his final year of residency in medicine and continues to be involved with humanitarian issues:

I regard medicine as a tool and not a destination. I am in the process of acquiring that tool. Once I have done so, the task is not finished as I will then use the tool to work on humanitarian issues, through ways which may evolve with me. The skills and values that I have gained through my participation in ES 10 have helped me on my journey and I believe programs like this should be expanded. It is an excellent way to train active citizens who will contribute to society with his/her own unique interests, skills and direction. It promotes a sense of curiosity followed by responsibility. Students are also inspired to develop their own set of skills and tools to follow up on this responsibility. This is the very purpose of education.

ES 10 had a profound impact on me, without ES I wouldn't have had the courage to make a global impact through my involvement through Red Cross. I headed Centennial Red Cross and felt strongly that you can make a difference and encourage others to do so. Sturrock would always encourage us to “just go for it.” (Peter)

This was something that stayed with Peter and helped him pursue his passions while at the same time continue to make a difference:

I am still much involved with humanitarian issues, Canadian politics and overall social justice. These are all important things to me today and in reflection, ES 10 had a direct effect on my social engagement, career choice and my humanitarian focus drive. ES was instrumental in fostering a sense of active citizenship and social responsibility. (Peter)

At the moment, Peter is finishing up his residency in family medicine and continues to be much involved with humanitarian issues. He believes more programs similar to ES 10 should be offered so others can be afforded the opportunities that he has had.

Jake

In Grade 9, Jake decided to sign up for the ES 10 program because some of his friends were as well, and he was interested in learning in a more experiential way. Jake did not consider himself as “academic” as some of his friends were, and since he had a great deal of interest in automotive mechanics, he felt the experiential nature of the program would suit his preferred way of learning.

Jake does not attribute much of his high school experience to where he is now: *“I don’t think my high school experience had a large influence on my choice of program. Even before high school I knew I wanted to get into some form of entrepreneurship.”* After high school Jake went on to college to receive an associate’s degree in marketing. He felt this was the best avenue for him to help him succeed in taking over ownership of an automotive shop that once belonged to his father. Through ES 10, Jake learned the value of community and the importance of building relationships:

One of the biggest things to take away from ES was this community relationship experience. You build enduring relationships based on trust like a family. This was unique to ES. The time spent and the amount learned from each other creates a huge amount of understanding. In ES 10 the atmosphere allowed for a more comfortable setting. Building relationships and being surrounded by the same people you get to know and trust everyone better and in a different way therefore I was always comfortable about expressing myself. I find that today in the workplace as I run my own auto shop this way of community has trickled into the way we operated in the workplace. My employees can openly express themselves and their voice, suggestions are heard and taken seriously. I try as much as possible to create a similar community atmosphere that I felt existed in ES 10. (Jake)

Jake’s fondest memory of ES 10 was the *“family vibe”* the program created.

We spent a great deal of time together and big events made us cooperate (like the snow trip where we had to build our snow structures to sleep in) we were good at conflict resolution within the group. There were deeper connections between us compared to the regular school. We also connected to the outside community - met community members and experienced communities we would not normally see. (Jake)

Jake believes *“the shared experience of ES makes you care about people.”* Although Jake does not feel he gives back to the community as much as he would like but does understand the importance of this and does what he can:

I don’t give anywhere near back to the community as much as I think I should. I have always wanted to get into coaching minor league hockey but lack the spare time to commit. I do regularly donate to minor league sports in the area on an annual basis and support my high schools dry after grad. (Jake)

Overall, for Jake, ES 10 was a positive experience, especially around how *“the program built relationships based on honesty and mutual trust,”* and he has maintained friendship with many fellow ES 10 classmates to this day. Jake also believed that the teamwork atmosphere in ES 10 most likely helped him today to be successful in his own

business. Although Jake does not believe his high school experience had a large effect on where he is today, he does attribute some of his success to his experiences in ES 10:

ES 10 was great for team building and self-discovery which probably helped with me being able to have the confidence to build my own business and be an entrepreneur. I am a go getter and I seek out work and don't fear talking to people. Teamwork is important in my business this I learned in ES. (Jake)

David

In Grade 9 science, David was encouraged to sign up for the ES 10 program by his Science 9 teacher (who happened to be me), but the deciding factor came because a couple of his close friends, also in the same Science 9 class, wanted to sign up as well. David was a little nervous at first due to being a type 1 diabetic and was not too certain he would be able to manage many of the extended field experiences that may be physically challenging. Encouragement from his parents, friends and teachers allowed him to make the commitment of being part of the program.

During the first week of school, David educated everyone in the class about diabetes and how to help him manage his condition, especially while out in the field. This classroom involvement sparked interest in a few classmates to get involved in community initiatives such as the JDRF (Juvenile Diabetes Research Fund) walk for diabetes cure, and their involvement persisted well beyond their high school years. Although there were moments where David's blood sugar levels were on low or high extremes, through support by the class, he was able to manage and participate fully in all the activities.

For David, the ES 10 program opened his eyes on many fronts but most importantly give him confidence to do things that he may have been hesitant to do so before due to his diabetes:

My experience in ES cultivated my love of outdoor activities, ecological concerns, sustainable development, democracy and multiculturalism. ES has given me the confidence to travel even though I have a chronic illness and partake in outdoor activities. I still canoe, kayak, fish, hike, bike and camp. I also traveled to South America for 4 months. My interest in the amazon and Brazilian sustainable development was greatly shaped by my ES experience. I would have never had the confidence to travel there without first learning to manage my disease through our long-term trips in ES. (David)

David was always an inquisitive person, willing to ask questions and go deep into issues. The ES 10 environment allowed him to be himself and start asking big questions, ultimately pushing his way of thinking:

ES sparked my interest in environmentalism, cultivated my interest in politics and my discussions with other students in the program developed my interest in philosophy in a profound way. I had an interest in debating, other people's cultures, environment, and religion. ES provided a space for me to follow these interests in a healthy way. I never had a good opportunity to explore these interests until ES. Philosophical discussions were sometimes initiated by the teacher where a certain culture of listening and freedom of expression was developed in a democratic way but often happened organically especially while on extended field experiences. This was a unique program, you had a lot of say in how you learn and what you learn. There was a freedom of structure. We spent a great deal of time with each other which helped break down barriers and build trust. We talked about things that you would maybe only discuss with your family or with your close friends. There was more interaction rather than opposed to a regular classroom. We discussed big issues. We were more willing to say things because of how well people knew and trusted each other. Being with the same group of bright kids with differing views made me developed my debating skills but also began the process of learning humility. It is where I started to gain an appreciation for people with different beliefs and treat them with more respect. Through ES I became more comfortable and competent with these skills and more confident to continue (still today) as in my later life I am involved in policy work. (David)

The ES 10 program exposed David to many experiences, many he would describe as having a “co-op style” approach: *“The coop style experience of this program made me seek out the internship with the government that I took after university.”* Many of the field experiences had students work alongside scientists (biologists, geologists) and conduct various field studies. These studies were real and often rose from concerned community members having questions about environmental practices and impacts. For example, one study had students help a marine biologist collect low tidal data and water quality and conduct biodiversity testing in an area on Salt Spring Island that was located close to a culvert that was discharging into the ocean. The concern was that heavy development upstream of the culvert was having a negative effect on the ecosystem.

Another study had the students work alongside a forester in a “sustainable” forestry operation to chart long-term effects of this kind of practice. Comparisons were made by visiting large scale operations as well. In another study, a retired professor and

entomologist worked with the students collecting data on a fresh water ecosystem that was being changed due to dredging (re-diverting water) from farming.

Visiting a sustainable forest practice made me question the economic logic of clear cutting along with the ecological. The sustainable economic model I learned here became a theme for me in my political beliefs. My ES final project was on Canadian government inaction on Kyoto. I became a political science major and an activist... no coincidence. My interest in philosophy, sustainable development, ecology and the public interest can be traced back to ES in a big way. (David)

The ES 10 experience left David with lasting attitudes, values and skills that influenced his future endeavours:

The atmosphere of ES where schedules and priorities are a discussion, not a top down endeavor really expand a person's expectations as to what they can expect from life. This applies to work in that one would choose a more democratized work environment or work to change a work environment so that it values teamwork and diverse skill sets. My experience in nature learning about fragile ecosystems makes sure that I would not work in fast money world of Fort Mac and instead work in the public interest to sustainably use our resources. My employer's post Zellers have all aligned with my values and ethics over potential monetary gain. This trend is likely to continue. This public service oriented direction in my life can be directly tied to my experiences in ES. Democracy in the classroom was always a big thing. Students had a say in the schedule, they had a say in curriculum exploration, they voice mattered". For David, this was a big thing and he believes we should all have a say. "I have chosen employers with collaborative team based work environments with flexible hours. I prefer unionized jobs where available and am active in internal worker's advocacy groups where unions have not been set up. I believe we should have democratic control as to how we learn and work. This is instilled in ES. Today I have graduated towards a more flexible schedule, out of the box thinking and really challenging the status quo. ES 10 helped me with this. (David)

David still believes he has a voice and can be part of change. *"Despite all of the challenges that we face as a civilization that would oppress a single voice from making a difference I would say that I personally and one generally can make a difference".* He believes that education can play a large role in helping people find their voice:

The key is education (developing Eros or the love of the truth), teamwork and courage. ES teaches all of that . . . in spades. Programs like ES must be expanded. Not just for what it teaches but for how it teaches students to think for themselves. It builds confidence, sparks interests and forges lifelong friendships. (David)

David's passion about making a difference is indicated by his involvement in various initiatives. He was a public speaker/advocate for JDRF (an organization that raises awareness and money for diabetes research), he mentors young people living with type 1 diabetes, is involved with various fundraising and communications initiatives for political federal leadership campaigns. He is a volunteer for Openmedia and Freshmedia (which focuses on developing forums for youth engagement and democracy) and continues through his life path looking for new challenges where he feels he can make a difference.

David has fond memories of ES 10, is still friends with many of his past classmates and still looks back from time to time on his experiences in relation to where he is today:

The environment of ES, the freedom and respect lets students understand that life can be different if we make the choice to do so. School does not have to be 'boring' and we can be trusted to want to learn. The truth is addictive once we are allowed to find it for ourselves. I look back at this time as one of the most civilized periods of my life that was focused on self-discovery, friendship, community and an environment of higher learning I would not find again until late university. By physically taking children across the province, they are able to gain an appreciation for their heritage, communities and sacred ecological trust that they cannot possibly conceive from a book or power point lecture. This program has the ability to change lives. . . . It changed mine. (David)

Sarah

Sarah signed up for the ES 10 program for the challenge of doing something different. Being a member of army cadets, challenge and doing something different was not something she steered away from. What she did not know was how much the ES 10 program would contribute toward her journey of making a difference. In ES 10, Sarah discovered that she had a voice and that even highly respected adults would listen, especially if that voice was backed up by sound reasoning:

I started to find my voice through formal and informal discussions that took place in the classroom and on the many trips. Voice was encouraged, it was a big focus in the program. Sometimes discussions were guided in the class room while others just happened organically. Many dialogues and debates took place in small groups and in large groups, these were good conversations, they were healthy, we all respected each other's opinions. The discussions were often very deep and philosophical. We were always asked, "What do you think? What are

your thoughts?" This was very much different than the traditional classroom as the flexible schedule in ES 10 allowed students to have an input in the typical day to day schedule. In ES, you were able to explore your own thoughts and feelings, develop some real opinions and a philosophical stance. This promoted thinking around our own actions and how these affect others, the community, and the future. Sturrock had great trust for the group and would leave us in the room during a test, he trusted us in the community, on our own, we were to govern ourselves. This gave us ownership and promoted self-directed growth... we were given freedom but with responsibility and expectations. (Sarah)

Sarah has fond memories of many of the experiences and still to this day replicates many of them:

I have redone many of the ES10 trips over the years (Granite Falls, Twin Island, Widgeon Creek, Kettle Valley Railway and I plan to go spelunking in Van Island again soon) because my experiences with army cadets and ES 10 ignited a love for nature and being outdoors. (Sarah)

The ES 10 program influenced her interest in Science and was the main reason why she pursued a Bachelor of Science. More importantly, the ES 10 program really changed the way she viewed her place in the world through a critical research issues analysis assignment. She was asked to choose an issue that was local or beyond that could be environmental or social in nature and that of interest:

I did my report on sanitation practices in Canada and conducted research through (informal to say the least) interviews with management at various sewage treatment plants, NGO activities (Sierra, Green Peace, others), and both government bureaucrats and elected officials. The relative ease that I had in setting up the interviews really struck a chord with me. I was amazed as a 15-16-year-old, I was able to ask tough questions of 'big-wigs' and get an answer. Though, I had to filter through various bias/agendas, when I backed up the interviews with research I was able to see these more clearly. This sparked an interest in civic engagement that I have sustained since high school. In my capacity at Oxfam I took lead roles with co-developing petitions, awareness campaigns and fundraisers to galvanize support for the Canadian government to play an active role at international forums. This led to my International Relations minor and co-developing the Africa Canada Accountability Coalition (ACAC). (Sarah)

ACAC is an advocacy organization that engages Canadians with issues in Africa, bringing about awareness of the need to be concerned and proactive. ACAC focuses on informing its members and the public about these issues, bringing them to the attention of media and political officials and working towards an understanding of people's responsibilities as human beings and consumers. ACAC firmly believes in the

power of individuals and democracy. Sarah said, “*With ACAC I have co-developed several international policy discussion forums that have generated consensus from academics, government officials, and non-profit organizations.*”

After her first degree, Sarah continued to be passionate about where she is in life and went back to school to complete a nursing degree while at the same time being involved in many of her community service programs:

I look at my experiences in ES 10 and the Centennial Red Cross club when I make sense of my engagement path. In ES 10 I learned about the importance of civic engagement and in Red Cross some basic event planning competencies. (Sarah)

Sarah really believes that every individual can make a difference and is genuinely interested in making a difference.

I can act on my principles and act in a way that I hope will create a more just world. I believe that I have a moral duty to do this and that there are other likeminded allies who I can join with. I'm realistic that this is a big job and that change won't happen overnight. I'm also realistic in believing that I have to find my slice of change that I want to see and focus on looking for small and tangible changes in causes that I'm passionate about rather than dwelling on the large scale mess that defines our world. I believe in Margaret Mead's quote 'Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has'. In ES 10 we were encouraged to go beyond what we thought was possible to be a leader, this attitude is carried to everything I do today. (Sarah)

At the present, Sarah is living in a small town of 4,000 with more than 50% of the population indigenous people. This town ranks second to downtown east side Vancouver for poverty, addictions and mental health indicators:

I work in Intensive Case Management as an RN . . . halfway between outreach street nursing and home care. I also work in our detox house. The thing about rural/ remote practice is that you're not just a (community mental health) nurse you're also part social worker, part occupational therapist, part counsellor, part mechanic, part dietician, part accountant, part lab tech, part cleaner. I LOVE the job, super meaningful. The clients I work with are the most incredible amazing people ever. It's also tough, the realities of residential schools, the forced displacements from ancestral lands, foster care, MMIW (missing and murdered indigenous women) is all so present and real where I work every day. We've already lost some clients to really heartbreaking brutal events and it's really hard because you can't work with this crew unless you're ready to be real with them. (Sarah)

At the time of writing this composite story, Sarah has been in this remote town for seven months, and although these seven months were some of the most challenging months of her life, they also have been some of the best due to the progress of the programs she was involved with and the difference that she was able to make toward these:

In other ways the last 7 months have been the best of my life. I'm now Permanent Full Time with Intensive Case Management in Port Hardy, we're the only rural and remote community mental health outreach team in BC, possibly North America. Between that and my old Withdrawal Management role I've been able to provide direct care to clients for medical termination of pregnancy, naloxone therapy, sexual assault support, seizure management, wound care, alcohol management, withdrawal management, mobility assessments, suicide assessments/interventions, STI/STD and vaccine counselling, HIV/HCV testing and support, and just about every form of harm reduction you can fathom. For example, I recently spliced together up an impromptu in-patient alcohol management for client who likely would have left AMA at grave personal risk. This was achieved with the help of my friend from nursing school who fired me off some protocol examples from Edmonton, an excellent and flexible doctor who was willing to entertain my scheme, and my amazing practice lead who gave me permission over the phone on his day off. I'm learning more and more about trauma, colonization, and health. I'm slowly starting to figure out where I fit into that picture as a nurse. (Sarah)

At the moment, Sarah is happy where she is as a registered nurse but knows that long term she may be propelled in another direction related to the present:

I'm proud to be an RN and I love working in the broad-scope semi-organized chaos that is community practice. In truth, I probably will end up in research - rural community mental health is a wide open field begging for attention. (Sarah)

Katrina

Katrina always was a good student, especially in the sciences, and while in Grade 9 she heard about ES 10, a program that integrated sciences into outdoor activities, so she decided to apply. Katrina is somewhat of an introverted person, a bit shy, so being in a program such as ES 10 was a bit out of her comfort zone. However, after a short while due to the community nature of the program, she soon found herself fully engaged and immersed in all the activities. Katrina said, “ES 10 develops a strong sense of community, the volume of time we spent together leads to trust. We overcame challenges as a group which helped create a sense of community.” Katrina still

remembers some of these challenges focused on problem solving skills and others having an academic component:

We overcame odyssey challenges like the lava pit crossing that took place in a real outdoor setting. In smaller group tasks, we developed a micro-community as well as worked collectively to complete various academic problem solving tasks. It was through these types of challenges everyone was able to find a role and contribute towards a common goal. (Katrina)

Being involved in many of the activities and spending a great deal of time with each other on trips and in the classroom really allowed Katrina, a relatively shy person, to practice leadership skills:

ES 10 provided her many opportunities to learn the ability to teach and lead and helped me decide what I really wanted to do in life. I grew more confident to speak in front of groups through all the positive reinforcement we received from other students and the teachers. Today, I work in an area very much related to the things we did in ES 10 as I teach outdoor activities to include nature and interpretative programs but also leadership to youth to go out and make a difference in the community. ES 10 showed me that if you are an introverted person you can still be successfully outspoken and find a career niche which suits you. (Katrina)

For Katrina, some of the skills and confidence she gained in ES 10 put her in the mindset “that is was okay to try things like the time I was a manager for a marketing company, I may have not tried it but ES 10 helped me in the way of thinking to push myself outside my comfort zone.”

Katrina was really interested in environmental issues, and ES 10, through the many outdoor experiences, helped shape her thinking in this regard. She said, “ES 10 helped me ES10 helped me define my love for the natural world, and gave me the confidence to explore outdoor and wilderness based recreation.” Katrina, with a strong desire to make a difference, decided to go into the environmental field and enrolled into the Environmental Arts and Science Program at McGill University:

ES 10 reaffirmed and defined my environmental values, leading me to choose the Environmental field when entering University. When academics at McGill began to feel very stale, I was reminded about my successes in more hands-on programs I attended during high school. At that point I took a break from university and later transferred to an Outdoor Recreation program in BC. (Katrina)

Katrina, felt she needed to re-connect with nature again to find out really what she wanted to do: *“My early educational decisions were based on a strong desire to help with the environmental problems plaguing the planet. More recent choices have focused on opportunities to provide experiences in nature for others.”* ES 10 may have sparked her interest in the outdoors, but experiences before and after ES 10 helped her re-affirm what she really wanted to do with her life:

I started working at a summer camp, Sasamat Outdoor Centre, after completing ES10. I did try other types of jobs over the years, including working for a couple retailers and a tutoring company, but I have found that I only really enjoy positions that allow me to work outdoors, and to share learning with others. My passion for these types of activities was inspired originally by two things, I think, all of my camping experiences from my childhood, and the fantastic outdoor trips I took with ES. (Katrina)

Through ES 10, Katrina discovered that being outdoors and doing various hands-on activities could make a real difference in the way people think and act:

I feel that programs like the ES10 program deserve to be expanded. It teaches proper interpersonal skills and facilitates the development of positive personal identity for youth. This style of program should be offered at every school. They really have the power to change the course of people's lives, and only for the better. (Katrina)

Katrina continues to work in the outdoor field through the Sasamat outdoor center, where she continues to be involved in leadership initiatives that help youth develop skills and attitudes that encourage them to be leaders in their communities. She also teaches at a nature center *“developing outdoor field trips for elementary students and facilitating professional development for elementary teachers on how to incorporate outdoor learning in their practice.”* Very recently, Katrina did an internship with an organization called HASTe (Hub for Active School Travel) and helped a Surrey Elementary school reconnect with and reclaim a local park that has a poor reputation. Katrina said, *“I facilitated a free outdoor learning experience for each class in that park, and worked with community groups to put on a large community event and showcasing in the park.”*

Chapter 8. Discussion

The purpose of this chapter is to revisit and discuss the four research questions posed in Chapter 1, present recommendations and propose a teaching model that identifies key learning environment features that can help foster skills, beliefs and attitudes that are related to an outcome goal of active citizenship. The focus of this chapter is on responding to the primary question of this dissertation, “What are the perceptions of a group of alumni from a Grade 10 Integrated curriculum program (ES 10) in regards to the effects of the Program on their citizenship activities?”

As described in the review of literature, the term active citizenship can be briefly defined as describing ways of “empowering citizens to have their voice heard within their communities, a sense of belonging and a stake in the society in which they live, the value of democracy, equality and understanding different cultures and different opinions” (Hoskins & Mascherini, 2009, p. 462). An active citizen engages in matters of importance by being socially responsible, informed and involved in affairs in their own community or beyond. Ultimately, my main goal in conducting the research for this thesis was to determine if the ES 10 program was perceived by its graduates to have had any influence on their current levels of active citizenship and if the program was viewed as having lasting effects in terms of the beliefs, skills and attitudes that they found to be useful in their present lives.

This dissertation raised four sub-questions in response to this theme. The sub-questions were intended to extend the primary research question in terms of features of the learning environment that contributed to the development of important beliefs, the skills and attitudes related to components of active citizenship and to as describe the graduates’ current levels of engagement in active citizenship. In this chapter, I use the sub-questions to frame the main sections.

Sub-question A: Did alumni view themselves as being engaged in their communities or beyond?

The responses to this sub-question were intended to help in understanding the primary goal of this dissertation: to describe the perceptions of the ES 10 alumni in terms of the effects of the program on their active citizenship. The qualitative and quantitative

results as reported in Chapters 6 and 7 provided evidence that the ES 10 alumni, as adults, were engaged in various activities at both the civic and community level. The Characteristic Events data in Chapter 5 offers a deeper view of the types of volunteer activities in which alumni were involved. One third of the study participants reported coaching a sport, while two thirds were involved in other community volunteer work, including activity with environmental organizations, youth groups, outreach initiatives, church groups, homeless initiatives, poverty initiatives, women's shelters, medical (health related) initiatives, social justice, salmon enhancement projects and youth engagement in democracy. Also significant was the finding that about one quarter of the ES 10 Alumni indicated volunteering in global initiatives such as the Red Cross, the Africa Canada Accountability Coalition, OXFAM, Houses Without Borders, IMPACT, Global health initiatives and International Aid work. For a description of these organizations, refer to Table 6.18. The collected composite stories in Chapter 7 provide a reasonable description of the extent and range of communities and civic activities in which some of the ES 10 graduates were involved.

What is most important in the findings was the range and types of volunteerism in which many of the ES 10 alumni appeared to be involved, including initiatives that related to environmental, social justice or humanitarian causes or programs. Further, some alumni were involved in initiatives not only at a community level but also on a global scale. A 2012 Statistics Canada Report on volunteering among youth of the same age cohort as the ES 10 Alumni indicated the most common form of volunteerism was in the areas of sport, arts and culture while engagement in environmental or humanitarian-related organizations and causes was much less common (ISSP, 2012; Vezina & Crompton, 2012).

ES 10 alumni also appeared to be very active in political and social realms and were not averse to exercising their voices through petitions and media or in political forums or discussion groups. This was considered an important finding because it appeared many ES 10 graduates went beyond the norms of their Canadian counterparts to include involvement in environmental- or humanitarian-related organizations associated with making positive change. This kind of behaviour aligns very well with the definition of active citizenship, especially relating to social responsibility. Again, the composite stories included in Chapter 7 provide a reasonable description of the wide range of activities and initiatives in which the graduates were involved, with one

graduate (Jake), representing involvement more in align with norms of Canadians of the same age.

In summary, the graduates of the ES 10 program demonstrated a high level of engagement in activities and initiatives that fit within the definition of active citizenship as proposed and conceptualized in this study. When compared to their Canadian counterparts, ES 10 graduates scored higher in most of the ISSP Citizenship 2004 survey (ISSP, 2012) categories. Based on a paired *t*-test, the differences in three of the categories were statistically significant. The three categories that were found to be significant were 1) Social and Political Action, 2) Good Citizen (measures community participation) and 3) Voice. Further the qualitative data from this study found that the ES 10 graduates indicated various forms of involvement in their communities, a result that was a strong indication that they were currently engaged in a varied level of active citizenship.

In this study, PLACES (Zandvliet, 2007, 2012) was selected as a useful tool for understanding the graduates' perceptions of the ES 10 learning environment. PLACES has been recognized in other research as a valid means of assessing the effects of socio-cultural elements of a learning environment, particularly in the context of environmental education curricula and programs (Zandvliet, 2012). In the research reported for this thesis, the PLACES tool was viewed as useful in determining the effects of features of the ES 10 learning experiences and their contributions to the participants' perceptions of their citizenship activities. It is important to note that the average mean score for all the PLACES constructs was very high and considered very satisfactory (above 4), with the exception of the shared control construct, which was considered satisfactory with an average mean rating of 3.5.

Table 8.1 illustrates some major theme(s) that the ES 10 graduates identify as being influences on their current activities and lives between high school and present day, relating to advertised goals of ES 10 (from a 2003 brochure, see Appendix J) and the PLACES constructs. Table 8.1 will help set up the discussion for the remaining sub-questions in the following sections.

Table 8.1 Alignment between PLACES Survey Constructs and Stated Goals of the ES 10 Program with Sample Student Perceptions of How ES 10 Contributed to Their Learning Experiences in the Goal Areas

Stated ES 10 Goal (from original ES 10 advertisement) <i>Students will develop:</i>		Related PLACES scale and Description	Major theme(s) that the ES 10 graduates identified as being influences on their current activities and lives between high school and the present. (Relating to advertised goals of the ES 10 and PLACES program constructs)	Active citizen related outcomes (including skills, beliefs, and attitudes) as demonstrated in the review of literature.
1.	Responsible citizenship	<p>Relevance/integration:</p> <p>Extent to which lessons are relevant and integrated with environmental and community-based activities</p>	<p>Theme: Active Citizenship</p> <p><i>The program showed us concrete examples of community commitment and activism. In university, I founded the non-profit organization: Africa Canada Accountability Coalition (Sarah)</i></p>	<p>Being an active citizen</p> <p><i>An active citizen embraces social responsibilities and takes it upon themselves to play a civic role of being informed, maintaining and developing critical perspectives while becoming actively involved in social, political and/or environmental issues (Klincheloe, 2005).</i></p>
2.	Self-confidence. Leadership skills.	<p>Critical Voice:</p> <p>Extent to which students have a voice in the classroom procedures or protocols.</p>	<p>Theme: Confidence using voice</p> <p><i>ES allowed me to voice my opinion, the teacher cared and listened and would act upon those thoughts. Coping with ambiguity and decision making in the classroom helped me to work with others in the future. Today I am confident in using my voice and self-advocacy which is important in my field of study (Marine Biology). (Lucas)</i></p>	<p>Having a voice and demonstrating leadership in education programs</p> <p><i>Empowerment and 'giving people a voice' as well as taking responsibility and leadership. (European Commission Directorate General for Education and Culture (2007).</i></p>

<p>Stated ES 10 Goal (from original ES 10 advertisement)</p> <p><i>Students will develop:</i></p>	<p>Related PLACES scale and Description</p>	<p>Major theme(s) that the ES 10 graduates identified as being influences on their current activities and lives between high school and the present. (Relating to advertised goals of the ES 10 and PLACES program constructs)</p>	<p>Active citizen related outcomes (including skills, beliefs, and attitudes) as demonstrated in the review of literature.</p>	
<p>4.</p>	<p>Friendships and positive peer relationships.</p>	<p>Group Cohesiveness:</p> <p>Extent to which the students know, help and are supportive of one another</p>	<p>Theme: Importance of community building <i>We were successful at creating a strong internal community.... this made a very strong impression on how important a support network is in life – as this is something that I seek out later in life which contributes to my success. (Mike)</i></p> <p><i>ES encouraged a sense of caring for each other and the greater community. (Sharon)</i></p>	<p>Key factor(s) identified in school and daily life to foster and sustain active citizenship.</p> <p><i>Sense of community and belonging to include the desire to be part of strong, safe communities based on networks and friendships that foster trust, concern for well-being, a sense of self-worth and encouragement towards individual and collective social responsibility (Ireland, Kerr, Lopez & Nelson, 2006).</i></p>
<p>5.</p>	<p>A responsible attitude about learning.</p> <p>Long term interests in different subject areas.</p>	<p>Student Involvement:</p> <p>Extent to which students have attentive interest, participate in discussions, perform additional work and enjoy the class</p>	<p>Theme: Self discovery <i>To this day, I believe that ES10 was an innovative and engaging program that allowed students to not only learn through activities but also encouraged students to explore their natural curiosities in life and find something to care about. (Alex)</i></p>	<p>Importance of connecting experiences in a variety of settings to help foster active citizenship.</p> <p><i>Linking experience to opportunity; young people made connections between their opportunities and active citizenship experiences in various contexts (Ireland, Kerr, Lopez & Nelson, 2006).</i></p>

Stated ES 10 Goal (from original ES 10 advertisement)		Related PLACES scale and Description	Major theme(s) that the ES 10 graduates identified as being influences on their current activities and lives between high school and the present. (Relating to advertised goals of the ES 10 and PLACES program constructs)	Active citizen related outcomes (including skills, beliefs, and attitudes) as demonstrated in the review of literature.
<i>Students will develop:</i>				
6.	Decision making skills.	Shared Control: Extent to which teacher gives control to the students with regard to curriculum/activities	Theme: Democracy in the classroom and future expectations <i>I remember appreciating the decision-making powers that our instructor granted us, and feel that the trust he placed within our group allowed us to achieve some things well beyond our years at the time... I believe we should have democratic control as to how we learn and work. This is instilled in ES. (David)</i>	The importance of having a voice at school to foster active citizenship. <i>Having a voice; young people believed that they should have a voice on matters that affect them especially at school (Ireland, Kerr, Lopez & Nelson, 2006).</i>
7.	Decision making skills. Critical thinking skills Leadership skills.	Open Endedness: Extent to which the teacher gives freedom to students to think and plan own learning	Theme: Flexibility in schedule and curriculum leading to critical thinking and decision making <i>Big one for me was the freedom of creativity, the flexible structure allowed the ability for one to expand on one's creative outlet. Coping with ambiguity was difficult but helped in critical thinking and decision making... Being pushed out of our comfort zone, helps in today's challenges. (Celeste)</i>	Important skills necessary for active citizenship. <i>Creativity, critical thinking skills, coping with ambiguity and informed decision making (Hoskins, 2006).</i> <i>Providing students opportunities to plan and implement actions that address real environmental problems in local communities is a powerful way of enhancing civic literacy (Orr, Strapp et al. in McClaren & Hammond, 2005).</i>
8.	Skill and knowledge in a range of field studies and outdoor pursuits. Responsible citizenship	Environmental Interaction: Extent to which students are engaged in field or community-based experiences	Theme: Willingness to make a difference <i>ES helped me desire to better the world from an environmental perspective, through all the outdoor experiences and seeing what nature was all about. ES planted a seed to give to the greater community, to think outside yourself. (Emily)</i>	Importance of engaging in community based experiences. <i>Student involvement in place-based activities and communities of practice helps foster social and environmental action and responsibility (O'Connor & Sharp, 2013).</i>

Sub-question B: Do the ES 10 alumni believe their experiences in the ES 10 program contributed to the development of their desire to make contributions to their communities or beyond?

Sub-question B asked whether the alumni believed that ES10 had affected their civic engagements. Exploration of the participant responses was extended by probing to discover which particular activities, experiences or features of the ES 10 experience were seen as being important to the development of their civic engagement. Thus, this question provided a good opportunity to identify key learning environment features that the graduates described as having affected their civic engagement. Table 8.1 is intended to show connections between the program's stated goals (as published at the time that the participants in this study were enrolled) and to illustrate with examples how some alumni perceived the effects of particular program features and experiences on their current citizenship and community-related activities. Further, Table 8.1 connects ES 10 goals to elements of the PLACES learning environment construct. Finally, Table 8.1 includes a column that focuses on important outcomes (including skills, beliefs and attitudes) related to active citizenship from the educational perspective as identified in the literature, which helps draw parallels and overlaps for the discussion to follow.

For example, Sarah's comment (Table 8.1, Row 1) aligns with the PLACES construct of relevance and integration is connected to various activities that she recalled as occurring during the extended field experiences. Emily's comment (Table 8, Row 8) on the importance of being immersed in outdoor settings as a means to understand environmental issues as a key feature in her willingness to contribute aligns with the PLACES construct of environmental interaction and connects to the ES10 goal of developing skill and knowledge in a range of field studies and outdoor pursuits. Both examples demonstrate how being immersed in community-based experiences can foster important beliefs and attitudes leading to active citizenship, which is consistent with the literature as illustrated in (Table 8.1, Column 4).

From the perspectives of Sarah and Emily, these two learning environment features were very important contributors to the development of their adult civic engagement. Further exploration into the responses from the graduates indicated the importance of how accepting and open they perceived the ES 10 learning environment to be. Sharon (Table 8.1, Row 4) believed ES 10 "*encouraged a sense of caring for each other and the greater community.*" She later spoke to this point during the consensus

gathering part of the group interview, and her comments met with agreement from all other graduates. This group interview method included a consensus portion where common themes or outliers relating to the questions were identified by groups of graduates and then presented for all participants to determine if everyone was in agreement or had other points to add. Sharon's statement was as follows:

We were in grade 10 but felt we could have a big impact. Sturrock helped us feel this way. . . . We learned to push ourselves further than ever before, everyone was pushing themselves so it felt natural to do so. (Sharon)

Sharon used the term "we" demonstrating that she felt comfortable describing this experience from a collective rather than individual perspective. Interestingly, many other responses from the group interview and questionnaires yielded similar responses referring to this collective experience using words like "us" and "we."

Another important piece from Sharon's earlier statement (Table 8, Row 4) is the importance of a "sense of caring for each other and the greater community," which demonstrates the program fostered personal and social responsibility. Further, Sharon's comments above on how natural it was for students to push themselves in a collective way appear to recognize that although they were only in Grade 10 they were capable of much more than they might have expected from themselves.

It is important to note, as shown in Table 8.1, Row 4 that a stated goal of the ES10 program was the development of "Friendships and positive peer relationships," and that this connects to the PLACES construct of Group Cohesiveness: "Extent to which the students know, help and are supportive of one another." Being part of a strong sense of community where students trust and support each other is supported by the literature as a key feature to foster active citizenship as illustrated (Table 8.1, Row 4). What Sharon is describing can be termed a community of practice. The concept of community of practice is attributed to the works of Lave and Wenger in 1991 (Farnsworth, Kleanthous, & Wegner-Trayner, 2016). The key premise behind communities of practice is that they reflect fundamentally on the social nature of learning, which is illustrated when a group of people share a common concern or passion for something they do and go through a learning process together. When a community of practice develops, it also enables the social construction of knowledge. This learning takes place through shared experiences and co-participation in multiple

learning practices such as those designed in a program such as ES 10. The following statement made by a graduate during the group interview phase of this research demonstrates participants' perception of the shared experience:

*It was a crucial development point in our youth, we were allowed to experiment in a safe environment. Personal development through exploration grew to have strength in self which lead to sense of responsibility. There were demonstrated tangible benefits to include: communities based on **values**, personal growth, and a support network based on mutual trust developed skills leading to higher level of confidence and belief in oneself. Being responsive and taking responsibility was encouraged. We met people in the community which taught us skills and the importance of being involved. Experiencing small communities like on the Vancouver Island trip helped us realize that relationships were based on **shared values** rather than proximity. Working through real-life problems with community members gave us something to care about. (Peter)*

It was noted that Peter's comments also met with consensus among the participants in the group interview session. What Sharon's and Peter's comments provide is a sense of what they believe to be the elements of ES 10 that may also have been important in fostering their community involvement following completion of the program. James uses the term "value" more than once in his comment. According to Raths, Harmin, and Simon (1978), values are attitudes about the worth or importance of people, concepts or things. Values influence behaviour because one uses them to decide between alternatives. Values along with attitudes, behaviors and beliefs are foundational of who individuals are and how they do things (Raths et al., 1978).

Raths (as cited in Raths et al., 1978) focused on the process of valuing rather than values as being something static or fixed, which involved prizing one's beliefs, choosing one's beliefs and behaviours and acting on one's beliefs. The term value was used by many other students as well when describing their ES 10 experiences in relation to their interest and/or belief of making a difference in their communities, which aligns with Raths's valuing process. The influence of program experiences on value development is demonstrated by the following comment: "*The beach surveys (looking at change to our environment) and all the other outdoor experiences created a value and importance for the environment*" (Gerald). From the following graduate's perspective, shared values were prompted by "*the connection between the class and community helped realize your role as a citizen, there was a collective social responsibility here. The beach cleanup activity that we organized outside school time – was 100% initiated by*

us” (Kerry). It is possible that shared values prompted by field experiences (attached to real-life problems) ignited a sense of agency in many students as illustrated by Kerry’s comment.

A critical element here is that the sense of community that was established through classroom initiatives and to a larger extent through extended field experiences that allowed students to experience real-life phenomena issues and activities in local communities. In this heightened sense of community, students’ perceptions of group cohesion were raised, as evident from their responses on the PLACES questionnaire and supporting qualitative data. Group cohesion is high when the “*sense of caring*” (Candice) can develop and when students are involved in experiential learning experiences centered around “*real-life problems with community members*” (Peter). Further, Peter saw high group cohesion as allowing students “*to experiment in a safe environment,*” which was believed led to “*personal development.*”

In addition, group cohesion translated to “*being responsive and taking responsibility*” because a “*support network based on mutual trust*” was built through experiences such as the one on Vancouver Island as referenced by Peter. The Vancouver Island experience included field experiences that saw the ES 10 students working collectively with community members and professional biologists to engage with a variety of real-life environmental issues. The trip was one week in duration wherein the class visited various communities and got involved in a wide range of activities. Examples of activities on the Vancouver Island trip included wet lands studies, foreshore and intertidal studies, forestry studies and land use studies. These investigations grew out of the concern of local community members. The following statement by Sue which met consensus during the group interview, which referred to these experiences on Vancouver Island, support Peters claim: “*This community involvement opened the idea of social responsibility ... we developed an appreciation of place and people developed through community interaction.*” The experiences gave ES 10 students something common to care about and may in turn have led to the community of practice effect seen in the students’ descriptions.

ES 10 experiences appeared to have led to a heightened willingness for individual students to make contributions of sorts to their own communities. Emily’s comment (Table 8.1, Row 8) supports this claim as she believed, “*ES planted a seed to give to the greater community.*” It is important to note that the activities described on the

Vancouver Island trip are consistent with the activities referred to by Sarah, Alex and Emily (Table 8.1, Rows 1, 5 and 8 respectively).

Further, collective groups of students from both the 2003 and 2004 cohorts reported involvement and collective contributions with volunteer organizations such as Stream Keepers and the Salmon Club while still in the ES 10 program and with volunteer organizations such as IMPACT (school group focusing on social justice issues), Juvenile Diabetes Research Foundation, The Salmon Club and Red Cross during their Grade 11 and 12 years. Many of these graduates attributed their experiences in ES 10 as stimulating their direct involvement in these programs, as evident by the following graduates comment:

There is no doubt in my mind that my grade 10 ES class allowed me to build a foundation of personal values that are based on a healthy natural environment and vibrant community. Following ES (while she was still in high school), I was asked to be the President of the leadership group, IMPACT. This volunteer group also allowed me to synthesize my passion for social justice. These two things encouraged me to find a degree to help influence in social justice. (Kerry)

Another common theme from the ES 10 alumni was the idea that the program contributed directly to their desire for and belief that they could make a difference by getting involved in community activities. A major finding of this study was that those students who got involved in volunteering through school opportunities provided while they were in their Grade 11 and 12 years were also more likely to continue volunteering in areas such as those relating to social justice, humanitarian, health or environmental themes after completion of high school. In fact, 14 of the 15 graduates who reported volunteering in school opportunities while in their Grade 11 and 12 years continued volunteering in their adult life in those areas mentioned. Further, 11 of the 15 graduates just mentioned expanded their involvement beyond the local community level to include involvement in global initiatives as well. Good examples of this phenomena were described in some of the composite stories in Chapter 7.

A major point to note is that while it appears the student's desires to get involved in active citizenship were ignited by the ES 10 program those who did continue to be involved in their Grade 11 and 12 years for the most part volunteered in school-supported initiatives such as Red Cross, IMPACT and the Salmon Club, and they did this collectively in small groups with fellow ES 10 students. In addition, since these

graduates collectively participated with fellow ES 10 students in the mentioned initiatives, this indicates the importance of working with peers of similar interests.

Schools can play a role in the development of citizenship, and school environments can provide safe and supportive stepping stones or scaffolds into citizenship-related activities. These conditions can extend and complement the initiatives begun in programs such as ES 10. An important difference is that in ES 10, citizenship activities were developed as part of the core curriculum of the program, while the citizenship opportunities in Grades 11 and 12 were part of the EXTRA-curriculum. The “regular” academic classes have learning environments that are not as supportive as ES 10 of this sort of active community involvement. If the development of citizenship is a core goal or mission of public schools, it is important to encourage practices and experiences in the regular curriculum that extend or are supportive of that mission rather than leaving it to chance or relegating it to the extra curriculum.

While Table 8.1 makes particular reference to the development of “responsible citizenship” as a goal of ES10, in many ways all of the goals can be seen as fostering active citizenship. The term “responsible citizenship” is very much related to active citizenship. Responsible citizenship is associated with actions and attitudes related to democratic governance and social responsibility while those that play a civic role of being informed, maintaining and developing critical perspectives while becoming actively involved in social, political and/or environmental issues describe active citizenship (Klincheloe, 2005). Table 8.2 provides somewhat detailed descriptions and examples of various learning experiences and program components of ES 10 (identified by the graduates) that were specifically designed to support the various goals of the ES 10 program with supporting statements from Table 8.1.

Table 8.2 ES 10 Program Goals and Supporting Activities/Components

ES 10 Program Goal	Activities/Components Specifically Designed to Support the Goal
Development of skills and attitudes related to cooperation	<p>Challenge activities requiring physical teamwork and active problem-solving; (e.g., simulation games and role playing around environmental problems). Extended field experiences, where students cook and prepare meals for the entire group. Learn how to take care of each other while spending a great deal of time together. Cooperating with each other has real outcomes in this setting.</p> <p><i>"We had a say in our learning which led to cooperation and the acceptance of differences for the benefit of the group . . . helped me with tolerance today." (Lily)</i></p>
Development of communication skills	<p>Regular de-briefing sessions within a variety of themes. Democratic classroom. Students are encouraged to use their voice in the classroom. Classroom experiences are extended into community, allowing students to communicate with various levels of community members.</p> <p><i>"ES allowed me to voice my opinion." (Lucas)</i></p>
Development of understanding of active citizenship	<p>Involvement and visits to community projects that entail active volunteer work; service projects with community organizations, etc. (all of these were attached to real-life problems/concerns within various communities) A variety of opportunities are made available to students, allowing them to explore matters of importance from their own perspective. Creation of a learning environment that encourages regular discourse around a variety of issues many philosophical in nature.</p> <p><i>"concrete examples of community commitment and activism" (Sarah)</i></p>
Development of self-confidence	<p>Outdoor challenges like snow shoeing up steep terrain while carrying own supplies and equipment. Building and sleeping in snow caves. These types of experiences demonstrate through reflection just how capable students are and is translated to other facets in life. Working along side with professionals during the various field experiences while being treated like an adult and held to a high level of expectation and responsibility.</p> <p><i>"Being pushed out of our comfort zone, helps in today's challenges." (Celeste)</i></p>
Development of skills related to leadership	<p>Having a say in the regular decision making around the day to day things that happen to include (schedule, curricular topics, and assessment methods). Having the opportunity to work with elementary aged students on various outdoor activities including environmental monitoring. Active problem solving through the various challenge activities presented. Students are encouraged to extend these activities through reflective practices where leadership components can be realized.</p> <p><i>"the decision-making powers our instructor granted us . . . the trust he placed allowed us to achieve things well beyond our years." (David)</i></p>
Development of skills related to decision making	<p>Shared control: Students have some control in many of the day to day decision making. Allowing students, a great deal of choice when investigating problems. Learning through problem solving how to gather credible information and make decisions and develop opinions based on these.</p> <p><i>"I believe we should have democratic control as how we learn and work." (David)</i></p>

ES 10 Program Goal	Activities/Components Specifically Designed to Support the Goal
Development of skill-related critical thinking	Variety of experiential learning opportunities (problem solving, place based, physical challenges, etc.) that are complex in nature requiring students to come up with solutions through a series of processes that encourages critical thinking. <i>"Coping with ambiguity and decision making . . . helped me to work with others." (Lucas)</i>
Responsible attitude about learning	Having a say in the regular decision making around the day to day things that happen to include (schedule, curricular topics, and assessment methods). Relevant learning experiences: Many of the problems presented in class were attached to real-life phenomena creating relevance towards learning. <i>"encouraged students to explore their natural curiosities in life and find something to care about" (Alex)</i>
Long-term interests in different subject areas	Integration of subject areas and a flexible schedule allows for extended engagement in areas of interest that can be more student-centered. <i>"The flexible structure allowed for one to expand on one's creative outlet" (Celeste)</i>
Development of skill and knowledge in a range of field studies and outdoor pursuits	Various extended field experiences and outdoor challenges (academic work integrated in each through experiential learning practices): Note: A more detailed description of these trips can be found in Appendix (K).

Sub-question C: Do the alumni identify particular skills or attitudes that they view as having been developed or fostered during ES 10 as having positively affected their community participation?

In this section, I will discuss skills and attitudes that ES 10 alumni perceived as being developed through their ES 10 experience and that they believed positively affected their community participation. Major themes emerging from the qualitative data included a sense of self-efficacy; self-confidence; an ability or willingness to take risks; conflict resolution; the capacity to deal with ambiguity; skills in research, critical-thinking, problem-solving, teamwork and leadership; an attitude of tolerance; and the exercise of voice. Tables 8.1 and 8.2 demonstrate the relationship of some of these skills as intended goals of the program related to various PLACES constructs and supporting activities and components of the ES 10 program, respectively.

Self-confidence and leadership skills were referenced by the graduates to be fostered by a learning environment where students have the opportunity to have a regular say in the day-to-day learning activities while skills in communication and cooperation as well as learning to practice and demonstrate tolerance were seen by participants as being related to the extent students were allowed to negotiate activities and schedules.

Critical-thinking and decision-making skills was referenced by the graduates to be fostered by a learning environment that offered some shared control (democracy) and flexibility over curricular topics and other important educational decisions, including assessment practices and the program schedule. In the group interview, all graduates reported viewing the ES 10 program as influencing the development of these valuable skills and attitudes and saw them as contributions toward active citizenship. Notable in these responses were references to program attributes or qualities such as a non-judgemental and open democratic style of operation, the flexible schedule and the various experiential learning and problem-solving activities that were provided.

Relevant experiential learning opportunities were reported by participants as being an important feature of ES 10. Relevance as a construct in PLACES was reported by many of the participants has having a direct link to active citizenship as depicted in Tables 8.1 and 8.2 and supported by Sarah's comment (Table 8.1, Row 1). Critical thinking, problem solving and a general sense of confidence in the ability to make a difference were all reported by the alumni as having been fostered by various experiential learning activities that were built into the design of the ES10 program. Further, these skills and attitudes identified by graduates are in alignment with current research as cited in Chapter 2 as being important learning outcomes for education programs that have active citizenship as a goal.

At the beginning of the ES 10 semester, students participated in many initiative tasks and adventure-based activities that were intended to help in the development of important skills, including communication, cooperation, critical thinking, logical reasoning and reflective thinking (Priest & Gass, 1997). In the attainment of skills and attitudes, graduates reported developing greater self-confidence, self-efficacy, communication and cooperation skills as main contributions from these activities. The following graduate supports this statement by illustrating how self-confidence was built: *"Being outside doing challenging tasks like rock climbing and snow camping really built confidence levels and helped finding out real potentials"* (Jake).

As the semester progressed, learning activities became more academically challenging through experiential practices that included problem-based and place-based forms of learning. Problem-based exercises involved students collectively and/or individually solving problems related to various curricular themes or interests. Place-based learning was developed through a series of single and multi-day field trips. While

problem based-learning activities were reported by the graduates as an important feature of the ES 10 program (especially around the development of research skills), place-based learning practices were most often referred to by graduates as influencing their current thinking and practice around active citizenship as illustrated (Table 8.1, (Rows 1, 8). For more detailed descriptions and examples of problem- and place-based learning relating to the ES 10 program, refer to Appendix L.

In the research for this study, the data from the consensus portion of the group interview support the assertion that problem-solving practices focused around real-life situations and settings and were presented with a level of openness throughout the ES 10 program. The following comment from one graduate during the consensus interview illustrates this view:

Problems presented in class were sometimes ill defined, they were real problems not made up ones, real issues attached to what we were experiencing. We had to come up with a method of analyzing these problems, create plans to create comparisons, design studies etc. If it was an environmental or social issue, we looked at ways we could get involved to make a difference towards change. This was not just reproduction of information and facts, it was not didactic, we were truly involved in the learning. (Sarah)

I believe the key point made in this comment was that problems presented in ES 10 were real-life problems and that since they were open or “*ill defined*” as stated by Sarah, they allowed students to have more control of the learning process and its outcomes and did not have pre-determined “correct” answers. This approach can increase student engagement and open many possibilities for the development of problem-solving skills in an environment where group cohesion is high. Participants in the group interview agreed that open-ended tasks helped their personal development and also led to a greater self-knowledge. They believed that ES 10 offered them the freedom to go in directions of their own choosing. For many, this also helped them to discover their own values, a discovery that later translated to their involvement in the volunteer opportunities discussed earlier in this chapter.

The student responses included in Table 8.1 also demonstrate the PLACES construct of Open-Endedness and program features in flexible schedules and curriculum can promote critical thinking and decision making. The graduates saw authenticity of the problems selected and the freedom to engage with problems in a style that was not solely driven by the teacher or extrinsic curricular requirements as key

elements of this approach. Connection to real-life problems or issues was a common theme in both the problem-solving and place-based practices prevalent in ES 10. The graduates believed that this was an important feature of the program that not only helped them develop interests but also promoted important skills for critical thinking, problem solving, research, cooperation, communication, research and fostered open mindedness. Many of these skills were identified by ES 10 graduates and are illustrated and supported in Table 8.1. These skills are consistent within the active citizenship research as important characteristics leading to active engagement in communities (Durr, 2004; Hope, 2012; Hoskins, 2006 Ireland et al., 2006; Klincheloe, 2005; Ross, 2012). The following graduate's comment is an example of this opinion about the ES 10 program:

The ES 10 program inspired me to constantly challenge myself and to create opportunities for myself. It also helped me begin to explore concepts of critical thinking and self-led learning. It helped me develop more self-confidence, social skills, communication skills, team work skills and finally I gained an interest in self-reflection. My experience with the Red Cross club and the Canadian Red cross exposed me to the importance of humanitarian issues and provided me with opportunities to develop my leadership and facilitation skills. (Peter)

When students must work together towards a common goal or problem they must be open minded in order to work effectively. In the process of working with ill-defined problems, participants also need to communicate effectively, reconcile differences, express ideas clearly and exercise emotional intelligence in important areas such as empathy. This can require exercising trust in self and others, conditions that are fostered within a learning environment that supports high levels of group cohesion evident in the ES 10 program.

Group cohesion (as described as an element in the PLACES construct) refers to a group's dynamics and the support that students perceive that they give to and get from one another. A strong sense of shared community can be built through experiences that are community based and involve real-life phenomena that demonstrate community value. Place-based projects contribute to building active citizenship by supporting and encouraging collaboration among individuals, professionals, groups and networks. This is also accomplished by utilizing communication and teamwork skills while exercising tolerance and empathy while working collectively to solve a problem of community significance. The collaboration here is not only among professionals, groups and

networks, as well as adult community members, but also among the students who become active participants and part of the collective work force on the project. The following comment sums up one graduate's perception that her community experience in ES 10 fostered a belief in the possibility of "making a difference," a belief that persisted well after the completion of the program:

ES10 changed my life forever. The people in the program shaped who I am today. The activities gave me confidence and I learned so much more than just what books can teach. I learned how important it is to help one another and be a part of the community. I learned what I am capable of (which is a lot) and that small groups of people can make a difference. (Emily). (Emphasis added)

Sub-question D: What aspects of the ES 10 program do alumni remember as having the greatest general impacts?

This final question is important as it aims to identify the key learning environment features perceived by the alumni as having had an important effect in their overall experience and current identity. Describing the learning environment features that were most important for the former students may offer a framework for the design of key features for education programs that intend to foster active citizenship or develop critical-thinking and problem-solving skills. For example, the new K-12 curriculum initiative in British Columbia (Government of British Columbia, n.d.-c) intends to meet the demands of the 21st century through developing students' competencies in hands-on collaborative learning, critical thinking and communication. This new initiative includes cross-cutting competencies at the core of the entire curriculum and assessment process. The core competencies include communication, creative thinking, critical thinking, positive personal and social identity, personal awareness and responsibility and social responsibility (Government of British Columbia, n.d.-b). Important features of the new curriculum are a focus on a concept-based and competency-driven design supported with experiential education practices and flexible learning environments. These new general goals and competencies are congruent with the goals of ES 10.

Appendix J lists the original stated goals of ES 10 and displays a copy of a 2003 brochure advertising the program to students at that time, and Appendix K includes details of British Columbia's new curriculum initiative. What is significant here is that programs such as ES 10 are often regarded as "alternatives" or "outside the box," but a closer look at British Columbia's new curriculum initiative and the results of this study

sets up the incongruous reality that programs such as ES 10 should be placed more in the mainstream.

As mentioned earlier, group cohesion and a strong sense of community have emerged as major themes identified for the participants in this study. The ES 10 graduates' ratings for this construct on the PLACES survey were the highest of all constructs and indicate the relative importance of this feature for the participants. Qualitative data also clearly indicated that the ES 10 graduates believed that the program fostered a cohesive group experience and built a strong sense of community through the strong relationships that developed among class members. The following comment by one graduate demonstrates the value assigned this idea:

One of the biggest things to take away from ES was this community relationship experience. You build enduring relationships based on trust like a family. This was unique to ES. The time spent and the amount learned from each other creates a huge amount of understanding of each other. We were a big family. (Jake)

The importance of a “community” experience for the ES 10 graduate was also demonstrated in the visualization of qualitative data represented in a Word Cloud included as Appendix M. The “cloud” shows the top 75 most frequent used words found in the qualitative data from the open-ended surveys and group interview (as generated by the NVivo qualitative analysis software program). “Community” was the third most frequently used word in the graduates' comments. The ES 10 alumni believed the high level of group cohesion and sense of community was initially built through the program's adventure-based activities, which fostered greater trust and communication. Examples of these are included in Appendix N. However, in the consensus part of the group interview, graduates also noted that group cohesion and sense of community were largely fostered through the extended field experiences where students spent a great deal of time together away from school cooking, participating in experiential learning activities, participating in individual and group reflection and collectively being a part of the process of decision-making for the day-to-day features of the program.

Group cohesion leading to a strong sense of community was seen by the graduates as foundational to the success of the learning environment in the program as well as their attainment of various skills and attributes relating to active citizenship. Group cohesion in the ES 10 program was indicated by the graduates as foundational to learning teamwork and leadership skills, tolerance and conflict resolution. A strong group

cohesion related to active citizenship outcomes is consistent with Breunig's (2013) research on pro-environmental behaviour of an ICP who reported group cohesion as key towards environmental knowledge and action. The graduates also indicated that a strong sense of community allowed them to work through complex problems collectively more effectively, leading to the building of problem-solving skills. These skills and attributes align closely with current research on active citizenship and with the stated goals and desired competencies of British Columbia's new curriculum initiative (Government of British Columbia, n.d.-c). The comments from the participants indicated that they felt group cohesion fostered a sense of personal safety in taking risks, problem solving and pushing themselves out of their comfort zones. Some of these comments contrast the cohesion of ES 10 to other school courses that they have taken in which emphasis is on individual performance and where students move independently from class to class, not allowing them to get to know their classmates very well.

Group cohesion also played a large role in creating an environment where people could speak freely. From the graduates' perspectives, they believed this helped to foster trust and encouraged the exercise of voice. Having a voice in matters that are important is considered an important indicator of active citizenship (Durr, 2004). The high level of group cohesion that was perceived to exist within the ES 10 program allowed students to feel safe in asking tough questions around curriculum content or about a given philosophical stance without the fear of ridicule.

There was voice. This was done through guided learning; we were supported by having a say. Decisions were made by groups of people rather than one person; this gave us more of a voice. There was a democratic leadership. ES was a very open group; there was no reason not to voice your opinion. In the ES community, we were free of persecution; we didn't feel judged the same way you would in regular school. People were open to discussing personal topics. (Mason.

Mason's comment (which met consensus in the group interview) also uncovered the elements perceived by the ES 10 alumni as having the most influence on their current practices. These included voice, shared control (democracy) in the classroom around curricular topics, assessment and the teaching schedule. The relationships shown in Table 8.1 for the constructs of Critical Voice and Shared Control also support Mason's comment. Shared Control as well as Critical Voice can be characterized as a form of democracy within a presented context. Critical Voice (as described as an

element on the PLACES construct) refers to the extent to which students have a voice in the classroom procedures or protocols. Shared Control (as described as an element on the PLACES construct) refers to the extent to which teacher gives control to the students with regard to curriculum/activities. On the PLACES survey (Zandvliet, 2007, 2012), Critical Voice was rated highly along with Group Cohesion. Interestingly, on the PLACES survey the construct of Shared Control was rated the lowest by the graduates (but was still in the *satisfactory* range). The following represents comments from graduates relating to how much say they believe they had in the ES 10 program:

We could finish early and leave early sometimes we stayed late depending upon what needed to get done. We had a say in all this. (Lucas)

There was a democratic style to the class, we had a say in our daily learning initiatives. (Lydia)

The teacher was more like a facilitator – he helped create that open environment. . . . We had a say in the curriculum and how it was graded. It was free from a fixed curriculum. (Mike)

This was a unique program, you had a lot of say in how you learn, what you learn. There was a freedom of structure. (Jake)

While these comments support a high level of shared control in the ES 10 program, it is very possible the ES 10 graduates desired to have more Shared Control since they rated this as the lowest on average compared to the other constructs of the PLACES survey. A similar finding was made by Koci (2013) with the Shared Control construct when he studied the ES 10 2007 cohort. In Koci's (2013) study Shared Control also scored the lowest rating of all the scales but demonstrated the greatest range in ratings when compared to the participants' perceptions of the traditional learning environment, the actual ES 10 learning environment and their post-preferred learning environment. The ES 10 participants in Koci's study believed they had a greater amount of Shared Control in the ES 10 program compared to the traditional classroom, but their preference was to have even a great deal more after the completion of ES 10.

Voice was also measured in the ISSP Citizenship 2004 survey (ISSP, 2012), and the ES 10 graduates scored a higher average than their Canadian counterparts of similar age. Voice in the ISSP survey related to a belief in how much one's voice matters and how it can make a difference in the present. This lends support to the qualitative findings of this study, which indicated that the ES 10 alumni attached significance to

finding their voices during ES 10 and perceived that development as being important in their current community and citizenship activities. The following represents one graduate's perspective:

Despite all the challenges that we face as a civilization that would oppress a single voice from making a difference I would say that I personally and one generally can make a difference. The key is education (developing Eros or the love of the truth), teamwork and courage. ES teaches all of that. In spades. (David)

This statement is important in this study because it underlines the significance of education and the development of a sense of optimism in students' efforts at "*making a difference.*" In addition, this statement also demonstrates the importance of the collective experience where teamwork can lead to a greater sense of self-efficacy toward society's issues and problems. A follow-up communication with David indicated the development of "Eros or the love of the truth" he refers to, which describes one's love and desire to learn towards what is good and true and to discover something to be passionate about. From this perspective, educators should be concerned with educating the whole person so they can make good decisions in life.

In the group interview, one graduate, Mike, indicated that the structure of the program fostered "*how to be responsible for your voice.*" During the consensus portion of the group interview, alumni agreed that the flexible schedule and open curriculum of ES 10 contributed to this attitude. The ES 10 program operated on what is referred to as a "school within a school model" (Deweese, 1999, p. 1) and had its own unique schedule outside the regular schedule of the school with which it was affiliated. With the ES 10 program, there were no bells, and core courses were taught in an integrated manner making it easy to allow students to have a regular say in start times, finish times and break times. Students also had a regular input about curricular topics and how they were to be assessed: "*There was democratic freedom in the class*" (David); and "*This was a unique program, you had a lot of say in how you learn, what you learn*" (Jake). The flexibility, openness and the amount of shared control were consistent with the learning environment features that were reported by the alumni as having positive effects on their learning and overall experience.

As a construct in the PLACES survey, Open-Endedness measured the graduates' perceptions of the amount of voice they perceived they had over when and what they learned while in the ES 10 program. The ES 10 graduates rated the construct

second highest on the PLACES survey, lending validity to qualitative data that indicated the importance of a democratic learning environment. During the consensus part of the group interview, the alumni agreed that flexibility in the schedule and democratic decision making (Shared Control) contributed to creativity while Open-Endedness helped them to develop their personal interests. Much of this is illustrated by the following graduate's statement (as well as comments illustrated in Table 8):

*There was academic freedom to do your own research, for example the chemistry project or talking to community members in the Okanagan. This allowed you to decide what you were passionate about and what you really cared about It was liberating to have choices at that age. Surprising and rewarding to be so successful at directing our own learning and schedule which brought out maturity.
(Lydia)*

A democratic and open learning environment can also be seen as an important part of the experiential learning cycle, whereby students participating in the learning experience are required "to take initiative, make decisions, and be accountable for the results, through actively posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, constructing meaning, and integrating previously developed knowledge" (Itin, 1999, p. 93). The results of the current study support the development and implementation of a learning environment that encourages the practice of these skills and dispositions. The ES 10 graduates identified some of these skills and dispositions as very important goals of education programs intended to foster active citizenship, which is consistent with the literature as demonstrated in Table 8.1.

Experiential learning is a theme commonly cited in the literature on active citizenship. The experiential learning cycle most cited in the active citizenship literature is the Kolb cycle (Mayo & Annette, 2010; Packham, 2008; Potter, 2002). An adaptation of Kolb's (1984) learning cycle is depicted in Figure 3.1. In this theory, experiential learning is a process wherein the learner constructs knowledge by negotiating through the creative tensions among the four learning processes depicted. This process is viewed as a cycle where the learner cycles through all the approaches by experiencing, reflecting, thinking and acting (Kolb, 1984; Kolb & Kolb, 2006). A key element of the Kolb model is that learning emerges from structured reflection by the learner. Therefore, for example, a student engaged in volunteering with a biologist who is collecting intertidal

data and undergoing analysis (a process that occurred in the ES 10 program), learns not just through this experience but from it through the reflection process as well.

McClaren and Hammond (2005) describe this kind of learning through two of three elements they believe are important in action studies: learning ABOUT, learning THROUGH and learning FROM. Learning about action refers to learning skills and strategies through hypothetical or simulated projects; a typical school's courses emphasize this part. Although learning ABOUT action occurred in ES 10, learning is extended THROUGH by being involved in real-life action projects; the action here is not simulated, and students play a major role in identifying and defining these projects. Finally, the learning is extended once again by learning FROM the overall experience. This element is an important part of the learning process McClaren and Hammond describe, which involves the review of outcomes, analysis of data and overall reflection of the experience, which in turn can lead to the learner's involvement in future action, hence active citizenship.

As indicated by the graduates, reflection was perceived as an important feature of the ES 10 program. Students in ES 10 were encouraged to write in their journals on a regular basis. *"Our journals reinforced strong group ties, we would do open discussions as well that challenged our position on something and allowed us to reflect"* (Sharon). Group processing or de-briefing after various field experiences consisted of talking about individual and/or group experiences. *"Many philosophical discussions in small and large groups took place, some facilitated by the teacher but many by ourselves"* (Sarah). The conversations consisted of academic learning based on data collection, analysis and extrapolation, as well as applying or examining big picture concepts that had the potential to challenge beliefs and behaviours. This idea is supported by the following graduate's comment: *"Our reflections and discussions in the class opened up a more philosophical way of thinking. This really opened our eyes and ideas outside of our normal way of thinking"* (David).

Overall, the qualitative data from the group interview and open-ended questionnaire indicated the graduates valued reflection and journaling and especially how these activities supported healthy discourse and philosophical thinking. The graduates believed reflection opened up a different way of thinking and extended the learning experience. If a student starts with an experiential activity, the experience can be enhanced by reflection and if coupled with the formation of concepts and theories, the

experience becomes more educative, affecting future action. This form of learning in the context of active citizenship can be compared to Freire's (2003) notion of praxis, which starts with an abstract idea or experience and incorporates reflection relating to that idea or experience translating to purposeful action.

Further Discussion

I used the ISSP Citizenship 2004 survey (ISSP, 2012) in this study to gather information on various active citizenship indicators as compared to normative data. The ISSP is a continuous program of cross-national collaboration that administers annual surveys on topics important for the social sciences. There are 47 participating countries, including Canada. For the purposes of this study, I only included information related to Canadian normative data for comparison to the ES 10 graduates. A limitation of this survey is that it does not represent a general survey on the topic of "active citizenship" though it has significant components that are closely related to recognized elements of active citizenship.

While comparing the normative ISSP Citizenship 2004 survey data with the ES 10 results was useful, the ES 10 students were a selected group of individuals while the individuals who participated in the ISSP survey were selected according to a sampling model that was intended to provide a representation of a larger demographic than that represented in the ES 10 students. In total, 1,211 participants from Canada (representing all age groups) participated in the ISSP Citizenship 2004 survey (obviously, the ES10 participants represent a narrow range of ages).

Surveys such as the ISSP draw their sample according to statistical models that more or less ensure that the sample is representative of the demographic they wish to include in the survey. Questions from the ISSP Citizenship 2004 survey centered around the following themes: 1) Community Participation 2) Political Action 3) Empowerment (self-efficacy for social/political change) 4) Informed citizen 5) Tolerance and 6) Voice. These themes are also consistent with the recent research relating to active citizenship indicators (Durr, 2004; Hoskins, 20068). When compared to their Canadian counterparts, ES 10 graduates scored higher in most of the ISSP categories. Based on a paired *t*-test, the differences in three of the categories were statistically significant: 1) Social and Political Action, 2) Good Citizen (measures community participation) and 3)

Voice. The results around these category themes also support the qualitative data in this study.

Although it would be difficult to gauge exactly how much effect the ES 10 program had on the graduates' present levels of engagement with active citizenship, it is apparent that the program had a definitive influence. Based on Statistics Canada (Vezina & Crompton, 2012) data, younger Canadians are more likely to volunteer than older Canadians with almost one half (48%) of people aged 20 to 24 reported doing volunteer work in 2010. In the current study, all (100%) of ES 10 graduates who participated in this study reported volunteering in some form or another with many of them being involved in community-based and global initiatives.

Previous research by Reed and Selbee (2002) found that people with a university education are much more likely to volunteer than those with less education. This may be another reason for the ES 10 graduates high rate of volunteering, since 81% of the ES 10 graduates reported having completed university degrees, 19% had completed diplomas, and 45% completed or were in the process of completing graduate or professional programs, including (teacher training programs, professional law, medical school and graduate programs). A 2012 report from the Organization for Economic Cooperation and Development (OECD) reported one quarter (25%) of Canadian individuals aged 25 to 34 had attained a university degree. The fact that all the ES 10 graduates reported attainment of some sort of post-secondary education with a large percentage (75%) of them receiving university degrees would seem to be significant as a factor influencing their citizenship activities.

The majority of the participants from the ES 10 program come from middle class families (as indicated in Table 6.16), which could have had an influence on the attainment of a university degree. However, since 2011 census data for Coquitlam indicates only 15% of all residents attained university degrees and the socio demographic makeup of the ES 10 cohorts was consistent with the general makeup of the larger school, which suggests something more is going on with the participants of this study (Tri-Cities Chamber of Commerce, 2014). While academic achievement was not one of the selection criteria for students being part of ES 10 as indicated in the Results chapter, the mere fact students had to apply to get in suggests they were somewhat self-motivated, and this may have contributed to the high levels of post-secondary education attained by the ES 10 graduates. A question for further research

would be whether the ES 10 program had significant influence on the graduates' professional pathway goals and attainment of higher education, since the post-secondary education completion rate within the ES 10 group was comparatively higher than the average of their Canadian counterparts.

Interestingly, a large number of graduates indicated a heightened interest in travelling abroad with many of them indicating ES 10 as increasing their confidence to do so. Many of the graduates who had travelled abroad indicated a motivation toward learning more about other cultures from a global citizenship perspective. This theme was a common occurrence in a fair number of those graduates who reported having traveled abroad. For more information on the graduates' travels and relationship to the ES 10 experience and global citizenship, refer to Table 6.17. The influence of ES 10 on the post-high school travels of the graduates is supported by the following comments from two graduates on the linkage between travel, global citizenship and the ES 10 experience:

I also traveled to South America for 4 months to follow-up on my interest in the Amazon and Brazilian sustainable development and this was greatly shaped by my ES experience. (David)

In ES you had a voice and it actually meant something. I learned you can actually do something with your voice, for example I went to Africa to reach out and understand the real issues around human rights. I Learned that you can make a difference and that your voice matters. (Sarah)

The study data also suggests that for some of the graduates, interests in sustainability practices may have started in ES 10, but it was through other opportunities, including travel, that interests and desires to take participatory action persisted. The qualitative data appears to support my earlier claim that programs such as ES 10 can be successful in igniting students' interests in active citizenship while continued participation in these types of practices as well as post-secondary education and travel may contribute to the likelihood that participatory action will persist, especially around themes to include the environment, social justice and humanitarian issues.

Active citizens are people who care about their local communities and beyond. They are motivated to make a positive contribution and have a say in what is happening. Active citizens take part, make decisions and influence a wide variety of things that can lead to more vibrant, sustainable communities from the social, political and environmental perspective. Active citizenship from the perspective of local community

participation can vary from being a good neighbour, community activist, volunteer in youth groups or sport teams to being a member in a wide range of community groups. Some active citizens get involved with matters that are important to them within their communities while others go beyond to include national and global initiatives. Many active citizens are motivated by a strong desire to make some sort of positive influence or change. Based on the overall results of this study, I believe I can defend a claim that a large portion of the ES 10 graduates fell into this definition of active citizenship. Since a major goal of the ES 10 program was to create a learning environment that would invite students to actively engage in a variety of learning experiences with the potential to push them to think philosophically and critically towards environmental and social responsibility, the ES 10 program was successful in achieving this goal.

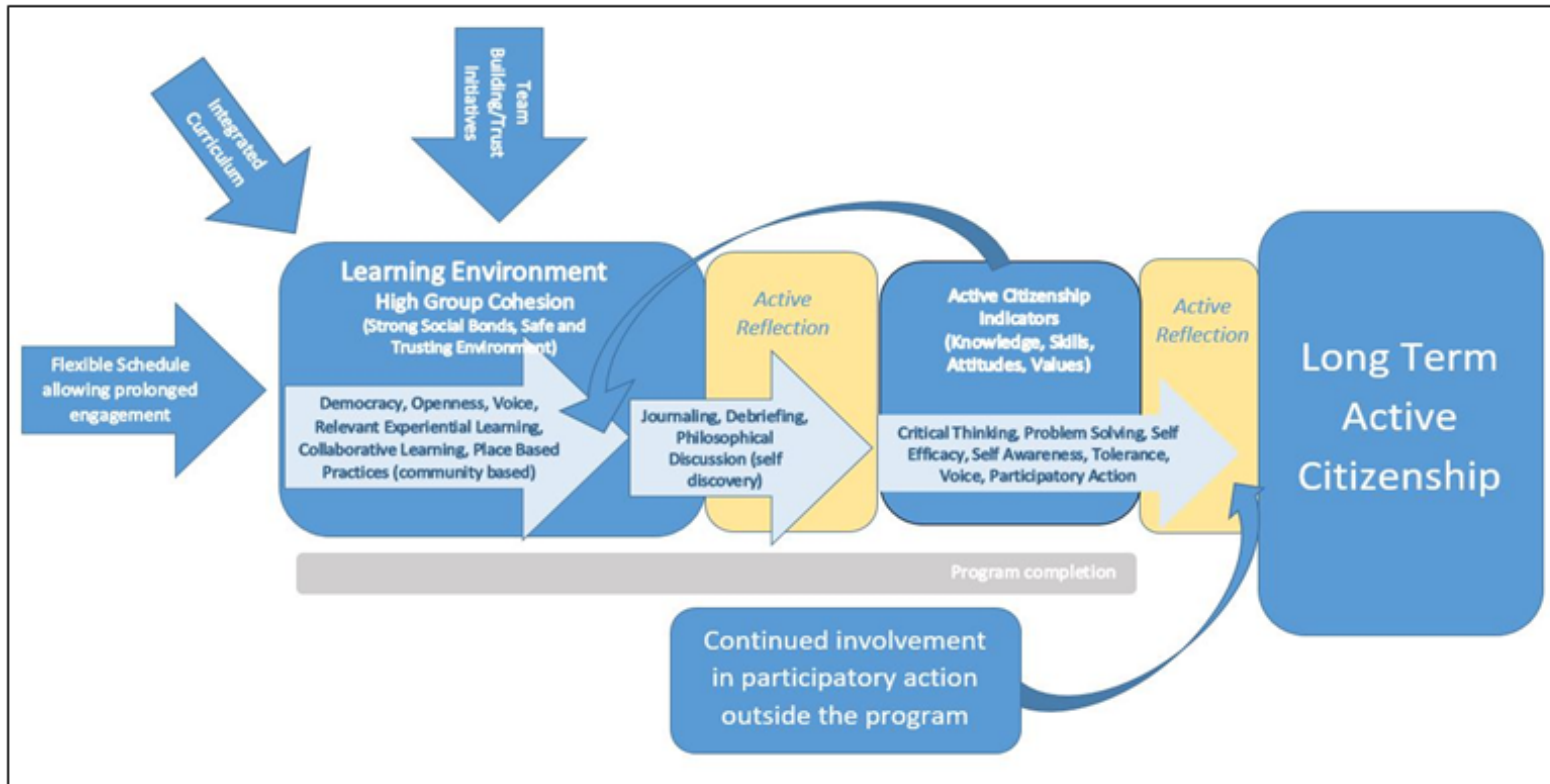
The results in this study are consistent with the scholarship of Dewey and Freire. Both Freire and Dewey advocated for an open democratic learning environment where learners co-create learning experiences with the teacher. Freire (2003) stresses dialogue based on mutual trust, respect, active listening and participation as a desired pedagogy for creating change. Dewey's educational method highlighted the importance of problem solving, cooperative learning, community-based learning, critical thinking, inquiry and, very importantly, reflection. Both Freire and Dewey advocate for a teaching pedagogy that is student centered, where teachers contribute to the education process through transaction and interaction (Itin, 2008).

For the ES 10 graduates, a very important feature of the program was how much say they had in everything, an attribute that they believed contributed to self-discovery and to caring about their learning experience. Democracy extended into the classroom can lead to self-determination where a student's voice is equal to that of the teacher's on many levels (Crittenden & Levine, 2016). Dewey's and Freire's theoretical frameworks can help educators make sense of and evaluate active citizenship practices. When a group of people such as the ES 10 students intentionally work together to solve societal/environmental problems, combined with dialogue and reflection, cooperation and habit, long-term learning can be achieved. Active citizenship as it is defined entails the regular participation in these activities. Experiential education in this sense is more than a methodology; it is a philosophy that can lead to a more participatory way of life.

Programs such as ES 10 that integrate subjects while utilizing experiential learning through place-based initiatives can be effective approaches toward attaining the

various skills, values, attitudes and knowledge necessary for active citizenship. It appears that programs such as ES 10 can incorporate design elements and learning environments that can foster active citizenship; the effect of such programs can be multiplied when the entire school culture, curricular and extracurricular, provides opportunities such as the Red Cross, Salmon Enhancement, Recycling, Habitat for Humanity, student political clubs and other educational opportunities that increase the likelihood of future participation in active citizenship after the completion of a program such as ES 10.

If active citizenship is a goal, special consideration needs to be given to creating a learning environment that fosters high group cohesion and a strong sense of community that can encourage students to exercise voice and have some shared control over many of the aspects of decision making, which in turn can foster the growth of important skills, attitudes and beliefs towards active citizenship. Figure 8.1 represents a model conceptualized through the major findings of this study to describe how education programs can help foster active citizenship. The model represents the major features of the learning environment that were apparent in ES 10 and seen by the graduates as having contributed to their engagement in citizenship activities. This model can be a useful tool for educators who share the desire of attaining similar goals related to active citizenship.



This model represents key learning environment features that can help foster the development of active citizenship indicators leading to long-term participatory action. Cohesive learning environments can be enhanced by team building and trust initiatives as well as an integrated curriculum and flexible schedules, which encourage prolonged engagement in collaborative learning activities. Learning environments high in group cohesion can be more successful when decisions are shared between the teacher and students around curriculum and schedule. Students that have an opportunity to exercise their voice regularly in open learning environments while participating collaboratively in various experiential learning opportunities that are community based can lead to self-discovery through active reflection while developing various skills, beliefs, attitudes and values all related to being an active citizen. Those that continue their involvement in volunteering opportunities based on their new beliefs and desires may demonstrate a greater range of involvement in active citizenship.

Figure 8.1 Educational Model for Active Citizenship (Important Learning Environment Features)

Limitations

This study was designed to investigate the long-term effects of an ICP, Experiential Studies 10, on the development of active citizenship. It drew on theory from diverse fields to include educational theories related to active citizenship, proposals for innovative educational approaches and learning environments. The overall intent of this study was not only to examine the outcomes of the ES 10 program but also to determine key learning features identified by the graduates as influences on their adult citizenship behaviours. The study is intended to help guide the development and implementation of educational programs with similar intents. With this in mind, several limitations must be acknowledged, and all claims and generalizations should be tempered by this knowledge.

The limitations of this study include researcher bias, sample size, selection and recruitment of participants, limits of phenomenology and group interviews, and the two survey tools. Although the methodology included approaches to limit bias (which can be found in the Methods chapter), it is important to remind the reader that I was the teacher/designer of the ES 10 program described here and also the researcher in this study. In terms of sample size, 38 out of a possible 47 participants were contacted and 36 took part in this study. Although almost all of the participants who were contacted took part in the study, it still represents a relatively small sample from which to make sweeping generalizations and comparisons. In a sense, this report is a retrospective case study, which inquires into the longer-term effects of the ES 10 high school experience as reported and perceived by this group of alumni. While the study employs mixed methods, a significant element of the data derives from the results semi-structured of one-to-one and group interviews.

Since a great deal of this research relied on the perceptions of the participants and subjectivity of data, limitations include difficulty in detecting research-induced bias, difficulty in making sense of data and presenting it so others can interpret it and the need to exercise caution in making large generalizations. Member checking, peer debriefing and triangulation methods were utilized to minimize these concerns. Group interviews, although effective for gathering rich data, can also include the tendency for certain types of socially acceptable opinions to take form and permit certain individuals to dominate the process (Smithson, 2000). To address this limitation, I used the interview matrix

method, which utilized smaller group interviews around the same questions and a consensus gathering portion. More details on this method can be found in the Methods chapter.

Another limitation includes how questions in the open-ended survey as well as the group interview were formulated and may have contributed towards a bias in their responses. To address this concern, field testing was done on the open-ended questionnaire while the group interview included a consensus portion as previously discussed. Furthermore, retrospective case study designs are subject to validity threats associated with recall and spoiler effects (Street & Ward, 2010). Member checking, peer debriefing and triangulation methods help address spoiler effects while having a consensus portion in the group interview helped address recall effects. The limitation around the PLACES inventory (Zandvliet, 2007, 2012) was that in their responses the participants had to rely on recollections made eight years or more after their direct experiences in the ES 10 program.

Demonstrating the persistence of the PLACES survey by comparing the 2007 ES cohort's results with Koci's (2013) results helps increase the confidence in the participants' responses around the PLACES survey. The limitations around comparisons between the results for the participants in this study and the results obtained in the ISSP Citizenship 2004 survey (ISSP, 2012) was discussed earlier in this chapter. Further limitation resided in how the participants were recruited and selected for the research. Those who volunteered to participate in this study were aware of the study aims and therefore could have decided to participate because they were in fact engaged in active citizenship or considered themselves to be so engaged. On the other hand, it is very possible that some potential participants did not participate because they were not wishing to report on a perceived lack of active citizenship.

General Conclusions

At the inception stage of the ES 10 program, I envisioned a program that not only provided enriched experiences but also invited students to think outside the extant high school and adolescent cultural paradigm and shift into a more comprehensive, integrated and creative worldview. More importantly, I was hoping that the program's design could help foster a learning environment that would invite students to think from a perspective of thinking "outside themselves" so they could become more

environmentally and socially responsible. The major findings of this study show that the participants believed that the ES 10 experience had affected their current disposition toward and engagement with citizenship activities. The graduates remembered their ES 10 experiences; they believed that a number of the things they do now or have done in the past eight years or more were affected particularly by the ES 10 program, and they were able to identify specific program elements as having influence in their overall development.

Although the participants have provided examples of their current activities that would support the claim that they are active citizens, this does not suggest that all high school programs should be operated similar to ES 10. However, there are some recommendations that might apply to the math teacher or the football coach that could enhance the learning environment and invite students to become more engaged in active citizenship. Creating environments where group cohesion is high with regular engagement in activities and experiences relevant to the student that are rich and hands-on followed by some sort of reflective process would be a good start. Allowing students to have a voice in how the schedule is arranged, what sorts of activities they might choose or how their work may be assessed might all be good ideas, regardless of the subject being taught. As well, creating more flexibility in schedules and structure of the school operations to encourage the integration of subjects would also be good ideas based on the major findings of this study.

The new British Columbia curriculum (Government of British Columbia, n.d.-b) now features core competencies, including Communication, Personal Awareness and Responsibility, Positive Personal and Cultural Identity and Social Responsibility. These core competencies are very similar to those described as attributes of active citizenship. These core competencies are supposed to be fostered across all subject areas and grades, which may be a challenge when subjects such as math, science, social studies, language arts, etc., are still taught in separate compartments and in formats that are restricted to typical 55- to 90-minute time blocks. This new curriculum is designed to meet the learning needs of the 21st century. This initiative states, "Every student will get hands-on experience in collaboration, critical thinking and communications - skills they'll need to succeed in college, university, and the workforce" (Government of British Columbia, n.d.-b, para. 4). Interestingly, the ES 10 program was focused on meeting similar outcomes since 2003. If there is a serious intention for schools to promote and

develop the attributes of active citizenship, then paying closer attention to the learning environment features that are prevalent in programs such as ES 10 should be considered. The key learning features that the ES 10 graduates identified as being most influential in the development of these attributes is a good place for educators to start when designing programs and/or courses with outcome goals representative of the new British Columbia curriculum and/or active citizenship.

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Appendix A. Consent Form



SIMON FRASER UNIVERSITY
THINKING OF THE WORLD

CONSENT TO PARTICIPATE IN RESEARCH

*The Long Term Perceived Effects of Integrated Experiential Education Programs as they relate to Active Citizenship and Professional Pathways
(A study utilizing participants from cohorts of Integrated Experiential Education Programs)*

You are asked to participate in a research study conducted by _____ - *PhD student*, from the Faculty of Education, Simon Fraser University. The results of this study will be contributed to _____'s thesis project. If you have any questions or concerns about the research, please feel free to contact: Investigator: _____ or Faculty Supervisor: _____

PURPOSE OF THE STUDY

The primary focus of the research will investigate the long term perceived impacts of integrated experiential education programs like the one you were involved in on its participants as it relates to professional pathways and active citizenship. These two main focuses were chosen as they align very well with stated educational goals from British Columbia's Ministry of Education, many school districts and the most recent 21st century learning initiative that has been adopted by many of the provinces in Canada and throughout United States. The main objectives of this project is to determine key learning environment factors that exist within these programs that individuals perceive to have had an effect on their chosen professional pathways and involvement as a contributing citizen.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

Written Survey:

You are asked to complete a written survey that contains three parts: Citizenship survey, Learning Environment survey and some open ended questions relating to your experience as a student while in high school and the experiential program. The results from the citizenship component will be compared to normative Canadian data as well as the other cohorts studied. The results of the Learning Environment Survey and open ended questions will be compared to the other cohort's results. The survey should take no more than 30 minutes to complete. This survey can be completed by mail or electronically and emailed to _____.

Focus Group Interview:

You will be asked to participate along with other participants of your cohort in a group interview after the written surveys are collected at a convenient time and location to the group. The time commitment for this portion of the study will be between 2 – 3 hours. You will have equal opportunity to express your views during this portion of the study.

There will be a possibility that you may be contacted at a future date to verify or clarify information that has been collected. This will be accomplished on a one to one basis and over the phone or in person if convenient and possible. By consenting to participate in the focus group, you confirm that any information you encounter will be kept confidential and not revealed to parties outside the focus group. Although the objective is to maintain confidentiality, it cannot be guaranteed.

Note: Once the study is complete the research findings will be available for all the participants upon request by contacting the principal investigator (_____) through the contact information listed in this document.

RISK TO THE PARTICIPANT, THIRD PARTIES, OR SOCIETY

Nil

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

This study can benefit present educators already involved in various forms of integrated curriculum, experiential education programs by strengthening their own beliefs and practices. It can also set the stage for other educators that are already trying to find new innovative ways of educating for the 21st century. The methods and results in the study may also give us a greater insight into how to effectively design programs by focusing on key learning environment factors and other positive indicators. Since many provinces in Canada are embracing the ideas centered on the 21st century learning initiative results from a study as such can help align policy with practice within ministries of education and school boards.

CONFIDENTIALITY

Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.

Confidentiality of you and of data collected will be ensured. You have the right to review or edit all video/audio transcripts relating to your participation. No parts of video or audio will be made public for educational purposes without the written permission of the participant(s) contained within. All data, written and electronic (contained on a memory stick) will be kept safe and locked in a cabinet at the main researcher's office. All raw data will be kept for three years from the commencement of the study. Information shared from the data collection will stay confidential within researcher and committee members. Personal names will not be used in the final publication.

Note: if you are interviewed over the phone or by Skype, your identity cannot be guaranteed as these forms of medium are not considered confidential.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so. All communication regarding participation and withdrawal can be forwarded to the principal investigator (_____).

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the Simon Fraser University Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Primary:

_____, Supervisor
Faculty of Education Simon
Fraser University Burnaby,
B.C. Canada V5A 1S6

Secondary:

_____, Director
Office of Research
Ethics Simon Fraser
University Burnaby, B.C.
Canada V5A 1S6

Application number: 2012s0090

Application number: 2012s0090

SIGNATURE OF RESEARCH PARTICIPANT

I have read the information provided for the study "The Long Term Perceived Effects of Integrated Experiential Education Programs as they relate to Active Citizenship and Professional Pathways" as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Name of Participant (please print)

Signature of Participant

Date

SIGNATURE OF WITNESS

Name of Witness (please print)

Signature of Witness

Date

Appendix B. Email Sample (Invitation to Participants)

Hello _____:

I hope this email finds you well. The reason why I am contacting you is to invite you to be part of a research project that I am involved with that is related to ES 10. I am hoping you may be able to take some time to complete three surveys as well be part of a group interview. I have attached the surveys here for your convenience as well. The three surveys are fillable pdf's - all you have to do is fill them out, save it and email it back. A consent form is attached as well, which will need to be completed and sent back to me (via email or mail).

I have attached the survey's as well as consent information. Here is a short description of the study:

I am now involved in a PhD program at SFU and conducting research on integrated experiential programs like ES 10. I am looking at the long-term effects that these programs may have had towards active citizenship and professional pathways. With good research, it is possible to use this study to further promote these types of programs. I'm hoping that you will be able to set aside some time to be a part of this study. The study consists of two main parts: written surveys – (three in total), and a group interview. I have included the written surveys as fillable pdf forms with this email. All you have to do is open them up, fill them in, save them to your desktop and email them back to me. This part of the survey should take no more than 30 minutes to complete. The group interview piece will be organized at a later date once I have a large number of returned questionnaires. The date, time and place of the group interview will be set for the convenience of the majority of participants. If you now live out of town and the group interview is not feasible, I could always interview you over Skype or the phone. I have also included a copy of a consent form please read this and if possible fill in and sign the final page (scan) and send it back to me. Alternatively, you can mail a paper copy to my address below. **Note:** By beginning the survey questions, you acknowledge that you have read the consent information and agree to participate in this research, with the knowledge that you are free to withdraw your participation at any time. Thank you so much for your time and I look forward to hearing from you soon.

Note: My mailing address if you are mailing the completed consent form:

(Omitted for confidentiality)

Thank you and hope to hear back from you soon

Appendix C. ISSP Citizenship 2004 Survey

The survey included here is from ISSP (2012).

ISSP (2004) Citizenship survey

Name:

Check one (program that you were a part of): ES 10 ES 11 COAST

There are different opinions as to what it takes to be a good citizen. As far as you are concerned personally on a scale of 1 to 7, where 1 is not at all important and 7 is very important, how important is it: (note: please check only one box per question)

1. Always to vote in elections

Not at all Important-----Very Important
1 2 3 4 5 6 7

2. Never to try to evade taxes

Not at all Important-----Very Important
1 2 3 4 5 6 7

3. Always to obey laws and regulations

Not at all Important-----Very Important
1 2 3 4 5 6 7

4. To keep watch on the actions of government

Not at all Important-----Very Important
1 2 3 4 5 6 7

5. To be active in social or political associations

Not at all Important-----Very Important
1 2 3 4 5 6 7

6. To try to understand the reasoning of people with other opinions

Not at all Important-----Very Important
1 2 3 4 5 6 7

7. To choose products for political, ethical or environmental reasons, even if they cost a bit more.

Not at all Important-----Very Important
1 2 3 4 5 6 7

8. To help people in Canada who are worse off than yourself

Not at all Important-----Very Important
1 2 3 4 5 6 7

9. To help people in the rest of the world who are worse off than yourself

Not at all Important-----Very Important
1 2 3 4 5 6 7

10. To be willing to serve in the military at a time of need

Not at all Important-----Very Important
1 2 3 4 5 6 7

Here are some different forms of political and social action that people can take. Please indicate, for each one,

- whether you have done any of these things in the past year,
- whether you have done it in the more distant past,
- whether you have not done it but might do it
- or have not done it and would never, under any circumstances, do it.

11. Signed a petition

Have done it in the past year	1	<input type="radio"/>
Have done it in the more distant past	2	<input type="radio"/>
Have not done it but might do it	3	<input type="radio"/>
Have not done it and would never do it	4	<input type="radio"/>

12. Boycotted, or deliberately bought, certain products for political, ethical or environmental reasons

Have done it in the past year	1	<input type="radio"/>
Have done it in the more distant past	2	<input type="radio"/>
Have not done it but might do it	3	<input type="radio"/>
Have not done it and would never do it	4	<input type="radio"/>

13. Took part in a demonstration

- Have done it in the past year 1
- Have done it in the more distant past 2
- Have not done it but might do it 3
- Have not done it and would never do it 4

14. Attended a political meeting or rally

- Have done it in the past year 1
- Have done it in the more distant past 2
- Have not done it but might do it 3
- Have not done it and would never do it 4

15. Contacted, or attempted to contact, a politician or a civil servant to express your views

- Have done it in the past year 1
- Have done it in the more distant past 2
- Have not done it but might do it 3
- Have not done it and would never do it 4

16. Donated money or raised funds for a social or political activity

- Have done it in the past year 1
- Have done it in the more distant past 2
- Have not done it but might do it 3
- Have not done it and would never do it 4

17. Contacted or appeared in the media to express your views

- Have done it in the past year 1
- Have done it in the more distant past 2
- Have not done it but might do it 3
- Have not done it and would never do it 4

18. Joined an Internet political forum or discussion group

- | | | |
|--|---|-----------------------|
| Have done it in the past year | 1 | <input type="radio"/> |
| Have done it in the more distant past | 2 | <input type="radio"/> |
| Have not done it but might do it | 3 | <input type="radio"/> |
| Have not done it and would never do it | 4 | <input type="radio"/> |

People sometimes belong to different kinds of groups or associations. For each type of group, please indicate whether you,

- belong and actively participate,
- belong but don't actively participate,
- used to belong but do not any more,
- or have never belonged to it.

19. A political party

- | | | |
|---------------------------------|---|-----------------------|
| Belong and actively participate | 1 | <input type="radio"/> |
| Belong but don't participate | 2 | <input type="radio"/> |
| Used to belong | 3 | <input type="radio"/> |
| Never belonged | 4 | <input type="radio"/> |

20. A trade union, business, or professional association

- | | | |
|---------------------------------|---|-----------------------|
| Belong and actively participate | 1 | <input type="radio"/> |
| Belong but don't participate | 2 | <input type="radio"/> |
| Used to belong | 3 | <input type="radio"/> |
| Never belonged | 4 | <input type="radio"/> |

21. A church or other religious organization

- | | | |
|---------------------------------|---|-----------------------|
| Belong and actively participate | 1 | <input type="radio"/> |
| Belong but don't participate | 2 | <input type="radio"/> |
| Used to belong | 3 | <input type="radio"/> |
| Never belonged | 4 | <input type="radio"/> |

22. A sports, leisure or cultural group

- Belong and actively participate 1
- Belong but don't participate 2
- Used to belong 3
- Never belonged 4

23. Another voluntary association

- Belong and actively participate 1
- Belong but don't participate 2
- Used to belong 3
- Never belonged 4

There are different opinions about people's rights in a democracy. On a scale of 1 to 7, where 1 is not at all important and 7 is very important, how important is it:

24. That all citizens have an adequate standard of living.

Not at all Important-----Very Important
1 2 3 4 5 6 7

25. Those government authorities respect and protect the rights of minorities.

Not at all Important-----Very Important
1 2 3 4 5 6 7

26. That government authorities treat everyone equally regardless of their position in society

Not at all Important-----Very Important
1 2 3 4 5 6 7

27. That politicians take into account the views of citizens before making decisions

Not at all Important-----Very Important
1 2 3 4 5 6 7

28. That people be given more opportunities to participate in public decision-making

Not at all Important-----Very Important
1 2 3 4 5 6 7

29. That citizens may engage in acts of civil disobedience when they oppose government actions

Not at all Important-----Very Important
1 2 3 4 5 6 7

To what extent do you agree or disagree with the following statements?

30. People like me don't have any say about what the government does

Strongly Agree	1	<input type="radio"/>
Agree	2	<input type="radio"/>
Neither Agree nor Disagree	3	<input type="radio"/>
Disagree	4	<input type="radio"/>
Strongly Disagree	5	<input type="radio"/>

31. I don't think the government cares much what people like me think

Strongly Agree	1	<input type="radio"/>
Agree	2	<input type="radio"/>
Neither Agree nor Disagree	3	<input type="radio"/>
Disagree	4	<input type="radio"/>
Strongly Disagree	5	<input type="radio"/>

32. I feel I have a pretty good understanding of the important political issues facing Canada.

- | | | |
|----------------------------|---|-----------------------|
| Strongly Agree | 1 | <input type="radio"/> |
| Agree | 2 | <input type="radio"/> |
| Neither Agree nor Disagree | 3 | <input type="radio"/> |
| Disagree | 4 | <input type="radio"/> |
| Strongly Disagree | 5 | <input type="radio"/> |

33. I think most people in Canada are better informed about politics and government than I am.

- | | | |
|----------------------------|---|-----------------------|
| Strongly Agree | 1 | <input type="radio"/> |
| Agree | 2 | <input type="radio"/> |
| Neither Agree nor Disagree | 3 | <input type="radio"/> |
| Disagree | 4 | <input type="radio"/> |
| Strongly Disagree | 5 | <input type="radio"/> |

Suppose a law were being considered by Parliament that you considered to be unjust or harmful.

34. If such a case arose, how likely is it that you, acting alone or together with others, would be able to try to do something about it?

- | | | |
|-------------------|---|-----------------------|
| Very likely | 1 | <input type="radio"/> |
| Fairly likely | 2 | <input type="radio"/> |
| Not very likely | 3 | <input type="radio"/> |
| Not at all likely | 4 | <input type="radio"/> |

35. If you made such an effort, how likely is it that Parliament would give serious attention to your demands?

- | | | |
|-------------------|---|-----------------------|
| Very likely | 1 | <input type="radio"/> |
| Fairly likely | 2 | <input type="radio"/> |
| Not very likely | 3 | <input type="radio"/> |
| Not at all likely | 4 | <input type="radio"/> |

36. How interested would you say you personally are in politics?

- Very interested 1
- Fairly interested 2
- Not very interested 3
- Not at all interested 4

Now we would like to ask your opinion about international issues.

37. Thinking about the United Nations, which comes closest to your view?

- The United Nations has too much power 1
- The United Nations has about the right amount of power 2
- The United Nations has too little power 3
- Don't know what the United Nations is 4

38. Which of these two statements comes closer to your view?

- In international organizations, decisions should be left to national government representatives 1
- In international organizations, citizens organizations should be involved directly in the decision-making process 2

39. Which of these two statements comes closer to your view?

- If a country seriously violates human rights, the United Nations should intervene 1
- Even if human rights are seriously violated, the country's sovereignty must be respected, and the United Nations should not intervene 2

On average, how often do you:

40. Read the political content of a newspaper

- Every day 1
- 3-4 days a week 2
- 1-2 days a week 3
- Fewer than 1-2 days a week 4
- Never 5

41. Watch political news on television

- Every day 1
- 3-4 days a week 2
- 1-2 days a week 3
- Fewer than 1-2 days a week 4
- Never 5

42. Listen to political news on the radio

- Every day 1
- 3-4 days a week 2
- 1-2 days a week 3
- Fewer than 1-2 days a week 4
- Never 5

43. Use the Internet to obtain political news or Information

- Every day 1
- 3-4 days a week 2
- 1-2 days a week 3
- Fewer than 1-2 days a week 4
- Never 5

Now we have some questions about your relations with other people. On a scale of 1 to 7, where 1 is not at all important and 7 is very important, how important is it for you personally:

44. When you meet people for the first time, how important is it that you do or say something to show that you have respect for them?

Not at all Important ----- Very Important

1 2 3 4 5 6 7

45. When you meet people you strongly disagree with, how important is it to do or say something to show you tolerate them?

Not at all Important ----- Very Important

1 2 3 4 5 6 7

Thank you

Appendix D. PLACES Survey

The survey included here is based on Zandvliet (2007, 2012).

Place-Based Learning and Constructivist Environment Survey (PLACES)

Name: _____ Date: _____ Age: _____

Program (check one): ES 10 , ES 11 , COAST .

For each of the statements below, (check the box) which best reflects your feeling or experiences as you remember them within your program (ES 10, ES 11, COAST). Remember, there are no right or wrong answers; it is your opinion that is wanted.

Personal Relevance/Integration

	<i>always</i>		<i>sometimes</i>		<i>never</i>
1. I learn about the community outside of school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. My new learning starts with issues important to the local community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I gain a better understanding of the community and places; outside of school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I learn interesting things about the community outside of school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Lessons are supported with field experiences and other community activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Critical Voice

	<i>always</i>		<i>sometimes</i>		<i>never</i>
6. It's all right for me to ask the teacher "why are we learning this?"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. It's all right for me to ask for a better explanation of confusing learning activities when I need one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. It's all right for me to request fewer distractions that interfere with my learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. It's all right for me to express my opinion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. It's all right for me to speak up for my rights.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Student Negotiation

	<i>always</i>		<i>sometimes</i>		<i>never</i>
11. I am provided with opportunities to talk to other students about how to solve problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I make an effort to explain my ideas to other students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I ask other students to explain their ideas and opinions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Other students ask me to explain my ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Other students are provided with opportunities to explain their ideas to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Student Cohesiveness

	<i>always</i>		<i>sometimes</i>		<i>never</i>
16. Students get along well as a group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I have opportunities to get to know other students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Members of the class help one another out during classroom activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Students get to know each other well through participation in classroom activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I am able to depend on other students for help during classroom activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Student Involvement

	<i>always</i>		<i>sometimes</i>		<i>never</i>
21. The teacher asks me questions when we are learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I ask the teacher questions when we are learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. My ideas and suggestions are used during classroom discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I pay attention during this class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I offer my opinions during discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Shared Control

	<i>always</i>	<i>sometimes</i>			<i>never</i>
26. I help the teacher plan what I'm going to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I help the teacher decide how well I am learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I help the teacher decide which activities or projects are best for me to work on.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I help the teacher decide how much time I spend on learning activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I help the teacher decide which activities I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Open Endedness

	<i>always</i>	<i>sometimes</i>			<i>never</i>
31. I am able to go beyond the regular learning activities and do some studying of my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I am encouraged to think for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. There are opportunities to pursue my interests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. I can design my own learning projects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. I am able to express myself freely in my learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Environmental Interaction

	<i>always</i>	<i>sometimes</i>			<i>never</i>
36. I am more outgoing during field trips.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I am able to express myself freely during community or field experiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Learning is a top priority for me during our community field trips.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. I put a lot of effort into the learning activities during our community field trips.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. I spend most of the time during field trips learning about my community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix E. Opened Ended Questions

Name:

Age:

A) Personal Background

Please list all the places that you have lived since leaving high school and tell me where you are living now. If you are not living in the same city as you did when you were in high school, is it your intention to return some day?

What is your marital status? (Check one)

Single Married Divorced Long Term Relationship Other

Do you regard yourself as settled or unsettled with respect to employment/education, or other factors? Please explain.

B) Recreational and Travel Interests

Please outline the recreational interests you have followed since leaving high school. Indicated the extent to which high school activities and /or extra-curricular activities have influenced your current interests. Describe the impact you feel your extra-curricular activities have shaped your present situation.

Please outline the travels you have taken since leaving high school. Indicate the extent in which these travels have influenced your current interest(s) and shaped your present situation(s).

Year of Travel	Destination	Duration	Outcomes

C) Education and training history following high school

Please outline your education and/or training following high school. Identify the years you studied, your program of study, the institutions you attended and the outcomes of your studies.

Years	Course of studies	institution	Outcomes(degree, certifications etc)

Did your high school experience influence your choice of programs you followed? If so, please elaborate.

Are there any specific high school activities/experiences that left you with lasting attitudes, values, skills and /or knowledge that influenced your educational decisions? If so, please specify.

D) Employment history following high school

Please outline your employment history following high school, years employed, type of work, location of employment and your employer,

Years	Description of your work	Location of employment	employer

Did your high school experience influence the kind of work you looked for? If yes, please elaborate.

Are there any specific high school activities/experiences that left you with lasting attitudes, values, skills and /or knowledge that influenced your employment decisions? If so, please specify.

E) Service to community and/or society

Please outline the service activities you have taken part in followed since leaving high school. These could include volunteer work, coaching, teaching, taking part in community activities and/or following employment that provides a service to a larger community. Did your high school experiences impact such service?

List all the service

To what extent is such service an important consideration in how you want to live?

Do you feel you have a voice on matters that affect you?

Final section

Are there parts of your high school experience that you feel were outstanding and deserve being expanded for more students to take part?

Are there parts of your high school experience that you feel were negative and deserve being deleted?

Did I miss asking questions that you feel should be asked?

Thank you for completing this questionnaire, your assistance is appreciated!

Appendix F. More Extensive Response to Interview Matrix Question 1

Question: Do you believe the ES 10 program helped foster the development of skills, in regards to one's ability and or desire to make a contribution of sorts to the community or beyond?		
Sub theme	Individual Response	Source
Self-efficacy	<i>Self efficacy - I realized that although you might not always "choose" to do something you will be able to accomplish it if need be. Pushed out of our comfort zone, which helps in today's challenges.</i>	Celeste
	<i>Always enjoyed advocacy and ES gave me the confidence and the ability to advocate to all peers. This helped me become what I am today.</i>	Peter
Self confidence	<i>ES improved one's skills and confidence to make a difference.</i>	Emily
	<i>Helped in developing individual skill sets, confidence, ability to assert self, communicate well, and leadership skills.</i>	Lucas
	<i>Confidence was big in ES - the curriculum and the way it was experiences provided a time and space to practice skills which are useful today. I had an interest in debating, other people's cultures, environment, and religion. ES provided a space for me to follow these interests in a healthy way. I never had a good opportunity to explore these interests until ES. Through ES I became more comfortable and competent with these skills and more confident to continue (still today) as in my later life I am involved in policy work.</i>	David
Making a difference	<i>She now does something that is very related to ES – teaching outdoor activities (nature and interpretive programs) but also leadership to youth to go out and make a difference in the community</i>	Katrina
Social Risk Taking and non-judgemental	<i>I big piece for me was how non-judgemental the environment was. We were free to be ourselves and there was a great deal of trust and respect. I was more tolerant and I believe this helps me today. I was very comfortable with being myself in the classroom but more importantly beyond the classroom. I was able to come out of my shell and became less concerned about what others thought.</i>	Mia (one on one interview)
Conflict resolution and Tolerance	<i>Today I feel I am more tolerant towards others and ES has helped. Conflict resolution skill development in ES is a key factor which today helps me.</i>	Lucas
	<i>Conflict resolution was a big skill, we self monitored in class</i>	Sharon
Critical thinking and problem solving	<i>Sturrock challenged us to problem solve and use critical thinking about how to improve health and social policy which is something I am very involved with today.</i>	David
	<i>Problem solving skills was big, as was critical thinking. We were challenged to view issues from both sides and come up with solid reasoning based on facts when picking a side. We were taught to be able to argue both sides so we could really understand the issue before we choose where we stood.</i>	Mia (one on one interview)
Leadership	<i>Otherwise a bit shy – learned the ability to teach and lead. This helped her decide that was what she wanted to do which is teach leadership and work in environmental education</i>	Katrina

Research skills	<i>Hands on developed research skills, we didn't have the chance to do before, we did research out in the community on a regular basis (examples: forestry studies, tidal zone studies, community issues studies) We did the hands-on work, then followed up with other sources (texts, internet, interviews with professionals).</i>	Mason
	<i>Research capabilities and problem solving skills improved my ability to create goals and learn to take the steps and confidence to achieve that goal.</i>	Emily
Risk taking	<i>ES put her in a mindset that is was ok to try things like the when she was a manager of a marketing company. ES helped her in the way of thinking to allow her to push outside her comfort zone.</i>	Katrina
	<i>We pushed ourselves to accomplish things that we thought were not possible like building and sleeping in snow caves</i>	Celeste
Team work	<i>Developed leadership skills in groups – learned how to work successfully with each other in a very close working environment – this has helped me today</i>	Mason
	<i>I am now a nurse, and with my job I require a great deal of team work skills, ES 10 helped me a great deal in this area</i>	Carmen
Consensus to Question 1		
Sub theme	Consensus response	Source
Creativity	<i>Getting open ended tasks, developing them in personal directions, we learned more about ourselves this way. We were allowed to go in directions our interests wanted to take us.</i>	Celeste
Diversity	<i>Through building relationships with people that we may not otherwise have associated with brought out a skill or perspective that is still reflected on later in life. You develop the ability to associate and listen to others that come from various backgrounds. This helped us later on in life especially when we travelled abroad or meeting new people.</i>	Sharon
Communication	<i>ES taught how to relationship build, through advocacy and the building of confidence while interacting with peers and adults in the community. ES helped with the acceptance of others which in turn helped in communication with others.</i>	Richard
Critical thinking	<i>Really helped in developing an informed opinion base on gathering of facts and information. Helped with the ability to question policy.</i>	Sarah
Purpose	<i>Helped in the desire to find more meaning from education in university which affected career paths.</i>	David
Confidence	<i>Being outside, doing challenging tasks really built confidence levels that carry on to willingness to challenge today.</i>	Lily
	<i>The opportunities in the program to teach each other developed confidence in group communication which lead to future career paths.</i>	Jake
Self efficacy	<i>Building of self efficacy - belief in being able to do it. The harder challenges like rock climbing and snow camping helped with finding out real potentials.</i>	Peter
	<i>Opportunities to lead adults developed confidence - for example the fire fighting testing protocols we ran for 3 days (for Vancouver Airport Authority). The fact that grade 10's we were professional and in charge of prospective firefighters really boosted our belief in being able to do just about anything. We were proud of each other.</i>	Sarah

Making a difference	<i>ES made "grade 10's" feel they could make a real difference in their community. For example; our community beach clean up project.</i>	Kerry
Risk Taking	<i>Learning how to push our comfort zones - the outdoor challenges which we would not have been exposed to helped us understand how we can push ourselves. The group competition that was created through various initiative tasks, the time pressures in some of the academic challenges, coupled by the encouragement for each other helped push us to higher limits. The bar was always raised. There was a group trust, risky questions can be asked as well.</i>	Sarah
Conflict resolution and problem solving	<i>Helped with problem solving skills, peer resolution and conflict resolution.</i>	Emily
	<i>Social problems were solved immediately while in the ES program, this learned skill helped later on.</i>	Mason

Appendix G. More Extensive Response to Interview Matrix Question 2

<p>Question: Sense of community and belonging to include the desire to be part of a strong, safe community based on networks and friendships that foster trust, concern for well-being, sense of self-worth and encouragement towards individual and collective social responsibility. Could you comment on the ES 10 program that you were involved with as it relates to sense of community as described above?</p>		
<i>Sub-theme</i>	<i>Individual Response</i>	<i>Source</i>
Voice	<i>We were encouraged to express our opinions on a regular basis and we had a say in our schedule and at times what we were to learn. I felt I was able to contribute to the class, in various ways. I still remember the time where I led an astronomy lesson down by the river while on the Squamish Pemberton tour. I was able to share my passion with the rest of the class and it was well received. This way of learning was more constructive. Since I felt trust, and people were non-judgmental it was easy to use our voice.</i>	Mia (one on one interview)
Acceptance	<i>Es was accepting, I could be myself and the ES community encouraged me to do things I would not have done before, it taught me I was awesome, this was hugely important to me, it gave me tons of confidence.</i>	Emily
	<i>ES was our own family, within the community of the school. We had as sense of pride. We all wanted to be there and not miss a day (no skipping). We did not want to miss out on anything. We would show up on Professional days even on days that we had off because of extended trips. This made all the time spent together even more special. There was no bullying - just a great acceptance of difference and unique contribution - not sure if regular school can do that.</i>	Sue
Caring	<i>We built some strong bonds, friendships over all the experiences. We were all concerned about the well-being of each other and others outside the group as well. We developed a sense of self-worth and safety.</i>	Peter
Cooperation	<i>This was a crucial time in our development – we had to get along with numerous people. We understood that everyone had their place in our community, we were all contributors.</i>	Lily
Family	<i>One of the biggest things to take away from ES was this community relationship experience. You build enduring relationships based on trust like a family. This was unique to ES. The time spent and the amount learned from each other creates a huge amount of understanding. We were “A Big family”</i>	Jake

Support and trust	<i>We formed some sort of community, we were a close knit group with a great deal support for each other.</i>	Lucas
	<i>The volume of time we spent together leads to trust. We overcame challenges as a group which created a sense of community</i>	Katrina
	<i>Huge commitment to each other, we were so sad when it ended. We went through so much, built deep trust, the group was bigger than yourself. It was very inclusive of everyone - there was a genuine interest in our peers.</i>	Drake
Lasting friendship	<i>Most people in the program built relationships based on honesty and mutual trust not status or abuse. All of these people formed long lasting relationships while other high school acquaintances are ghosts to you in the future. The shared experience of ES makes you care about people.</i>	Jake
Safe environment	<i>We felt safe, we would have to rely on others for safety and well-being for example building of the snow caves and rock climbing. All the time together developed a sense of closeness – there was a desire to be part of the network</i>	David
	<i>We developed a sense of self-worth and safety. I felt good to be part of this group. I think ES created a different community experience for each individual</i>	Lydia
Social responsibility	<i>Important to get to know each other especially if you will be in close quarters, we learned from each other. Opened up the idea of social responsibility as everyone needs to contribute to society. The large amount of time spent together fostered this sensed of community</i>	Sharon
Community service	<i>We stayed in community centers and interacted with others outside our group, sometimes doing community service as well (painting the walls in Fulford Hall, doing the beach cleanup organized by us outside school time)</i>	Kerry
Consensus to Question 2		
Sub-Theme	Consensus Response	Source
Respect	<i>We respected differences for the benefit of the “functioning group” - Breaking down of barriers to allow for a better understanding and caring of each other, respected others diversity for who they truly were. - There was a respect/caring of what others thought/opinions because classmates were more like a brother or sister. - - We would often debate among one another with civility and respect. - It was an insulated environment where we built up values - acceptance and empathy was the norm</i>	Sarah
Tolerance	<i>Open to diverse ways of thinking” it was encouraged</i>	Gerald

Acceptance	<i>Recognizing people as diverse all having different backgrounds and interests. We were less judgmental and more accepting</i>	Lily
Reflection	<i>Through our reflective talks and journaling there was a "philosophical" self-discovery</i>	Peter
Connected Bond	<i>There was a family "vibe". We spent a great deal of time together and big events made us cooperate (like the snow trip where we had to build our snow structures to sleep in) we were good at conflict resolution within the group. There were deeper connections between us compared to the regular school. We connected to the outside community - met community members and experienced communities we would not normally see.</i>	Jake
Social Responsibility	<i>This community involvement opened the idea of social responsibility. - Appreciation of place and people developed through community interaction. Important point is "Group reciprocity": We felt we could talk we had a voice therefore give back to others, this fostered trust. - The program demonstrated that it feels good to be in the community.</i>	Peter
Benefits of community	<p><i>There were demonstrated tangible benefits (see below).</i></p> <ul style="list-style-type: none"> • <i>Communities based on values</i> • <i>Personal growth</i> • <i>Support network based on mutual trust developed skills leading to higher level of confidence and belief in oneself.</i> • <i>Being responsive and responsibility was encouraged</i> • <i>Meeting other people in community taught you skills and importance of getting/being welcomed.</i> • <i>Experiencing small communities allowed us to come together like the Vancouver Island trip, we understood relationships were based on shared values rather than proximity.</i> 	Peter
Safe	<i>It was a crucial development point in our youth, we were allowed to experiment in a safe environment. Personal development through exploration grew to have strength in self which lead to sense of responsibility.</i>	Peter
Cooperation	<i>We would work in small groups, which was like a micro community, there was reliance on the group but there was this fluidity between all groups.</i>	Katrina

Appendix H. More Extensive Response to Interview Matrix Question 3

Question 3: Did the program in any way allow you to have a voice in matters that affected you? If so, how? Do you think this had any effect on the way you think and act today?		
Sub theme	Individual Response	Source
Democracy	<i>We could finish early and leave early sometimes we stayed late depending upon what needed to get done. We had a say in all this. Always comfortable asking questions, don't recall specifics but I felt comfortable being forward with my thoughts. I learned how to give things time to think, reflect which helped avoid confrontations, it was much easier to talk things out this way in a respectful manner. Today, I still feel confident about voicing my opinion when feeling strongly about situations. ES had an environmental influence on my opinions, I have strong views on issues today regarding things like Enbridge and I am not afraid to voice these opinions.</i>	Lucas
	<i>This was a unique program, you had a lot of say in how you learn, what you learn. There was a freedom of structure.</i>	David
	<i>Yes, there was voice. This was done through guided learning, we were supported by we had a say. Decisions were made by groups of people rather than one person; this gave us more of a voice. There was a democratic leadership.</i>	Mason
Confidence	<i>I voiced my opinion frequently and confidently there was an ease to do this in this group, it was comfortable to do so. Definitely different than in a regular class setting where trust was not big. ES helped me find "self" and solidify my "individuality" through this supported voice. I am much more confident today.</i>	Lily
	<i>ES had a profound impact on me, without ES I wouldn't have had the courage to make a global impact through my involvement through Red Cross. I headed Centennial Red Cross and felt strongly that you can make a difference and encourage others to do so.</i>	Peter
Long term voice leading to active citizenship	<i>Sturrock would always encourage us to "just go for it". This stuck in my mind and helped me go to a Red Cross conference which eventually led to my big involvement of Red Cross. I am involved with humanitarian issues, Canadian politics and overall social justice. These are all important things to me today. In conclusion, ES had a direct effect on my social engagement and career choice wise, and my humanitarian focus drive.</i>	Peter
	<i>I called a sewage plant for part of my research on an issue analysis, People were open to talk to a 15-year-old girl – this really opened my eyes, all of a sudden I was not afraid to ask important questions to anyone. This project empowered me, my voice mattered not just inside the class but outside as well. This led to my direct involvement into being a force in Oxfam, and the Africa coalition. Sturrock always pushed you to think about what's next, to think forward. In ES you had a voice and it actually meant something. I learned you can actually do something with your voice, for example</i>	Sharon

	<p><i>I went to Africa to reach out and understand the real issues around human rights.</i></p> <p><i>I Learned that you can make a difference and that your voice matters.</i></p>	
Open environment	<p><i>I like how the atmosphere was more free form, often there was no right or wrong answer it encouraged us to talk, it was very open. ES was structured so much different than a regular class, which fostered interaction among each other. I enjoyed the issue analysis project where we had a creative way to voice our opinion, an opinion based on knowledge and some critical thought. We were allowed to research any issue and could choose our own ways to investigate like interviewing people, we were also allowed to present it in a creative way of our choice.</i></p>	Celeste
	<p><i>Problems we dealt with were on a smaller personal level. We had a significant say in voicing our opinion or our concern. We needed a class website so we created one, we needed a yearbook so we created one and started a tradition. We were encouraged to create our own projects and curriculum, I liked that, I had ownership. The issue analysis, we could choose any topic of interest to us and research it in various ways. There were multiple ways we could voice our own opinions.</i></p>	Peter
	<p><i>In ES, you were able to explore your own thoughts and feelings, develop some real opinions and a philosophical stance. Voice was encouraged, it was a big focus in the program. Many dialogues and debates took place in small and large groups, leading to very good conversations. We "agreed to disagree" this was very healthy, we all respected everyone's difference. We were always asked "What do you think" What are your thoughts?</i></p>	Sarah
	<p><i>The teacher was more like a facilitator – he helped create that open environment. For me it may have played a role in how I am today but I believe all my experiences contributed to that. The one thing that helped me the most would have been the confidence I gained with outdoor pursuits. This confidence has allowed me to access the outdoors and challenge myself, in fact some of these experiences have helped me solidify my direction in life. Those challenging outdoor experiences allows one to really think about the things that really matter.</i></p>	Mike
	<p><i>ES was a very open group; there was no reason not to voice your opinion. In the ES community we were free of persecution; we didn't feel judged the same way you would in regular school. People were open to discussing personal topics.</i></p>	Mason
Self-discovery	<p><i>In grade 10 she didn't know what was important to her. It was ES that opened the door to new ideas. For example, sustainable forest practices. The ES class environment provided a platform to discuss important ideas. There was academic freedom to do your own research, for example the chemistry project or talking to community members in the Okanagan. This allowed you to decide what you were passionate about and what you really cared about.</i></p>	Lydia

Consensus to Question 3		
Sub theme	Consensus response	Source
Democracy	<i>There was democratic freedom, we all had a voice in most things of ES</i>	Drake
	<i>In the classroom environment, personal needs were often met, there was a voice to ask for it. This led to flexibility. The program could be tailored around us.</i>	Celeste
	<i>There was a high level of trust in each other, felt safe even if there was risk. We were part of the process, we had a say in everything; the schedule, curriculum, projects, activities.</i>	Mason
Supportive environment	<i>The environment was supportive of sharing thoughts and feelings, it felt safe. This was somewhat facilitated through group work and team work initiatives but also through the instructor who encouraged voice through a supportive environment.</i>	Emily
Philosophical discussions	<i>Talking within a familiar group made it easier to talk about important issues. People were accepting of other and differences. We had many philosophical discussions in small and large groups. Some facilitated by the teacher but many by ourselves.</i>	Sarah and David
Value of voice	<i>Voice meant something, it was valued. Could make a difference in class, there was a value in this, we were not speaking to just fill time we were speaking because you could make a difference.</i>	Sue
Voice in the future	<i>ES 10 was a factor in having a voice today, but likely not the only thing in how we are today. ES really helped building up confidence in speaking up, we felt our voice mattered and moved from a belief that no one would listen to one that people would. ES helped "snowball" our voice it was the start of self development of voice.</i>	Mike
	<i>Voice and agency, you expected to be heard, this helped with attitudes towards advocacy well after the program. This did cause some of problems though in our grade 11 year with our expectations of this being so high and our teachers not being ready for it. Us ES'rs would want to exercise more voice but many of our teachers would not give up control.</i>	Sarah
Listening skills and being informed	<i>Opened eyes to listening to others opinions, to hear others voice and develop opinions based on more knowledge and understanding the issues and facts.</i>	Lydia
Social responsibility	<i>There was an increase in participation at all levels because voice matters, like a training to be responsible for voice, lived with the consequences. There was a high level of social responsibility. There was ownership in our learning process, the group was responsible for this.</i>	David
Self efficacy	<i>Definitely built self efficacy, belief in ability to take on big challenges. The snow trip proved this. This attitude was carried on with everything that was done. Expectations were high on us, placed by us, and supported by us.</i>	Peter

Appendix I. More Extensive Response to Interview Matrix Question 4

Question 4: What is it that you remember the most about the program in terms of unique learning environment features? This could also include “specific” experiences that may have affected you in some way. These examples could be positive or negative.		
Sub theme	Individual Response	Source
Structure	<i>It was liberating to have choices at that age. Surprising and rewarding to be so successful at directing our own learning and schedule which brought out maturity.</i>	Lydia
	<i>Structure was more free, you could come and go, and the schedule was flexible.</i>	Mason
	<i>No restrictions, freedom. We had a say in the curriculum and how it was graded. It was free from a fixed curriculum. Example: I was able to build my own microscope carrying box, right there in the classroom during class time so I could use it on our trips. I was allowed to be a teacher – taught cell biology to the class – this led me to start the biology club later on.</i>	Mike
	<i>Flexible schedule allowed for better opportunities</i>	Sue
Democracy	<i>Democracy in the classroom was a memorable feature.</i>	Mason
	<i>Love that the schedule was different – never got bored; field trips were great and it was very free form – open with new ideas that we could contribute to. We developed grading rubrics, they were easy to follow. The teacher control was good, it was free form, we were allowed to do our own thing, activities, science, and such.</i>	Celeste
	<i>Everything was a big discussion – our opinion and ideas mattered</i>	Sue
	<i>Projects were done the way we wanted, we could be creative with our assignments and presentations. We had a lot of open ended questions. Testing was varied, we even had interviews.</i>	Carmen
Field experience	<i>We collected scientific data, analyzed it, understood why we were doing it, extended the learning. We collected lots of data, sometimes on our own and sometimes with professionals and other groups. Cooperative practices were all good, Gord mixed it up to keep it all cohesive.</i>	Celeste
	<i>Outings – were big – still remember them. All these shared experiences, I experienced things I would not have otherwise. The outings helped expose us not just to science and other areas of study but to self identity which was big, this still sticks today.</i>	Kerry

Novelty	<i>Very novel experiences led to concrete learning, still remember today</i>	Lydia
Social	<i>Socially – very unique, friends with people you would never have been friends with, gain respect for people with different beliefs and values than your own.</i>	David
	<i>Biggest take away – social skills how to interact and be a team</i>	Sue
	<i>We were a tight group and this added to the sense of community and level of responsibility “positive peer pressure”. We did not want to let anyone down.</i>	Kerry
Journal	<i>The journaling experience, reflecting on our learning made it sink in and the teacher response to our journaling made it worthwhile.</i>	Lydia
	<i>Journaling contributed to this long lasting memory – hands on learning followed by journaling.</i>	David
	<i>Journals were great and group discussions were great. Good to reflect with a journal, and have something to look back on. I think most of us still have our journals today.</i>	Lily
Unique	<i>The balance between self directed learning and team base activities were very unique and beneficial.</i>	David
	<i>Always learning something new and interesting compared to the other grade 10's who had a boring year. Students were immersed in the learning which promoted the sharing of learning even around the campfires – learning never stopped.</i>	Sarah
	<i>Learning methods supported diverse learning styles, this was great. Information was presented in a flexible manner – different ways and we had some control. The experience supported self-development as we were free to be ourselves.</i>	Carmen
Hands on	<i>The social and environmental justice point of view built into the program made it less dry, more lasting especially because we could experience and see things first hand.</i>	Lydia
	<i>Learned the value of hands on learning – take in the information and retain it because of the long lasting memories attached to the experience.</i>	David
	<i>ES was a hands on fun atmosphere, it was unique: we were thrown outside into the world, take as much as you can out of what's around you. The way we learned made you want to learn more, learning continued even well after the activity. Our field tests were open journal, which took some pressure off. Sturrock was there to serve as a scaffold to our own learning, students filled in their own gaps.</i>	Emily

Self-development	<i>The program promotes thinking around our own actions – how these affect others, the community, the environment, the future etc. Sturrock had great trust for the group – would leave us in the room during a test, trusted us in the community on our own etc. Gave us ownership. This promoted self – directed growth – we were given freedom but with responsibility and expectations. At first some did not appreciate these methods but later we did.</i>	Sharon
	<i>Learned a lot around team work, cooperation, and we learned at our own pace. The whole experience/environment helped me to become more open, flexible, and an accepting person.</i>	Emily
Hardship	<i>Building and sleeping in the snow caves was a memorable experience; it was challenging and life changing.</i>	Kerry
	<i>The snow trip was memorable – it was a tough trip and it was the first one – the sense of community was built early on.</i>	Sharon
Consensus to Question 4		
Sub Theme	Consensus Response	Source
Place	<i>We loved all the trips, the places we visited, we slept, cooked, studied and played. We loved the bus, we spent a lot of time on that bus. Many of us have recreated some of these trips by returning to the same place.</i>	Drake
Structure	<i>The structure promoted creativity because it was flexible and democratic. We had flexible schedules, and flexible deadlines which relieved pressure which facilitated learning. Some time pressure was also given which challenged and motivated us, we showed we can perform under pressure.</i>	Carmen
	<i>There was flexibility in what to study and how to answer tests like interviews instead of written ones. There was democracy in all of this, we had a say.</i>	Jake
	<i>Dynamic schedule kept things fresh (novel) with just the right amount of routine – we were in control of much of this. This allowed us to do much more – take advantage of opportunities.</i>	Lydia
	<i>People in program were exposed to opportunities in self-governance. This helped in the development into individuals that are not risk adverse and are able to make good choices in adult life.</i>	Peter

Skills learned	<i>Many of the skills came from the outdoor camping and other activities.</i>	Mason
	<i>We had opportunities to teach each other, and social skills like learning tolerance and accepting differences was learned.</i>	Peter
	<i>We had to communicate with different kinds of people like biologists, not your usual crowd -this was outside our normal realm.</i>	Sarah
	<i>Supported personal development because you could be yourself</i>	Peter
Independence and teamwork	<i>We had the chance to plan, pack, cook, do things for our self, we gained independence – we started to do more at home and became more helpful. We saw the value in working together.</i>	Gerald
Relevant learning	<i>Learning was social, it had relevance. Learning was attached to something we could related to.</i>	Sue
	<i>Problems presented in class were sometimes ill defined, they were real problems not made up ones, real issues attached to what we were experiencing. We had to come up with a method of analyzing these problems, create plans to create comparisons, design studies etc. This was not just reproduction of information and facts, it was not didactic, we were truly involved in the learning.</i>	Sarah
Open endedness	<i>Open ended questions made knowledge have value.</i>	Celeste
Relationships	<i>Established long term relationships – still remember everyone (can't be said of normal classroom)</i>	Jake
Reflection	<i>Reflection was a big part, as a group but alone and with our journals – Journals were much appreciated after the fact. All of us still have them and they serve as a good memory. "Authentic" learning and journals helped bring that out.</i>	Kerry
	<i>The journals helped us learn in the moment rather than cramming in facts after. Journaling also helped us retain information especially when they were attached to relevant things. Our reflections and discussions in the class opened up a more philosophical way of thinking. Really opened our eyes and ideas outside of our normal way of thinking</i>	David
Unique	<i>There was a balance of team based and individual endeavours.</i>	David
Challenge	<i>Pushing ourselves was not a chore, it was the norm.</i>	Emily
Enjoyment	<i>We enjoyed going to school – we were all sad when school was over.</i>	Sue

Appendix J. ES 10 Goals (Course Overview and Brochure)

The following course overview and goals of ES 10 are from the original program proposal that was presented to Centennial's school administration. The brochure is a 2003 version used to advertise the ES 10 program.

Course Overview (general description)

The proposed Experiential Studies program will hold the same philosophy and format as the ES 11 program used in the Yukon except it will integrate most subjects from the grade 10 level. The program will be called Experiential Studies 10 and will be focused around two science courses. Students take the following courses: Science 10 (compulsory course), and Earth Sciences 11. The balance of the courses includes the two compulsory courses: Physical Education 10 and one of Social Studies 10, English 10 or Math 10 (the course chosen out of this group would suit the strengths of the program leader(s)). The specifics of each student's course will be arranged through discussions with the program teacher(s). These courses will be based upon experiences and activities found both inside and outside the school setting and will involve both the school and professional science communities. For the 2002-2003 school year, Social Studies 10 will be incorporated as the fourth course.

The Experiential Studies program is designed to extend and enrich the student's understanding of science through projects and field experiences in biology, chemistry, geography, forestry, mathematics and environmental studies while using physical education as a medium to deliver some of the topics. The program provides challenges that help the young person grow intellectually, physically, socially, emotionally and culturally. The program encourages each student to become a responsible citizen, with the self-confidence and skills needed to meet the many challenges of a changing society.

THE OBJECTIVES OF THE EXPERIENTIAL STUDIES PROGRAM are to have students develop:

- A responsible attitude about learning, about themselves, about their role in society and about the environment.
- Thinking and problem solving skills through an integrated approach to academic subjects focused on the sciences.
- A knowledge and appreciation of the natural environment and the different ecological zones throughout the province.
- Self-confidence, self-discipline and rigor in science endeavors.
- A heightened commitment to nutrition, health and fitness.
- Skill and knowledge in a range of field studies.

- Co-operative attitudes and habits through group interaction.
- Leadership skills.
- Communication and observation skills.
- Skill and knowledge in a range of field studies.
- Co-operative attitudes and habits through group interaction.
- Outdoor pursuits skills
- Skills in working with scientists and other community members
- Long-term interests in sciences and specific projects
- Friendships and positive peer relationships.

General Description

(an application form is included with this pamphlet)

The Experiential Studies 10 program integrates traditional class work, science labs, projects, and field studies. The program incorporates challenges which will promote a student's intellectual, physical, social, emotional, and cultural growth. The E.S. program encourages each student to become a responsible citizen, with the confidence and skills needed to meet the many facets of a changing society.

The students will take part in various field trips that range from one to three days in length to an extended trip of up to two weeks in duration.

One teacher stays with the group of students for the entire semester. ES 10 is a demanding program offering considerable rewards and enriching experiences for those that are prepared to accept the challenges of the program.

Field Trip Activities

- Learning about history while cycling the Kettle Valley Railway
- Studying geomorphology while rock climbing in Squamish
- Studying biology while hiking and canoeing
- Studying rocks and structures while hiking in various regions throughout British Columbia
- Doing various ecological studies in the lower mainland
- Meeting and visiting professionals related to course material
- Developing partnerships with other experiential classes

The objectives of E.S. 10 are to have students develop:

- Self confidence
- A responsible attitude about learning
- Problem solving and critical thinking skills
- Decision making skills
- Self-discipline
- A commitment to nutrition and health
- Skill and knowledge in a range of field studies and outdoor pursuits
- Heightened knowledge of British Columbia
- Co-operative skills and attitudes
- Leadership skills
- Communication skills
- Observation skills
- Long term interests in different subject areas
- Long term interests in outdoor activities
- Friendships and positive peer relationships

The E.S. 10 Year

Experiential Studies 10 will be offered for a whole semester during the 2002-2003 school year. Students take a conventional program of studies in one semester and the Experiential Studies program in the other semester .

The E.S. 10 Semester

- Earth Sciences 11
- Science 10
- Social Studies 10
- Physical Education 10

The Alternative Semester

- English 10
- Math 10
- Other grade 10 options

The program aims to extend and enrich a student's understanding of these four courses. The subjects will be taught in a manner that integrates traditional class work, science labs, projects, and field studies.

EXPERIENTIAL STUDIES 10



**Centennial School
Coquitlam, B.C.**

Appendix K. British Columbia's New Curriculum: Cross – Curricular Competencies

The core competencies (Government of British Columbia, n.d.-b), along with literacy and numeracy foundations and essential content and concepts, are at the center of the redesign of British Columbia's curriculum and assessment (Government of British Columbia, n.d.-a). Core competencies are sets of intellectual, personal, and social and emotional proficiencies that all students need to develop in order to engage in deep learning and life-long learning. Through provincial consultation, three core competencies were identified.

The three cross-curricular competencies, each with a number of sub-domains:

Thinking Competency:

- Critical thinking
- Creative thinking
- Reflective thinking

The thinking competency encompasses the knowledge, skills and processes we associate with intellectual development. It is through their competency as thinkers that students take subject-specific concepts and content and transform them into a new understanding. Thinking competence includes specific thinking skills as well as habits of mind, and metacognitive awareness.

Personal and Social Competency:

- Personal and Social Competency
- Positive personal and cultural identity
- Personal awareness and responsibility

Personal and social competency is the set of abilities that relate to students' identity in the world, both as individuals and as members of their community and society. Personal and social competency encompasses the abilities students need to thrive as individuals, to understand and care about themselves and others, and to find and achieve their purposes in the world.

Communication Competency:

- Language and symbols
- Digital literacy

The communication competency encompasses the set of abilities that students use to impart and exchange information, experiences and ideas, to explore the world around them, and to understand and effectively engage in the use of digital media.

Core competencies are evident in every area of learning; however, they manifest themselves uniquely in each discipline. In the current drafts of the redesigned curricula, competencies are embedded and evident within the learning standards. Competencies come into play when students are engaged in “doing” in any area of learning. This includes activities where students use thinking, collaboration, and communication to solve problems, address issues, or make decisions. The ultimate goal is for learners to employ the core competencies every day in school and in life, and for the core competencies to be an integral part of the learning in all curriculum areas.

Appendix L. Detailed Description of Problem- and Place-Based Practices

Project Base Learning Descriptions and Examples

Weather Data Collection

Weather data was collected daily. Some instruments were made in class by students (wind sock, sling psychrometers, Stevenson screen). The data was used to create charts and predictions as well as participate in data sharing with the GLOBE program (2017). This is an international science education program that encourages various ecological monitoring through testing protocols as well as collection and sharing of data from schools and other groups. The ES 10 students were also involved in collecting data on water quality from various streams in the nearby community using the protocols prescribed as well as collecting data on night sky pollution all shared with the GLOBE program.

Water Cycle

To extend the various atmospheric studies and water cycle studies that occurred in the classroom and nearby school community these concepts and ideas were extended on a winter overnight snow shoe trip which placed the ES 10 students in the high alpine of a local coastal mountain area to collect data on the atmosphere as well as snow depths and densities, (snow crystal type etc.) using instruments made in the classroom by the ES 10 students. The data was collected, analyzed and brought back to the classroom where students extended their understanding about water flow in creeks and rivers related to the snow pack. These kinds of experience build into other experiences like local canoe trips that take students to areas where they can study landscape changes due to erosion and further there understanding of water quality.

Issue Analysis Project

The ES 10 students chose a topic relating to a local issue or beyond that they were interested in. These issues were environmental, social, or humanitarian (any area of choosing). The students were encouraged to investigate both sides of the issue and be able to argue for both sides prior to deciding where they positioned themselves based on

their research and evidence gathered. They were encouraged to engage the local community, agencies or government to gather as much as a perspective as possible.

Examples of Place-Based Learning Experiences:

Foreshore and low tide shoreline studies

The students participated in various low tide shoreline biodiversity projects on Salt Spring Island and in their own community in Burrard Inlet. In both cases, they were able to work side by side with marine biologists who assisted in the transect mapping studies. The Salt Spring project, rotated from three different sites all addressing issues that came from community concern. For example, at one location the health of the intertidal zone was measured to determine if there was a negative impact from run off that was suspected negatively affecting the intertidal zone by a development project which was taking place upstream of the run off. The Burrard inlet project came out of concern from a local biologist who was worried an invasive eel grass species was negatively impacting the intertidal zone. In all these cases, groups of students also surveyed and mapped out the foreshore using theodolites to determine features of the land which could be compared to at a later time. The particular protocols utilized in each of the studies were developed in large by the students with some guidance by the teachers involved as well as the biologist.

Ford Lake Wet Lands Studies:

Ford Lake, on Saltspring Island is actually a pond that is surrounded by a wet land. Ford Lake collects the waters that begin at Fulford Creek. It is well known that wetlands are important habitat for a variety of species of water fowl and represent a wide range of ecosystems over a small area. For this reason Ducks Unlimited have acquired approximately 60% of the land surrounding the lake and allocated the management of the lands to a local farmer. Community concern arose about the fact that much of the Canary grass wetland have been mowed and some of the area was dredged to encourage drainage. The concern was that the drainage was affecting the water balance causing the lake water levels to fluctuate more rapidly than normal. The ES 10 classes have been partnering with another integrated program from the Yukon called ES 11 and have been involved studying various aspects of the area collecting extensive data to include; bathometric survey, vegetation transects, benthic analysis, bird census and

water level monitoring and metering. The data has been kept by local conservationists and biologists to help inform people on better ways of managing the area.

EMAN plots (Mount Taun Ecological Preserve, and Sustainable forest practice)

Environmental Monitoring Assessment Network (EMAN) is a set of protocols developed by Stanford University to study, over time, complex natural ecosystems. The initial plot involves surveying a 100 m by 100 m plot in a characteristic setting, then divide this block into 20 m squares. These in turn are divided into 16 5 m squares. The ES 10 students partnered up with another integrated curriculum program called ES 11 from the Yukon to establish EMAN plot sites at two locations on Salt Spring Island (one at an ecological preserve and one at a sustainable logging practice). Over the years these groups have been conducting detailed analysis on a 20 x 20 m plot each semester. In some instances, a partnership occurred with a local elementary school as well. The students in the ES 10 class were involved with making various instruments to help collect data (go no go gauges, clinometers, DBH tapes, etc.). In addition to investigating and learning about the sustainable logging practice the ES 10 students would also have an opportunity to learn about larger scale logging practices in the Squamish area.

Investigating Fresh Water Ecosystems in local area around school

ES 10 students were involved with investigating the health of local streams to understand the effects of urbanization and the health of the ecosystems in their own neighbourhood. Students designed their own studies to create comparisons and analyze the health of various stream in the area that had different urban pressures affecting them. Water quality studies would include water chemistry, as well as invertebrate study (identification and counts) with close attention made to temperature, PH levels and indicator species. These types of experiences led to a better understanding of the effects of paving and run off, extensive washing of vehicles, and effect of local industry/business and poor practices of disposing of wastes.

Appendix N. Sample of Activities in ES Aimed to Foster Group Cohesion

Sample of Various Games/Activities/Initiatives Aimed to Foster Group Cohesion (utilized in ES 10)	
Games/Low Ropes	
Description	Goals
<p>Team Pod</p> <p>Teams will move themselves across an area (outside or in gym) with only designated number of body parts in contact with floor. Group is successful with entire team crosses a line, if more than the number of specified contact points touch the floor, team must start again or a handicap is given (e.g., blindfold one member).</p>	Cooperation, Communication
<p>Riverboat</p> <p>This is an introductory challenge that requires a group to transport themselves across an open space (usually the gym). They must do this without touching the floor with any part of their bodies using only two small tumbling mats to create their riverboat.</p>	Cooperation, Communication
<p>Lava Crossing</p> <p>A group of students usually (12) must get themselves across a gully (or marked area) using only a rope, carabiner and sling. One member of the team has special shoes and can make the crossing only once (the shoes then are considered no use). The rest of the team must come up with a solution of using the rope, carabiner and sling to get each person over the designated area without touching the ground. If a member touches the ground a time penalty can be imposed or a member of the team can be blindfolded.</p>	Cooperation, Problem solving, Communication, Trust
<p>Obstacle Courses</p> <p>Various low rope elements are set out in a wooded area to encourage problem solving, cooperation and communication. Webbing can be strung between trees making a tight rope, ropes etc. can be utilized as well. Stumps can be used as stepping spots for 2 x 4's of varied lengths used as bridges. This activity is usually challenging and has varied elements.</p>	Cooperation, Problem solving, Communication, Trust
<p>A frame activity</p> <p>A large A – frame made from three 2x4's (2-10 feet long for uprights, and 1- 8-foot-long for base). The object here is to place one member in the A- frame (balanced upright) and move this A- frame and person from one location to another (usually about 30 feet away) using only rope (at a minimum 8-foot distance away from the A- frame). To increase the challenge, less ropes can be used as well as blind fold everyone except for the person in the A-frame.</p>	Cooperation, Problem solving, Communication, Trust

<p>Traffic Jam</p> <p>Place something to mark places for people to stand on in a line (poly spots work well in the gym setting, pieces of cardboard work fine in outdoor setting). This activity requires one extra marked space. The object of this activity is to split the group into two so that they are each facing each other on the marked spots with the empty space in the middle. The goal is to exchange places with some restrictions in mind: only one person can move at a time, no person is to move around anyone facing in the same direction, no one must move backward, and no one can move around more than one person on the other team at a time.</p>	<p>Cooperation, Problem solving, Communication, Trust</p>
<p>Trust Falls</p> <p>Various levels of trust falls are utilized:</p> <p>A. In small groups, one person stands in the center of a small group of people in a circle, closes their eyes, places their hands across their chest and falls into the group backwards, the group members carefully catch this person and carefully pass them around in the circle. This activity can be used in the early stages of building trust.</p> <p>B. One member of the team is selected and stands on a raised platform, next they fall backwards relying on the support of their team to catch them. This quick team building activity is all about support and trust and is used when groups are forming bonds so the trust is already starting to build.</p>	<p>Trust and self-confidence</p>
<p>Adventure Based Activities aimed to foster Group Cohesion</p>	
<p>Description</p>	<p>Goals</p>
<p>Canoe Trip</p> <p>Overnight canoe trip – students paddle canoes to a designated camping area at Pitt Lake, BC. Activities on this trip consist of basic back country camping skills, and various ecological, historical, and earth science studies. Hiking is also included on this trip.</p>	<p>Cooperation, Trust, Building self-confidence</p>
<p>Rock Climbing (indoors and outdoors)</p> <p>Students participated in learning about basic climbing techniques and skills in the indoor setting than transfer these to the outdoor setting (learning about safe set up, and approach).</p>	<p>Cooperation, Communication, Trust, Building self-confidence</p>
<p>Mountain Bike Trip (Kettle Valley Railway)</p> <p>Five-day mountain bike trip along an old abandoned railway bed near Kelowna, Penticton and Princeton. Long days of cycling distances of 50 km, two students responsible for buying and preparing the day's meals for the entire class (this is reciprocated for various trips through the semester so everyone has a chance). Various opportunities for earth science studies as well as social studies.</p>	<p>Cooperation, Building self-confidence and efficacy</p>
<p>Kayak/Canoe trip up Indian Arm</p> <p>Overnight kayak/Canoe trip – students paddle canoes to a designated camping area up Indian Arm. Activities on this trip consist of basic back country camping skills, and various ecological, historical, and earth science studies.</p>	<p>Cooperation, Trust, Building self-confidence</p>

<p>Snow Trip (Snow shoeing)</p> <p>Students carry all their supplies (backpack) and snow shoe up steep terrain to the sub alpine in a local Vancouver (Coastal) mountain area. They are required to build snow caves and sleep in these for one night. Other activities include snow studies, and atmospheric studies.</p>	<p>Cooperation, Trust, Building self-confidence and efficacy</p>
<p>Other Activities aimed to foster Group Cohesion</p>	
<p>Description</p>	<p>Goals</p>
<p>Fire Fighter testing protocols</p> <p>The ES 10 2003 cohort oversaw three full days of testing for prospective firefighters for the Vancouver Airport Authority. They conducted physical testing as well as psychomotor ones measuring coordination, decision making and reaction time. This was a unique experience where grade 10 students oversaw large groups of adults. The results of the testing led to the hiring of future fire fighters for the Vancouver Airport Authority.</p>	<p>Cooperation, Communication, Building self-confidence and efficacy</p>
<p>Various Class initiatives (Academic challenges)</p> <p>Students were regularly presented various problems at the start of the day that were connected to an investigation that may have occurred earlier in the week. In small groups, they were assigned different aspects of a larger problem and given a specific time limit to find more about it utilizing all the resources in the local community (local library, school library, school resources, community members, etc.). The groups would then meet back and collectively work together and present their findings.</p>	<p>Cooperation, Communication</p>