

DISCOVERING THE ELEMENTS OF SUCCESS
FOR
OUTDOOR EDUCATION PROGRAMS IN PUBLIC HIGH SCHOOLS

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Abstract

The study reported for this thesis sought to examine the design and process elements that are significant attributes for the successful implementation and sustained operation of programs of outdoor education (OE) in high school settings. A qualitative analysis was made of the results of semi-structured interviews conducted with twelve experienced OE practitioners about their views of the requirements for success in developing, implementing, and sustaining OE programs in high school contexts. The interviews focused on discovering and collating participants' experiences and narratives concerning the factors that they had found to be important to sustaining OE programs in secondary schools. When the interviews were transcribed and collated the study participants described program formats that were important to the successful implementation of OE programs in high school settings with particular emphasis on developing effective relationships with community settings, an understanding of school culture, and effective student recruitment. Time use and scheduling patterns, staffing ratios, and funding for program equipment and student transportation were identified as potential program obstacles. Interviewees also described the personal attitudes, knowledge, and skills that they considered to be important for the success of teachers working in OE programs.

Keywords

Outdoor education; Experiential Education; Environmental Education; Collaboration

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Chapter 1: Introduction

“School-based experiential outdoor education, although often neglected as a part of the curriculum in our current era of high-stakes test-based accountability, is definitely a necessity.” (James & Williams, 2017, p.58)¹

*The realities are these. Those of us who teach environment-related subjects, in various departments, are mostly employed in large organizations that are not wholly supportive or understanding of what we do or why we do it. For the most part we are tolerated—not always and everywhere, mind you, but mostly. We exist as outliers—a curricular out-shed behind the big house where the **really important** stuff happens. David W. Orr.*

Foreword in Jickling, Bob and Sterling, Stephen (Eds.) (2017), p. vii)

Personal Rationale and Context

I had a transformative experience in a Grade 11 outdoor education program in Ontario that has shaped my views of OE for 10 years. I now feel reconnected to the powers and importance of OE through my Masters in Environmental Education and Communication at Royal Roads University. Today, proposals for outdoor education programs (OE) at the high school level may encounter uphill battles to prove their worth in the overall curriculum. Many studies of outdoor education programs report considerable variation in their approaches, structures, outcomes, and effectiveness (Hattie et al., 1997, p.77). My claim is that it would be an improvement to the acceptance and credibility of OE programs if there were clearly defined criteria that could be used to guide the development and implementation of high functioning programs with a greater probability of successful outcomes. Therefore, the goal of this study was to explore the fundamental elements or design features that may make a school-based outdoor program successful. Considering this goal, the proposed research described here sought to discover some of the experiences, methods, and goals viewed by practitioners as important in making high school-based OE programs effective and worthwhile learning experiences. On beginning this study I believed that there were many elements required for an outdoor education program to be successful. Thus, for this research I wanted to collect narratives from teachers working in the field of OE and faculty and

instructors involved in training professionals to activate OE programs in order to discover their insights about starting a new program or sustaining and enhancing an existing OE program.

In an initial review of existing scholarship on outdoor education programs I found that there is some published material on “best practices” in outdoor education, including field trips, and other activities applied in outdoor education programs. There is also theoretical literature concerned with the nature of learning environments and instructional approaches as well as about the general goals and purposes of environmental education. However, I found that there seemed to be a lack of research on practitioners’ views of the essential elements required for OE programs to be successfully implemented and sustained in the organization and school culture of contemporary Canadian High Schools, especially given that these important educational institutions now face multiple demands and changes from a wide range of stakeholders.

Research Questions

General research question.

Goal.

How do experienced practitioners of Outdoor/ Environmental Education describe the major factors that have contributed to their successes in implementing and sustaining OEE programs in the context of high school organizations and curricula?

Sub-Questions.

1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?
2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.

3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.
4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?

Thesis Outline and Structure

The thesis is organized into the following Chapters.

- Chapter 2. Literature Review
- Chapter 3. Research Methods
- Chapter 4. Research Results
- Chapter 5. Discussion of Results and Recommendations
- References
- Appendices

Chapter 2: Literature Review

Delimitation of the Review

The focus of the research conducted for this thesis was an examination of the factors that are seen by practitioners as having significant influences on the development and implementation of successful outdoor education programs offered in the context of public high schools.

Outdoor education (OE) is often described and discussed in the context of programs offered and organized outside the domain of schools and particularly in high schools. Programs that could be included in the realm of outdoor education have been organized by private schools, and non-school-based groups such as the Scouts and Guides, Outward Bound, Mountain Schools, Sea Schools, Nature Centers and summer camps. For the purposes of this review the focus has been on research and theory related to outdoor education programs offered and structured within public high schools and typically taught by credentialed teachers.

The thesis research was focused on a series of interviews conducted with teachers who were directly involved in outdoor education programs offered in public high schools. The teachers recruited for the interviews had designed, developed, and implemented programs that typically

had been successfully offered to a range of students over varying lengths of time and were programs that varied in their styles and structures depending on the overall organization and schedules of their schools.

Given the overall purpose of the thesis and the research approach, this literature review is organized around the following headings.

- Definitions and Descriptions of Outdoor Education and its Relationships within the broad field of Environmental Education
- What Elements of Structure and Organization should be in place to create, implement and sustain an Outdoor Education program as an effective educational experience for students at high school levels?
- What Program Formats are likely to be important to gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents?
- What Attitudes, Knowledge and Skills are viewed by outdoor education teachers as having been important components of their overall preparation, experience and training for their roles in program instruction and operations?

As will be noted below, the field of environmental education is currently an area of active discussion, research and scholarship and is now often connected to concerns about education related to climate change, energy resources and sustainable development. However, given the thesis goals this review is focused on writings and research that address outdoor education, although there will be some discussion of connections to programs being offered and developed in areas of education that are not specifically associated with, or only broadly connected to, outdoor education.

Definitions and Descriptions of Outdoor Education and its Relationships within the broad field of Environmental Education

It should be noted that discussions and debates around the definition and description of environmental education and outdoor education have been long-standing. McBride et al (2013)¹ write that, “Numerous scholars have argued that the terms environmental literacy, ecological

¹ McBride, B.B., Brewer, C.A., Berkowitz, A.R., & Borrie, W.T. (2013). Environmental literacy, ecological literacy, ecoliteracy: What do we mean and how did we get here? *Ecosphere* 4 (5) 67. Retrieved from <http://dx.doi.org/10.1890/ES13-00075.1>

literacy, and Eco literacy have been used in so many different ways and/or are so all-encompassing that they have very little useful meaning.”

Outdoor education, adventure education, experiential education, environmental education, ecological education, and education for sustainable development can be seen as a family of educational programs or curricula that are broadly concerned with how humans perceive and interact with their environments, with an emphasis on nature or natural environments. More recently cultural biodiversity is being considered as an addition to environmental education.

Charles Roth (1968)² is often credited with developing one of the first descriptions of a curriculum for environmental education. Roth wrote, ” Is environmental education the same as conservation education, resource-use education or outdoor education? Yes and No.” (p.2.) He continued stating, “Outdoor education” is a very broad term that is perhaps best summarized in the statement of one of its founders, Dr. L.B. Sharp³.”Outdoor education is teaching outdoors those things which are best taught outdoors while teaching indoors those things best taught there.” Roth extended his discussion of the place of outdoor education in the context of environmental education when he wrote,

“The greatest original push for outdoor education came from the physical education and outdoor recreation people. Much of their field trip and school camping activities has related directly to environmental education. In recent years there has been a great increase in the use of outdoor education methods in academic contexts. Outdoor education is a method. It is an important aspect of environmental education, but it is only one aspect.” (p.3.)

As Roth observed, the field of outdoor education has roots that extend into the late nineteenth and early 20th centuries where it was often associated with outdoor recreation and conservation education, organizations that were not generally viewed as having significant places in the curriculum of schools and were part of extra-curricular or general community programs offered by a range of organizations. However, during the Second World War concerns developed about providing a variety of educational and recreational programming to the families of those who

² Roth, Charles E. Curriculum Overview for Developing Environmentally Literate Citizens. Liberty Council of Schools. Lincoln. Mass. Conservation Education Center. Spons Agency Office of Education <DHEW>. Washington. D.C. Div. of Plans and Supplementary Centers. Pub Date (68)

³ Sharp, L.B. 1943. Outside the Classroom. The Educational Forum, 7(4), 361-368.

were away into the military. Of note here was the work of Lloyd B. Sharp, who discussed the differences between school and non-school programs as noted above. Sharp's proposal as to the differences between school-based and outdoor-based programs has since often been cited as providing a criterion for program design. For example, in their widely used text, *Outdoor Education*, (Smith, Carlson, Donaldson and Masters (1963)⁴ reflected Sharp's distinction.

“Outdoor education is conceived to mean learning in and for the outdoors. ...Outdoor education is a means of curriculum enrichment through experiences in and for the outdoors. It is not a separate discipline with prescribed objectives like science and mathematics – it is simply a learning climate which offers opportunities for direct laboratory experiences in identifying and resolving real life problems, for acquiring skills with which to enjoy a lifetime of creative living for attaining concepts and insights about human and natural resources and for getting us back in touch with those aspects of living where our roots were once firmly established. (p.19).

It is clear here that Smith et al did not propose adding a new item to the school curriculum in a way similar to the offerings of science, math or other subjects. They firmly stated that the most important aspect of outdoor education was that the outdoor environment is “boundless and abundant in material phenomena” that are particularly important for some kinds of learning. (p.21). Further, Smith et al claimed that the skills and attitudes that can be developed through outdoor learning are important parts of a good general education and they were also concerned that people should develop habits and skills that will contribute to the conservation of nature. These habits were claimed to be fostered through learning outdoor sports such as camping, fishing, angling, shooting and hunting. (p.22).

In their textbook Smith et al expressed serious concerns that too many people were not developing outdoor skills and they wrote as a consequence, “Millions of people, many of them without the adequate skills, are surging into the woods and onto the lakes and streams--they crowd into parks, they camp everywhere, they move around the country in search of adventure and relief from crowded areas.” Smith et al estimated that “by the year 2000 there would be ten

⁴ Smith, Julian W. Carlson, Reynold E. Donaldson, George W, Masters Hugh B. *Outdoor Education*. 1963. Englewood Cliffs NJ. Prentice-Hall.

times as many people as there are now participating in outdoor activities.” (p.22.) They could not have anticipated the future directions and growth of post pandemic recreational activities or the frequent reports of people getting lost in wilderness areas, leaving campfires untended, and the demands to use gas-powered quad vehicles and large RVs as substitutes for hiking on foot, tent camping or staying in rural cottages or huts. Nor could they anticipate large numbers of people trying to book camp spaces months in advance, not to mention large amounts of junk and trash being left in forests, fields, lakes and along seashores.

Later writers continued to discuss the nature of outdoor education and its position as a component of a general education and an important element of learning environments. Simon Priest ⁵, an authority in Adventure Education, noted that Outdoor Education could be Simon Priest ⁶, an authority in Adventure Education, noted that Outdoor Education could be described as a place (natural environment), a subject (ecological processes), and a reason for learning (resources stewardship). He claimed that OE could also be considered a method (experiential), a process (sensory), and a topic (learning about relationships). Priest defined outdoor education as “an experiential method of learning with the use of all senses that took place primarily through exposure to natural environments and as placing emphasis on relationships between humans and natural resources. He claimed that OE included environmental education and adventure education. (p.113.)

In a 2011 publication Smith and Knapp proposed that outdoor education and environmental education were separate but closely related educational movements. They also claimed that during the 60s and 70s critics of environmental education accused educators of simply renaming their outdoor science, nature study, or outdoor education programs by adopting the term “environmental education” to modernise their program contents. Smith and Knapp also proposed that while EE and OE do overlap, outdoor education can be applied to any discipline that can be learned and taught outside. They also commented that both OE and EE are offered mainly through schools, nature centers and outdoor residential facilities where priority is placed on

⁵ Priest, Simon. The Semantics of Adventure Education. In Miles, John and Priest Simon, Adventure Education. 1990. State College PA. Venture Publishing.

contextual, direct, and unmediated experiences and where students are encouraged to use a variety of senses in exploring the content as a means to maximize their active engagement and learning (p.83).

As can be seen in the above brief summary of some descriptions of OE, there is fairly general agreement that outdoor education can be viewed as a method, approach, or style of education, rather than as a specific body of content or a discipline like science, mathematics, or history. As a method or approach outdoor education focuses on the learner, on the learners' primary and direct experiences, and invites the application of all the senses. Outdoor education is typically seen as taking place through exposure to natural environments, although constructed or built environments can also be included and outdoor education may take place indoors through trip preparation. The emphasis of OE is on the relationships between people and their environments—whether built or born (an idea reflected in the writing of the American poet E.E. Cummings⁷, who stated that there was a world of difference between the built and the born).

In 2009 the North American Association for Environmental Education (NAAEE) issued a publication *Environmental Education Materials: Guidelines for Excellence* as part of the NAAEE's National Project for Excellence in Environmental Education.⁸ That publication makes the claim that "Environmental Education is good education." (p.8.) Further, the document states, "...the goal of environmental education is to develop an environmentally literate citizenry." This statement can be directly compared to the writings by Charles Roth in 1968.

The NAAEE document also outlines how environmental education should be conducted.

Through comprehensive, cohesive programs, learners explore how feelings, experiences, attitudes, and perceptions influence environmental issues. They become knowledgeable about natural processes and systems and gain an understanding of human processes and systems. Learners are able to investigate and analyze environmental problems and issues using a variety of techniques. They also use basic science and math skills and explore the nature of bias. They develop a sense of their rights and responsibilities as citizens, are able to understand the ideals, principles, and practices of citizenship in our democratic republic, and they gain the skills necessary for citizenship (p.8).

⁷ E. E. Cummings (2006) Catherine Reef, Houghton Mifflin Harcourt.

⁸ *Environmental Education Materials Guidelines for Excellence*. (2009). North American Association for Environmental Education, Washington, DC.

It is notable that this description places emphasis on basic science and math, as well as on the attributes of effective citizenship and the development of character.

While descriptions of outdoor education place emphasis on experience—the direct experiences of learners-- John Dewey, an important philosopher of learning and curriculum, commented critically that the notion that all genuine education comes about through experience does not mean all experiences are genuinely or equally educational. Further, Dewey claimed that some experiences may be mis-educational and that mis-educational experiences were those that have the effect of arresting or distorting the growth of further experience.⁹

The discussion of the nature of outdoor education the differences between it and other environment and experienced-related programs is continuing. It was my intention in this section to provide a brief overview of some of the definitions and descriptions made by authors whose works are often cited.

What conditions of school structure and organization are important factors in the successful offering of educationally effective high school outdoor education programs?

While outdoor education programs have deep roots in the offerings of organizations outside formal public schools, OE is now often found as an offering by public high schools as well as by private schools and other agencies. In some cases public school-based OE programs are promoted or advertised to parents and potential students while other schools do not list outdoor education projects among their regular curricula. It is useful to question why some schools are firm supporters of outdoor education experiences and programs as part of their overall offerings, while others are not interested or supportive.

Schools, especially large enrolment urban public high schools, are complex organizations that reflect the influences of many different stakeholders—parents, teachers, school administrators, school boards, and the general community. In this thesis the focus is on public

⁹ Dewey, John. 1963. Learning and Experience. NY. The Macmillan Co.

high schools, but the program offerings of public and private schools may be shaped by funders or patrons as well as by parents and school alumni.

Environmental education and outdoor education have been described as challenging many of the assumptions of contemporary curriculum and the roles and purposes of schools. (O’Sullivan, 1999¹⁰ Jickling & Sterling, (2017)¹¹). The patterns of scheduling and the distribution of students and teachers, as well as resources of time space and equipment among different curriculum subjects might be seen as reflecting the operations of industrial era factories, farms, and businesses.¹² This claim was included in a controversial report from the Educational Commission of the States titled, *Prisoners of Time* (1994). The Report was revised and re-issued in 2005 and is still often cited in discussions of how schools are organized and curriculum structured. In the original Report the Commission argued that while standards must be held constant, time can vary. It would seem logical that as higher aspirations are held for all children, we would be willing to battle traditional structures and practices. “Students’ lives have changed. They live in a digital world. They use the Internet, cell phones and other digital devices to access information and to accelerate communication. For them, time is a resource, not a barrier. We call not only for more learning time, but for all time to be used in new and better ways.” (p.2).

Of direct relevance to outdoor education and similar program innovations, the Report stated,

“A bright spot in the creative use of time is the development of “after-school” or “out-of- school” programs and activities. These programs, in addition to providing safe havens and healthy places for children, contribute to student achievement in unique ways. The many hours spent in after-school and out-of-school activities provide teaching and learning opportunities that often complement and enrich school- day instruction.” (p.2).

If environmental and outdoor education programs intend to invite students to re-examine human-environment interactions and consider possible changes in the nature of those

¹⁰ O’Sullivan, Edmund, 1999. *Transformative Learning. Educational Vision for the 21st Century.* London. Zed Books.

¹¹ Jickling, Bob and Sterling, Stephen. 2017. *Post-Sustainability and Environmental Education. Remaking Education for the Future.* Cham, Switzerland. Palgrave Macmillan.

¹² *Prisoners of Time.* 1994. (2005 Reprint). The Education Commission of the States Education Reform Reprint Series. (<https://files.eric.ed.gov/fulltext/ED489343.pdf>).

interactions, then we might ask how school physical structures, organizations and program offerings could be changed to support environmental and outdoor education.

The *Guidelines for Excellence* document from the NAAEE offers advice to “educators, administrators, curriculum designers or materials developers” in the evaluation of the quality of EE materials. (p.10). The document claims that it provides direction while allowing flexibility to shape content, technique and other aspects of instruction. (p.10)

For this thesis interviews were conducted with outdoor education teachers who were invited to describe elements of school structure and organization that they considered to either be assets or obstacles to their activities in outdoor education or other environment-related school projects and programs. The results of the interviews are presented in Chapter 4 and discussed in Chapter 5.

What outdoor education program formats have been found to contribute to success in attracting students, meeting curriculum requirements and the expectations of stakeholders?

There is a considerable diversity to be found in descriptions of specific formats for school-based outdoor education programs. This section of the review provides a brief sample of some representative pioneers or pace-setters in the development of programs of outdoor education.

An early pioneer and advocate for nature study as a component of school programs was Anna Botsford Comstock (1854-1930). She is described as having developed nature study materials for use by elementary school teachers. Her major text was *Handbook of Nature Study* (1911)¹³. The 930 page *Handbook* was a compilation of nature studies that she and others had developed. Botsford put considerable effort into convincing teachers and school administrators of the value of nature study and was a pioneer in putting into writing and distributing the concept of students “exploring their place and using direct experience to make meaning of the world around them.” She was also committed to the principle that the time to study any living thing is when you chance to find it. (1904, p.57.) In her view each lesson should be taught independently as the opportunity arises to make observations in nature rather than as a part of a planned and structured series of lessons. Comstock also held to the principle that learners should be actively engaged in

¹³ Comstock, A.B. 1910. *Handbook of Nature Study* (24th Ed.) Ithaca, NY. Comstock Publishing.

posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, and constructing meaning. (p.102) ¹⁴

She also spoke about the value of nature study to teachers' meetings throughout the state of New York and at universities in New York, Virginia and California and even developed a correspondence course for teachers. Comstock made a path for others to follow. "She focused on what was wanted and needed in the contexts of the time" (p.105). Certainly many of Comstock's principles could still be assigned and seen in some current program offerings.¹⁵

Another person who can be seen as having an influence on the formats of programs and experiences in outdoor education was Maria Montessori.¹⁶ Montessori's ideas about the teaching and learning of children continue to be influential among educators across various curriculum and subject areas. Among her core principles was the concept that children have an inherent desire to learn and that on their own they are capable of accumulating an incredible amount of information and wisdom about their natural surroundings. Montessori also had an important influence on how classrooms should be designed and activated and she proposed that the school environment should include the use of nature. Further, she advocated that children should be encouraged to make decisions and be allowed to engage in their work without interruption while stating that character development involved children learning to take care of themselves and their environments. Montessori believed that the learning environment was just as important as the learning itself. She was also a firm advocate of the importance of hands-on activity and learning by doing and believed that the learning environment should support social development. It has been argued that Montessori's work influenced others who were important in the areas of experiential learning, including John Dewey.

Other writers have also commented on the need to rethink the domination of school classrooms and school buildings in general on the learning experiences of students. In 1970 a

¹⁴ Anna Botsford Comstock. Beyond science—Learning about self and nature through field experience. Woodhouse, Janice L. and Christopher D.Wells. pp.100-107. In Smith T.E. and Knapp, C.E. 2011. Sourcebook of Experiential Education, NY. Routledge.

¹⁵ Woodhouse, Janice L. and Christopher D.Wells. pp.100-107. In Smith T.E. and Knapp, C.E. 2011. Sourcebook of Experiential Education, NY. Routledge.

¹⁶ Swiderski, Michael J. (2011). Maria Montessori. Founding Mother of Experiential Education. in Smith T.E. and Knapp, C.E. 2011. Sourcebook of Experiential Education, NY. Routledge. (p.197.)

representative from the Ford Foundation reported to the US Senate Committee on The Environmental Education Act in which he stated

...the schools present a very special environment which is different from that of the community and quite separate from the life that surrounds them. This separation is pervasive throughout the school experience. Children learn about the environment of their community from being in it, and from their experience in it. In schools they learn about school environment and how to survive in that special setting.

Several writers have commented on the need to focus the development of outdoor and environmental education on a reconsideration of the physical environment of school grounds and the local urban community. In *The Environmental Classroom*, Hawkins and Vinton note that environmental learning can be extended into the students' own neighbourhoods and onto the larger community. The following comment illustrates this shift in thinking.

A schoolyard that initially exhibits features as ordinary as those of a lemon can also become a unique and varied environment to learners trained to use all their senses in perceiving their surroundings. A deep hole in the ground turns into a soil laboratory from which texture, content, depth, and acidity can be determined. A hill of dirt only two feet high reveals erosion processes. Rocks and plants lend themselves to a variety of investigative activities. Trees, shrubs, plants, water areas from streams to puddles. Paving and animal habitats disclose ecological principles. Even cracks in the sidewalk can be studied for plant and animal life. Seasonal changes, and effects on nearby areas and patterns development. (p.40).¹⁷

Hawkins and Vinton give as an example a program in Bellevue, Washington which uses their community for an integrated multidisciplinary approach to environmental learning while studying the physical and geographical features of the city. Students also learn about its human resources and the Bellevue schools find "teachers" in the thousands of persons who run the various enterprises facilities and resources of the community. The architecture, industrial parks, libraries, businesses, natural areas, and museums help to comprise the other classroom for learning. (p.44.)

¹⁷ Hawkins, Donald E. and Vinton, Dennis A. 1973. *The Environmental Classroom*. Toronto. ON. Prentice-Hall. p.40.

What attitudes, knowledge and skills are viewed by teachers as being important elements of experience and training for those involved in school-based outdoor education programs?

In an address to a 1970 conference held for BC teachers on outdoor and environmental education John Kirk described outdoor education during the early 20th century as seen as being very directly concerned with outdoor recreation. For example Kirk claimed that L.B. Sharp proposed that emphasis in outdoor education should be placed on teaching and learning outdoor living skills such as learning to cook, to build shelters, and accomplish other campcraft activities. Kirk also proposed that Sharp's thesis was that freeing students from the confines of the classroom would foster self-assurance, competence, and the abilities to relate better to their classmates, teachers, and other people in general.¹⁸

Julian Smith, whose text on outdoor education has been mentioned above, saw outdoor education as being education IN the outdoors and FOR the outdoors with an emphasis on the development of recreational skills such as archery, riflery, fly-casting, fishing, boating and canoeing. Both Sharp and Smith emphasized five day resident experiences in wilderness or semi-wilderness settings as being essential components of outdoor education programs with students in Grades 5 and 6.¹⁹

In his 1970 Conference Address also Kirk proposed that the period from 1940-1950 could be described as the Recreation Period of Outdoor Education while the period from 1950-1960 should be referred to as the Curriculum Period, in which all subjects could be taught in the outdoors, with a focus on improved assimilation of the curriculum content by students—a process of curriculum enrichment. Kirk saw the Curriculum Period as one in which Outdoor Education became a PROCESS, with camping and recreational skills being replaced by outdoor laboratories that were often operated on the school grounds.

¹⁸ Kirk, John J. Values and Current Trends in Outdoor Education. Keynote Address delivered by Dr. John J. Kirk at Educational Change—What about the Outdoors, a Conference on Outdoor Education and Recreation, Vancouver BC, October 23, 1970.

¹⁹ Smith, J.W., Carlson, Reynold E., Carlson, G.W. and Masters, H.B. Outdoor Education, 1963. Englewood Cliffs, N.J. Prentice -Hall.

In his conference address Kirk²⁰ proposed that in the 1960s there was a shift towards a focus on human misuse of the natural environment and on helping students of all ages better understand their role and place in the spectrum of living things. Outdoor education was seen as a most effective vehicle for accomplishing these goals and as a result outdoor education programs began to reflect an emphasis on attitude formation in conservation with the focus on Land Management and Land Use. Kirk described the shift in emphasis in outdoor education from recreation towards viewing outdoor education as cultivating a reverence for life through an ecological exploration of the interdependence of all living things and as fostering the development of a land ethic in students. The term land ethic is often related to the works of Aldo Leopold, and in particular to his classic, *A Sand County Almanac*.²¹ For Leopold the emphasis should be on teaching students to see the land, to understand what they see, and enjoy what they see. Leopold termed such an approach as teaching land ecology, a process that involved putting the arts and sciences together for the purpose of understanding the environment (p.118).²² Kirk described this as an approach that views outdoor education as a method that cultivates a reverence for life through an ecological exploration of the interdependence of all living things. Further, Kirk claimed that “the reverence for life concept when properly demonstrated enables the student to see himself quite differently and to see more clearly the “kindship we share with all other life forms and begin to realize that that if any of these other life forms, even the tiniest microscopic animal found in a pond or stream is adversely affected or destroyed, then the quality of all life is proportionately diminished.”

What attitudes, knowledge and skills are viewed by teachers as being important elements of experience and training for those involved in school-based outdoor education programs?

The writers and practitioners whose ideas have been briefly described in this review also often made comments and recommendations concerning the need for teachers involved in outdoor education to develop a set of skills and attitudes that will contribute to effective educational

²⁰ Keynote Address delivered by Dr. John J. Kirk at Educational Change—what about the Outdoors, a Conference on Outdoor Education and Recreation, Vancouver BC, October 23, 1970.

²¹ Leopold, A. (1966). *A Sand County Almanac: With Essays from Round River*. New York. Sierra Club/Ballantine.

²² Simpson, Steven. Aldo Leopold. *Teaching in the Spirit of the Land Ethic*. In pps 117-123. In Smith, T.E. and Knapp, C.E. 2011. *Sourcebook of Experiential Education*. Key Thinkers and their Contributions. NY. Routledge.

experiences on the part of the students. In an analysis of Aldo Leopold's *Sand County Almanac* Simpson found that Leopold was a strong believer that enjoyment, playfulness and fun should be integral parts of learning experiences. Simpson cites Newton (2006) as quoting a letter from Leopold to a friend in which he states, "What young people need most is not buildings or tracts to facilitate their contact with nature, but those inner qualities which enable them to enjoy nature wherever they go" (p.267).²³

As has been noted many outdoor education programs place focus on a range of student experiences in a variety of natural settings and conditions. In the early recreational phase of outdoor education the focus was often on developing students' recreational skills in areas such as fishing, hunting, cooking, shelter-building, etc. In this phase many programs were actually taught and directed by expert consultants who did the actual teaching and skill development while classroom teachers observed or maintained basic order. As greater emphasis began to be placed on outdoor education as a means to developing greater understanding of and value for human-environment connections and dependencies, teachers needed to develop their abilities to foster and sustain consideration and understanding of values and diverse cultural perspectives as well as needing basic knowledge of methodologies in observation, data gathering, measurement, and recording along with skills in values clarification, collaboration, team-building and conflict resolution. In effect, teachers needed to acquire the attitudes and abilities of reflective practice, along with practical skills in safe outdoor travel and navigation. Teachers are now also challenged to address the needs of an increasingly diverse student body and to include the perspectives and knowledge of indigenous peoples along with a range of socio-cultural beliefs and behaviours in their program experiences.

Summary

This review reveals that educational programs in outdoor education can be viewed as needing to integrate a range of curriculum content, across a number of disciplines and subjects, with a range of learning experiences and in variety of settings and schedules. It is not easy for an individual teacher to have the educational preparation and personal experiences needed to address these expectations—reality that suggests the need for outdoor education programs to involve teaching teams in which the members bring a range of skills and styles into the learning

²³ Newton, J.L. (2006). Aldo Leopold's odyssey: Rediscovering the author of *A Sand County Almanac*. Washington, DC. Island Press.

environment. A great many schools, especially high schools, are still organized on the model of an individual teacher working with a single class often within tightly compartmentalized content and schedule. The challenges presented by attempting to offer effective outdoor education in a conventional school environment will be explored through the interviews conducted in this thesis with experienced teachers who are dedicated to providing effective and educationally valid learning experiences to high school students.

Chapter 3: Research Methods

Introduction and Overview

The research described for this thesis employed a qualitative approach through involving semi-structured interviews with teachers who had extensive experience in implementing and sustaining programs of environmental and outdoor education in high school contexts. The use of an interview method was intended to enable immersion in the cultural and contextual field of OE and add “participant voice and collection of themes” (Suter, 2012, p.369) to the development of an understanding of the current state of OE programs in public high schools. The interviews were examined for recurring themes as well as unique elements that may be found in OE programs that are currently in operation. In the Analysis phase, I intended to study what people actually reported to be doing, as well as what was in their minds as possibilities or future goals (Silverman, 2017). A systematic analysis of themes and rigorous analysis of the sequences seen across the interviews was central to the review of the data collected during the semi-structured interviews. The interview format was intended to allow me to take a journalistic approach to the research topic.

In this thesis my approach to the research method was to listen and learn from the participants’ stories (narrative inquiry), and also to take an investigative, journalistic approach. As I analyzed and learned from the OE educators’ experiences, I attempted to prioritize and select areas of significance from the interview contents. My definition of significance was to seek participants’ descriptions of what made an OE program successful based on the longevity of the program and a positive culture of support for the program and its continuation.

Lacy Marvette (2017) a professor in narrative inquiry, explains that “Narrative inquiry is about how the participants tells and understand their experiences and how society, culture, and institutions shape those experiences” (p.1). In my analysis and search to develop understanding, I looked into the extra pieces that shaped each story while considering that each successful school OE program exists in a different culture, institution, and circumstance. The context of a narrative is important for a researcher in their re-telling of the story (Clandinin & Connelly, 1999). My analysis of the interviews sought to uncover some themes and structures that were viewed as being significant for successful OE programming in high schools.

Research Design

Step 1.

This step involved the identification of current or recent programs in high school level OE. The data for this step came from publications such as research journals, professional journals, reports in local media and through contacts with current practitioners or administrators and recommendations made by my faculty supervisor. My supervisor’s recommendations were based on his network of contacts with OE teachers who had been enrolled for EE graduate studies at universities in British Columbia and Alberta.

Step 2.

In this step, I made contact with persons identified in Step 1 as having been involved in high-school or post-secondary level OE programs with a focus on programs that have been successfully implemented and sustained over time and/or are currently active. My contact was made in the form of an email or online contact in which I provided my potential interviewees with a description of my research goals and process and invited them to indicate if they were willing to participate in my study. I followed up with those who indicated willingness to participate by sending them detailed Project Information and a participant Consent Form (Appendix A and B). I then set up times and dates for computer-based interviews to be conducted via Zoom™ or by telephone. The research design used semi structured interviews to gain insight through the OE professionals' descriptions of their experiences and any learnings they had gained from those experiences.

Step 3. Interviews.

In this step, I conducted semi-structured interviews that were intended to allow the unfolding of participants' advice and their accounts for successes and possible challenges in high school outdoor education programming. (Describe how you made the recordings and how you transcribed the recordings into text.) I then collated and analyzed the interview transcripts. The participants were also sent transcripts or summaries of their interviews so that they could make any changes or additions. The Interview Topics are listed below in Table XX. In this step I conducted semi-structured interviews that were intended to allow participants to provide their narrative and advice concerning the factors that are important contributors to success in OE programming in the high school context.

Step 4. Development a Draft of the Research Findings.

In this Step I used the information from Steps 1-3 to develop a working draft of the research findings. Chapter 4 describes the results from my analysis of the interviews.

Potential Ethical Issues and Permissions

Writing about the faults, successes and inner workings of a school program can have significant ethical impacts. The interviews, although semi-structured and conversational, were guided and respectful. The participants were contacted by email or phone, and the purposes of the project and their involvement was outlined. Those who agreed to participate were then sent a detailed Project Description and a Consent Form. (Copies in Appendix A). The Consent Form secured permissions for each interview and confirmed that the identity of the interviewee would be strictly protected. I maintained the anonymity of those interviewed by assigning interviewees with alias names. The names of any schools, institutions and programs that were mentioned in the interviews were also protected by aliases. Any references to particular persons who were mentioned during the interviews were removed from the interview transcripts. My intent in this research was to find solutions, ideas and ways to implement, sustain, and improve high school-based OE programs. It was not my intention to use the interviews as a form of evaluation of any specific program. Before any contact was made with potential participants or any interviews were conducted the research proposal was evaluated and approved by the Research Ethics Committee of Royal Roads University.

Project Participants

Grouping.

Prior to beginning with any interviews I had planned to group the participants into two main categories with Group 1 being faculty or instructors at college or university levels who were involved in professional teacher education with an emphasis on students interested in Outdoor Education.

Group 1. Pre or In-service Teacher Professional Education.

In developing my plan for this thesis I was intrigued by a program called Educational Leadership with a focus in Outdoor Education offered at St. Francis Xavier (SFTX) University in Nova Scotia. The program involves students in a Masters Degree program on how to design and implement a successful outdoor education program. I hoped to compare or contrast the SFTX program with other post-secondary Outdoor Education focussed programs such as those offered at Royal Roads, Simon Fraser, and Lakehead Universities. However, I was unable to arrange interviews with the people at SFTX. However, three of the interview participants were involved in professional level teacher education in the area of outdoor education.

Group 2. Teachers currently involved in Outdoor Education programming at the High School Level.

The interviewees who agreed to participate in this study were practitioners who were actively doing the work of outdoor education programming at the high school level or had considerable personal experience in such programming. I wanted to find people who were presently working in outdoor education programs, preferably including people who had initiated and developed programs still running today or that had operated over a considerable time period (several years).

Instrumentation/ data collection.

I used the Zoom™ video conferencing platform for interviews. I chose Zoom™ because it was easy to use for audio recording and saving. Because the interviews were in both audio and visual formats I was able to establish a more personal contact since I could see the participants and they could see me. I used Zoom™ for all interviews including those interviews that were in-person. There was one interview that wouldn't allow a good connection on zoom and so a phone call audio recording was necessary for half of the allotted time. Once the interviews were completed, I reviewed the record of each interview and then sent transcripts and summaries of major points to the participants so they could make

any additions or corrections and ensure that I had not overlooked any of their major ideas. The transcribing phase was rigorous and detailed by listening using voice to text and then fixing any misheard words. I would often listen and re-listen to ensure accuracy, but this method allowed me to live the words, text, ideas and circumstances of each participant. For example, the emotions of fatigue, or busyness of a participant was felt in several interviews. These extra steps in the communication with participants helped to ensure credible and valid representation of their views. I then reviewed the responses by each participant to the basic interview topics and looked for emergent stories and themes about program implementation and success factors. I looked in particular for key elements proposed as important to successful program implementation with particular references to the high school environment. I then reviewed the interviews to identify any success factors that were identified across a number of interviews.

Interview Formats.

I began each interview with a personal introduction and with a short reminder to the participant about their Informed Consent agreement.

Personal introduction and research context.

To begin our interview I would like to offer a brief description of my personal context in undertaking this research project. I am currently working in a High School in South Calgary that will be cutting the outdoor education program by the end of June this year after 7 years of being offered. I do not feel like I had a chance to save this program in the year and a half that I have been on the staff of the school. I had a successful program running at the junior high school level (gr.7-9), a program that is still doing well today along with programs at a handful of other junior and middle high schools in Calgary. As a result of this experience my research question has become what conditions are required to start and maintain a successful outdoor education program at the high school level, given structure and culture of public high school settings, including the expectations of students, colleagues, and parents?

I invited you to participate in this interview because you have considerable experience in offering a high school-based experiential program of outdoor and environmental education and I am seeking to understand and learn from your work. By signing a Letter of Consent, you have agreed to participate in this research and I would like to emphasize here also that you are completely free not to discuss any of the topics in this interview, or to stop participating at any time and leave the session. I appreciate your willingness to participate.

Interview questions and topics.

- 1. What would you say are the essential or characteristic elements you included in your outdoor education program, that is, the things that made your program what it is or was? Why do you believe these are significant features of your program's design? What do you believe are essential requirements for success in starting up a program in a high school setting?*
- 2. What is required in the formatting of an OE program that will likely allow its success and sustainability? Specifically, how should one arrange or set up a high school-based program?*
- 3. What attitude, knowledge and skills are required of a teacher for success working in an OE learning environment? What parts of your previous education or life experiences do you regard as being most important for your work in OE?*
- 4. What support networks are required to build and sustain an OE program?*
- 5. How do you think OE programs can mesh with traditional school systems and the current organization of high school learning? Where do you see OE fitting in with curriculum, assessments, preparation for post-graduation university or college/career programs and the structures of high school settings?*
- 6. What do you believe are the unique essentials to a successful OE program? For example, what learning experiences or design features should be included in a program in order for it to be sustained over time and change?*
- 7. What are particular challenges that you need to pay attention to in offering an OE/EE program in a high school setting? What things would you advise me to pay attention to in launching and maintaining an OE program in a public high school?*
- 8. In my experience so far, I feel like there is some kind of magic in OE programs that makes them worthwhile and loved by participants and stakeholders. Are there aspects of your program that contribute its "magic"?*
- 9. What have you experienced as the most important barriers to implementing and sustaining your high school-based OE program? Do you have any suggestions about how you might have removed or reduced these barriers?*

Please feel free to add any topics or advice that you feel we have not discussed in this interview so far. Thanks very much for your contribution and advice. As previously indicated, I will send you a transcript or summary of our conversation so that you can review it and make any corrections or additions.

It should be noted that I tried to develop a conversational tone in the interviews and allow the interviewees to inject topics that were of importance to them and also allowed them to modify the schedule that I had planned while still attempting to eventually cover the questions and topics listed above.

Chapter 4: Interview Results

Introduction and Research Questions

A major goal of this thesis was to discover the characteristics of programs of outdoor and environmental education that had been successfully implemented and sustained in the context of public high schools with a view to discovering whether these programs shared common characteristics. The research method involved interviewing the teachers who had been directly involved in establishing and operating these programs in order to collect their stories and gather advice they might have to offer about factors that contributed to their successes in running a high school OE/EE program.

As stated in Chapter 1, the research for this thesis was framed by a general research question and several sub-questions. The General Research Question was stated as:

How do experienced practitioners of Outdoor/ Environmental Education describe the major factors that have contributed to their successes in implementing and sustaining OEE programs in the context of high school organizations and curricula?

The general question was extended by four sub-questions.

1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?
2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.

3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.
4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?

The methods used in conducting the interviews, transcribing the interview results and collating the interview data are described in Chapter 3. After conducting and transcribing the interviews several common themes were identified. The following sections provide details about the common themes as they were described and discussed in the interview conversations. Note: in the following sections the interviewees are identified by their assigned pseudonyms which are formatted in italics. Table 5.1 in Chapter 5 was designed to summarize the major components that were described during the interviews as being needed to establish and maintain a successful OE program. Appendix 1 summarises the transcripts made from the Interviews.

Themes Emergent from the Teacher Interviews

Community support.

Based on my interviews with several teachers who have operated successful OE programs it became clear that a teacher cannot carry the weight of an OE program on their own and that it is imperative that an OE program have community support. Community support was seen by these teachers as being a fundamental component in running and sustaining a high school-based OE program and that community support might include be derived from administrators, teachers, parents, students, and district level policy makers. Further, interviewees stated that it was important that an OE program's facilitator/teacher be supported by other stakeholders who also viewed the program as a valuable non-traditional form of educational experience. (All twelve of the expert teachers who were interviewed expressed the need for general support from communities and colleagues to be important for program success. This view is evident in *The Travelling Son's* statement.

...You are never going to be able to do it all by yourself, so it is about finding the people around you, in both your school and community, that can support you. You need to cater to the appetite of the community for the type of program you're trying to run.

During his interview the *Humble Innovator* claimed that they were "...not ready to start a program until ... there was a build up of support within the community from

teachers, parents, students, administrators” and stated further that the whole village had to be onboard sharing the desire to build a great OE learning experience for as many kids as possible. The *Humble Innovator* added that, “just having another person to lean on can really help you push forward and gain more experience. Once the programs were being offered to the youth, it just took off and people wanted more.”

These statements clearly make a case that without the support of the community failure is very likely or inevitable.

The importance of program funding.

When asked about the barriers to outdoor education, participant *Max Cadence* stated emphatically, “Funding, end of story!” As noted above, while community support for a program is imperative, this support needs to be shown through funding. *Max Cadence* further stated that while supporters can say they believe in and support a program, they also need to “walk the talk”. Based on various interviews it became clear that funding can be achieved through donations of money, gear, and/or buses, and also from grants, fundraising activities, contributions from foundations or program fees (if school or district policies will allow the charging of student fees. The interview participants generally agreed that the biggest expenses are for transportation, equipment, support from expert guides, and are a result of the costs of operating with a lower ratio of students to teachers. Based on his years of experience participant *Biophilic Salamander* noted that the need for finances can be a recurrent threat to a program. To address this issue *Biophilic Salamander* described creating a personal, non-profit foundation as a way of finding financial endowments to keep his program up and running. He claimed that after about 3 to 5 years with the support of a successful foundation, a program could become self-supporting.

Participant *Oliver E. Coach* also spoke about the financial struggles faced by his program and noted that making people aware of his needs and asking for donations or even contributions in kind from used clothing stores, had been helpful at times. The interviews generally found that funding is a crucial factor in the development and operation of OE programs and must be thought through and planned for. Participant *Fortunate Free Spirit* stated that while her job was teaching, a huge additional part of her work was fundraising. For example she described running an open lot during the month of December to sell Christmas Trees. She also emphasized the low

student/teacher ratio and need for staff time to plan and prepare for fieldwork as important factors in her program.

Meaningful field experiences.

The interview participants were in general agreement that an OE program must be structured to contain a minimum of two meaningful field experiences. Interviewees also claimed that extended field experiences may entail substantial amounts of time away from students' home cities, as well as from cell phones and classroom structures. Further, these experiences may present new challenges, provide time for bonding, create powerful memories, build self-awareness and support the development of teams. When she talked about the "magic" of OE programming participant *Pathways Beginning* described extended field experiences as being required for program success and noted that "the misery days are the memory days". She claimed that challenging experiences are highly important and legitimate components of OE programming. Every interviewee had a story that was an account of the real, relevant, character-building learning that happens as students have time away together to make deeper connections. Participant *Carpe Diem* made further points about the importance of extended field experiences when he stated that they are crucial, must be well planned and to use every moment. He also claimed that including challenges in field experiences made a trip that much more worthwhile and added that teachers shouldn't just focus on booking a means of travel and should consider the entire time spent in travel as having the potential to be used in meaningful and creative ways.

Max Cadence's program began with a trip to see a local volcano as a day outing. He stated that this trip started the curiosity and connection of students with the land and peaked their interest to learn more and do more outdoor experiences in their learning. In addition, *Project Wizard* reflected on a key trip to the mountains that acted as a hook to get students signed up for his program. His trip to a place where he grew up and knew a lot about acted as a place for students to connect with his outdoor passion and find their own drive to take his outdoor program. It becomes word-of-mouth in the school and the new students can anticipate their chance to experience that field trip.

The importance of developing interpersonal relationships.

In this study the interviewees emphasized that developing interpersonal relationships should be at the core of all outdoor education programs. The group dynamics, communications,

relationships, and the family-type atmosphere of an OE program can provide the foundation for success of the entire program and a basis for each student getting the most out of a program. Participant *Pathways Beginning* referred to planning a program that placed learning curriculum course content at the forefront to be a big mistake. She claimed that while course curriculum objectives can be addressed this should never be done at a cost to the development of processes of teamwork and group building. All the interviewees claimed here that the “magic” in an OE program was a result of the social learning, personal development and character growth that came from the relationships that students develop with each another and the teachers. The *Travelling Son* clearly expressed this view when he stated, “...developing a sense of community among the kids is a really important place to start” and that “...academics can wait, you need to get the group functioning first.”

Preparation and planning.

Several of the interviewees stated that being ready to engage in some professional debates is a necessary way of thinking for a teacher who is preparing to undertake OE programming. Several participants spoke about the battles that may come up during program planning and development. For example, *Fortunate Free Spirit* spoke about some changes that put her program at risk, with particular mention of teacher/student ratios becoming unsustainable within the budgeting process. *Biophilic Salamander* stated that things change almost every decade, and you need to be prepared to first convince and later to re-convince stakeholders about the worth of a program. *Biophilic Salamander* also noted that he had to go to the School District with a plan for the fight that he expected to have in order to even maintain a program that clearly had momentum and longevity after being on-going for 10, 20, and even 30 years.

Despite high profile persons like Greta Thurnberg pushing the need for system level changes, an OE program that is different from traditional approaches to learning must not only gain additional support, but maintain that support by constantly sharing program successes and reporting the benefits of immersive and relevant learning experiences. Further, a program needs to be consistently well represented by the students, staff, and local media outlets. Participant *Shutumin Sapin Spirit Hawk* reiterated the point about the need to maintain program legitimacy by stating, “I think that environmental education, by nature, lives outside of what is perceived to be part of the standard processes and practices” and that OE needs to be noted for its worth and importance in a culture and community. *Pathways Beginning* reiterated the importance of the

program being represented through the students' voices and by awareness of how they must behave and act in order to represent the program effectively.

Preparation and planning are essential to success in starting and maintaining an OE program. All interview participants referred to the sort of background research that was required to ensure that they were ready to launch a program. Participant *Pathways Beginning* cited using literature and research on the nature of learning and education to support her proposal and to back up her planned programming. *Max Cadence* spent a lot of time getting to understand the community and to know their interests in and need or want for outdoor learning. *Humble Innovator* invested time in Professional Development opportunities and presentations at Admin meetings in order to share ideas about OE and experiential learning. In addition he noted that the time spent was a great way to gain connections with all of the people who are needed to support and invest in an OE program.

The interview participants also indicated the value of doing research about the needs of their school colleagues in order to discover the people who are onboard with support for outdoor programming. These comments indicate that research and preparatory work can shape the way a program begins and over time can support the way it is maintained, gains momentum and finds success.

Time as an overarching theme.

The interview results clearly indicated that available time was viewed as an essential element for OE program development and operations. To be successful an OE program requires blocks of time scheduled to that provide freedom for the magic of OE programming to take shape: time to move through activities, time for field experiences, and time for participants to connect with each other and to nature. Often programs fail because there isn't enough time allotted and bells ringing to change classes and outside commitments become dominant, in a downward spiral. All the interviewees made claims about the need for administrators to support and develop timetable structures that allowed sufficient time for the building of group dynamics and meaningful field experiences. When interviewees were asked what makes a program "magical", they came back to the need to have the time available to create, innovate and make meaningful learning experiences.

Participant *Fortunate Free Spirit* provided some examples of the need for time in a successful program when she stated that it was essential to her program to “be able to ignore the bells a lot”. *Project Wizard* stated that, “...when boxed into one typical 90 minute high school time period there isn’t enough time to create opportunities for learning, connection and community building”. In regard to time, *Humble Innovator* also commented, “the ones (OE programs) that are the most successful are the ones that can have the kids for the longest period of time without interruptions”.

Representing and advertising programs.

In my interviews an emergent theme referred to the importance of making OE programs become known in their communities in a positive and even exceptional light, and to drawing in the community and maintaining their support. Participant *Pathways Beginning* spoke about the importance of the ways that students represent the program, talk about it and the ways they interact with others when out on field trips. In regard to his circumstances *Project Wizard* spoke of needing a process to recruit students by making them aware of the opportunities offered by an OE program. There was a general feeling from all the interviewees that an essential element of success is developing a general awareness that places a program in a positive light. That might mean going to feeder schools or other high schools to advertise the program. Especially useful is having current or former students speak about the program at Open Houses and other events. These presentations can promote the program to the population of people who are potentially eligible to enrol.

Program philosophy.

I entered this research looking for specific factors for program success in outdoor education offered in public high schools. A program’s philosophy often takes shape in a context where the OE program exists as a school within a school or in a specialised “or magnet” school that exists slightly outside or parallel to the public school system. During the interviews for this study some participants noted that a program philosophy is something that should to be agreed upon, ideally by the entire support network of the school district administrators, students, parents and teaching staff. Participant *Humble Innovator* described the philosophy as “a strong foundational belief system that is clearly outlined”. He noted that in his school the overall philosophy has 4 pillars: inquiry, place, community, and experiential education. This philosophy provides the legitimacy and values needed for a program to exist and succeed. *Biophilic Salamander* explained that a

strong program philosophy that expresses why we would be doing this and why learning in the out-of-doors is important is imperative to starting up and maintaining a strong program supported by the generally shared belief in the value of the program and its benefits to the community and culture of the area. Participant *Spirit Hawk* stated that a philosophy should be seen as a vision that is shared by all involved. “You sometimes have to shift from the initial vision and just go with it” meaning that while having a philosophy is key, it may be necessary to break or adapt the philosophy to different circumstances as a program takes shape.

The ideal outdoor educator.

During the interviews I asked a specific question seeking descriptions of the personal strengths and abilities that participants saw as being needed by outdoor educators. What are the key attributes needed by outdoor educators in finding OE program success? This question provoked descriptions of some idealistic traits desired for the job of outdoor educator, but also resulted in descriptions of OE teachers who were capable of breaking away from traditional learning environments and making outdoor learning available to more people. Participant *Fortunate Free Spirit* stated that having left her highly successful outdoor education program, she is now really passionate to find avenues for making outdoor education and learning accessible to as many students as possible by training teachers to feel comfortable in getting kids outside. She is not alone in this endeavor.

I was overwhelmed by the number of participants with whom I spoke who were moving away from their individual OE programs towards making a difference on a larger scale. For example, *Humble Innovator* has taken a role in an entire elementary school which has outdoor learning at the forefront while *Carpe Diem*, *Pathways Beginning*, *The Roaming Explorer*, *Max Cadence*, and the *Biophilic Salamander* have all started to extend from their original programs to reach more students with real, relevant, outdoor educational learning. These informants claim to be seeking to accomplish the goal of creating OE opportunities for more students by through working in the field of teacher education and taking leadership roles in professional development programs for teachers in their jurisdictions.

The participants’ descriptions of the traits needed by an effective outdoor educator typically began with stating a passion for outdoor education and learning because without passion, an educator won’t have the strength to put in the extra time and work required to run an outdoor

education program. Every interviewee described some degree of passion for the work as an important trait. For example, *Fortunate Free Spirit* called it “passion beyond reason” and continued to say that the educator has to have “a willingness to spend more time with your students and colleagues than probably your own family...it is an immersive experience”. *Oliver E. Coach* explained that the passion is what gives an educator the ability and drive to put in the necessary work. He stated that he rarely does a trip that isn’t also a site inspection looking to expand what he can offer his students. *Biophilic Salamander* also described this passion as including a love for nature that drives an educator to intentionally build and maintain amazing experiences and opportunities for students to “find connections both social and with the other-than-human world”. Thus, passion was viewed as driving the dedication of an educator to the program and their work.

Additionally the outdoor educators in this study were described as needing to have confidence in what they do and in their knowledge and connection with the culture in their schools and communities. This theme was recurrent in the interviews and was illustrated with examples such as the suggestion from *The Travelling Son* and *Humble Innovator* that it would be very hard to walk into a new school and start a program with little or no understanding of how things worked in the building. *The Travelling Son* claimed to have developed strength and confidence through experiences with his father (who was the previous OE Teacher at his current school) and from having grown up in the area. The participants generally saw the combination of outdoor skills, knowing your capacity as an educator, and a commitment to building your interpersonal and group skills as being essential to developing confidence, a confidence that ran through to students and supported them in their trust in the outdoor educator’s ability and in the safety of group experiences.

Pathways Beginning described confidence in safety management and in being “educated and skillful in group dynamics” as key components for a successful OE teacher. However, an outdoor educator need not be an expert in everything and they should be open and willing to ask for help or find help as needed. Most of the interviewees regarded the characteristics of expressing a lack of ego and a willingness to continue to learn and grow in a way that is never overpowering and always open, as being desirable for an OE teacher. *Fortunate Free Spirit* spoke of her good fortune and luck rather than her skill, ability and talent for innovation as being critical to her success in creating a beautiful and highly successful OE program. *Oliver E. Coach*

stated that an OE educator is always learning and growing, “gaining/ building capacity”. A view shared throughout my interviews was that an educator needs to be willing to continue learning, ask for help and perform within their personal set of comfort and skill.

Flexibility was also viewed as a common trait desired of an outdoor educator. *Fortunate Free Spirit* described the ability to adapt in the way that you speak with and make connections with students as “speaking their language”, while *The Travelling Son* referred to the need for flexibility in terms of adapting to changing weather and the unpredictable nature of the outdoor experiences of being outside on trips and as well as changes to group dynamics. A general theme was that as things come up and circumstances shift, the OE educator must be able to adapt and make good decisions on-the-fly, a trait that contributes to the support they receive by being skillful, knowledgeable and trustworthy. Participant *Carpe Diem* gave a great example of having to move classrooms and creating a desk and chair moving challenge for his students, rather than seeing the task as a cumbersome inconvenience.

How does Outdoor Education fit in the traditional school system?

In my interview discussions the topic of the challenges of formatting OE programs and working in the traditional formats of public high schools generated a unanimous response that edging out (escaping) from the system was to some extent essential. *Project Wizard* stated that the formatting should include an academic course attached to an optional OE course in order to get the time needed and to give legitimacy to the program. All participants emphasized that there should to be a minimum of 2 high school [schedule] blocks dedicated to an OE program and that OE works best when taken outside the structured timetable/ schedule and offered in a situation where bells can be ignored. *Oliver E. Coach* described a program that is running within a bell schedule and he mentioned the difficulties and limitations of having to end activities on a bell ring as barriers to getting deep into activities. He has opted to develop an extracurricular club that provides opportunities for extended field trips and weekend sessions for outdoor skill training. It would seem that time becomes a major factor when looking for full immersion in a program that is different from the traditional system of class changes and curriculum blocks.

The Magic in OE programming.

I asked my interview participants about their views of the special characteristics or "magic" in their programs and the sort of magic that should happen with OE programming in general. In

my interviews I defined the term magic as that special characteristic or identity that may not be palpable, but is ever-present and makes a program important and special in the eyes of the students and OE teacher. Through this question I sought to elicit the participants' views of the elements that were needed to make an OE program important, valued, and legitimate. I also intended here to provide an opportunity to explore the whole idea of why there should be this kind of programming in high schools in the first place. The question about program "magic" provided a chance for conversations about the essence of Outdoor Education.

Max Cadence claimed "one of the most important impacts is the real deep relationships that build confidence in kids and now kids can take risks and accomplish things they couldn't have done before." Similar impacts were described by majority of participants. *Shutumin Sapin Spirit Hawk* described the magic element as "...when you see the intentions of the program being fulfilled in creating this sense of community, joy and accomplishment". *Carpe Diem* spoke of "pushing past comfort zones" as a magical and powerful component of OE learning.

All the participants spoke of the rich relationships and learning obtained through gaining confidence and working through challenges that lead to accomplishments in skill, personal development and character. *Biophilic Salamander* added that making connections to the other-than-human world were being important in addition to social and emotional growth. This notion was extended by *Roaming Explorer* who commented on the value of sitting in the forest for 20 minutes and listening to the quiet. Reflection through journaling and being in solo spots in outdoor spaces and connecting to places were also mentioned by a number of the participants. Participant *Project Wizard* provided a great image when asked about magic

That ultimate or high point is when the cell phone is put away, they are laying in an open field in the winter, bundled up, looking up at the stars and finally hearing their own voice, just hearing other things and just experiencing feeling cold and they just think that is the greatest thing in the world. There is nothing they would describe they like more as when we have those moments.

Avoiding barriers to OE programming.

In looking for successes in OE programs, I also realized that there are barriers that the interviewees might have had to overcome in order to achieve the resulting longevity and success of an OE program. All participants in my study referred to the Administration of a school as a possible barrier to programming. However *Max Cadence* was an exception when he stated,

Money, end of story! It is the biggest barrier... Admin is never really a barrier because they want to provide what is best for the kids and they want to

look good, and if the program runs and it is good, then that looks good on them.

Administrators have control over budgeting, timetabling and overall communication with the rest of the supporting community. *Oliver E. Coach* stated, “You are kind of always at the whim of the administrators”. However, *The Travelling Son* referred to time as the greatest barrier. He seemed busy and was possibly stressed (or tired) when he commented.

Time is the biggest struggle for getting kids out, for building community, for creating connections, for opportunities to share learning, to conduct authentic inquiry, for planning, for paperwork, for meetings to ensure safety and support from the district and colleagues, time to let conversations carry on.

The Travelling Son’s statement certainly indicates that time can be a barrier although his statement also eludes to a barrier that some referred to as teacher burnout. *Fortunate Free Spirit* reported strongly on this factor as the job is hard work and all-consuming. She stated that she has seen programs that don’t have enough support in place and it becomes too much for a teacher to handle. *Max Cadence* spoke of teacher burnout with comments on strategies to avoid burnout. “If you can’t feed your own soul then there’s no way that you’re going to find the energy and ability to feed others”. For him this meant getting out on his bike every day to avoid feeling “twisted up inside”.

Acquiring and maintaining resources like money, and support from youth leadership, elders, and guides or guest speakers were also described as barriers. To avoid these barriers it is crucial that OE educators apply networking skills to make connections and use the resources that might be readily available right in front. As *Biophilic Salamander* explained, “A teacher needs to be non-judgemental and have a business sense of how to get to “yes” and how to make connections in the community, school and with organizations. Resources and funding require creativity, innovation, and hard work.”

Taken together the interviews with the experienced outdoor and environmental education teachers provided a clear picture of the rewards and demands of developing, teaching and sustaining these types of programs. Chapter 5 discusses the implications of their comments and the general picture that they present of the modern high school as a learning environment

and also compares these findings with other current proposals concerning the requirements for effective school-based EE and OE.

Chapter 5: Reflections and Recommendations on the Research Results

Research Questions and Goals

Chapter 1 opened the thesis by describing the general purpose of the research and listed the questions that were proposed as shaping the methodology and design of the research.

The general goal of the research was:

How do experienced practitioners of Outdoor/ Environmental Education describe the major factors that have contributed to their successes in implementing and sustaining OEE programs in the context of high school organizations and curricula?

The goal was reflected in four questions:

1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?
2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents?
3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment?
4. How do experienced OE Teachers assess the impacts of their professional preparation or other life experiences as influences on their work in OE?

These questions were intended to be broadly reflected in the 1:1 interviews that I conducted in this thesis. The interview and recording process has been described in Chapter 3 and the detailed results of the interviews are summarized and presented in Chapter 4 and in Appendix 1. Table 5.1 of this chapter is intended to organize the interview summaries around the four research questions as presented above and in Chapter 1. The intent of this Chapter is also to

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discuss some issues that might be seen as important themes or influences on the development of OE programs in the context of high school organizations.

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Table 5.1.

Summary of the Results of Interviews designed to Address the Question:

How do experienced practitioners of Outdoor/ Environmental Education describe the major factors that have contributed to their successes in implementing and sustaining OEE programs in the context of high school organizations and curricula?

Note: Use of Alias

In this Table, as in other sections of the thesis, the identity of participants is protected through the use of alias names. These replacement names are intended to capture some of the personal backgrounds of the interviewee without revealing their identity.

Interview Topics	1.What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?	2.What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.	3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.	4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE.
Project Wizard	<ul style="list-style-type: none"> ● Calm intensive 4-5 day programs - focus on real learning that is hands-on; ● Focus on connection to place ● Need to be having fun, doing fun things ● Time is required for meaningful learning and when boxed into 1 high 	<ul style="list-style-type: none"> ● An open approach to learning together and finding experts or organizations to support learning ● Project-oriented work that is student-led, designed and implemented 	<ul style="list-style-type: none"> ● Always be ready to defend what you are doing, as being meaningful learning; ● Develop notoriety through media and advertising to protect the program and validate its value to the community 	<p>Learning about other communities and going to other communities, can really help kids understand their own communities. Taking them away and then talking about Calgary or other places they've visited is much more effective.</p>

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	<p>school 90 minute periods, there isn't enough time to create opportunities for learning, connection, community building, et cetera.</p> <ul style="list-style-type: none"> ● Mental health is a real concern and it is more necessary than ever to provide opportunities for connection to the land and place, to the outdoor environment and the health benefits of real learning in an outdoor atmosphere 	<ul style="list-style-type: none"> ● An Administrator who is on board ● Community backing and belief in the value of the program, including community partners ● Validation - through community members, and local media, sharing stories, word of mouth, people seeing value in the program 	<ul style="list-style-type: none"> ● Be able to speak to people in their language or styles. ● You can't be passive, "You've gotta get your elbows in there and still make room for yourself" ● My knowledge is my humility and ability to learn alongside students 	
Max Cadence	<p>You absolutely need support structures in place. <i>This includes the district supports, principal, and community member's support. Good will is not enough.</i></p> <p>You need to be able to make a claim or statement to the people who are willing to support your program. That is, show that it has a value that is important for the school, and the community at large and that it will bring</p>	<p>You need to be able to make a claim or statement to the people who are willing to support your program. That is, that it has a value that is important for the school, the community at large and that it will bring strength to the communities. So, you have to be able to convince those people who are yeah or nay sayers.</p>	<p>You need passionate educators who care deeply and are dedicated to the program. You need passion that can allow you to be able to run the program and share that passion. If the kids aren't interested in the program then it doesn't matter if I'm wanting to create something over the long-term.</p> <p>You need to feel confident and secure both in what you do, in your job, as well as</p>	<p>There's a professor from the University of Winnipeg who had an acronym, he was an education professor, his acronym was <i>magic</i> – Meaningful Activities Generate Interactive Classrooms or Imaginative Classrooms. Being Meaningful is a critical part of it. I think, that if you look at the <i>Explore</i> program, which is a cohort based program like the one that I'm doing now, an enviro and social</p>

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	<p>strength to the community. So, you have to be able to convince those people that are yeah or nay sayers. Your senior Administrators need to see the value in the program. You need money for staffing when sometimes the teacher to student ratio numbers are low.</p>	<p>You need a link with the community so they feel supported and are supportive, and they can't feel threatened by what you are doing. A key skill is relationship-building both in and outside the school. It is so important to make connections with community members, parents, students, teachers, principals, super intendants, et cetera</p>	<p>confident with the culture of the building that you're in.</p> <p>I have seen this job as a calling. So how can I recharge that? I need to walk outside, I need to ride my bike outside, I need to touch trees, I need to work in my garden, I need to go kayaking and these are the experiences that I want kids to get in and the OE program helps them with that.</p>	<p>studies class, if you look at any program like it, it's going to be a cohort based program.</p>
Interview Topics	<p>1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?</p>	<p>2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.</p>	<p>3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.</p>	<p>4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?</p>
The Travelling Son	<p>I changed the way that I was teaching--moving to a lot less curriculum focus. Building community was a first priority.</p>	<p>Last year there was a much stronger sense of community among the group of students. The Outdoor studies program is now combined with Social Studies 11.</p>	<p>You have to have some sort of outdoor background. You are often going to be on your own whether it's for hikes or simple camps. You have got to have the skills down pat that you that you're trying to convey to the</p>	<p>I think that for a teacher the attitude that is so important is to be flexible in the school program and working with the kids. I think the more rigid you are the more difficult that it can become if you're always</p>

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	<p>The administration has been supportive of what I am doing. I have been able to borrow teachers to come out on certain activities like overnight trips. The kids were excited to have other teachers drop in and be a part of things.</p> <p>Everything that I do is reliant on students signing up for the course. If I didn't have anyone signed up or if I had only 10 students sign up ...that's would be the death of the program. I've gone from having 90 students down to under 30. I want to promote the program to have students sign up but I also don't want students to sign up who are not the right fit or are not really going to enjoy the program and might bring in wrong attitudes.</p>	<p>This gives me twice as much time with the class. We are not a semester school and are structurally flexible so it was possible to add one more course which doubled the amount of time that we can spend doing local things right here around the school and during class time as well as only on our daily trips. At another school it is likely going to be a set schedule or rotation of blocks and that makes it more difficult to create larger blocks of time. Developing a sense of community among the students is really an important place to start to make the magic happen in a program.</p> <p>I don't need to focus quite as much on the content that am I going to teach today so I can give time to developing part of a sense of community</p>	<p>students. Having a background and comfort with various skills is really important.</p> <p>You have to be flexible when working in an outdoor environment. When talking with District staff it can be difficult to have them understand that sometime plans change and that this may needed in the best interest of student safety in whatever is going on. Changes to the weather may dictate changes and mean that you can't follow your plan exactly.</p> <p>I am kind of like a Renaissance outdoors person. I love a lot of different activities although I probably don't do any of them fabulously well. I do a lot of things that I just enjoy: canoe and kayak and white water paddling and rock climbing and backcountry skiing. I'm not the best at any of those things but I think having skills in a diversity of activities and having a range of activities that you love is probably an asset.</p>	<p>following the letter of the Law and the book rules.</p> <p>When I was a new teacher I took a few years just building up the basic skills. I think it's important to have some sort of outdoor and environmental orientation to what I'm doing. I have tried to bring in the idea of food as a community builder. It is something that we all share together. I found for my students that cooking and organizing food was really influential.</p>
<p>Humble Innovator</p>	<p>As one of two teachers really promoting Outdoor Learning I think having a team, just having another person to lean on was extremely important.</p>	<p>The ones that are the most successful are the ones that can have the kids for long periods of time</p>	<p>Some experience is obviously necessary. I think that competency is important but it's just having that energy and that excitement around the outdoors</p>	<p>Talk to people who have done it and learn from their work</p>

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	<p>We established a team within our school district and then it came to the point where we were having a number of proDs each year around Outdoor Learning.</p> <p>I think the philosophy is really important. When I look at successful outdoor schools. It's all about the philosophy and making sure that the staff in particular and also the students and the parents really get the philosophy and how you're practicing it.</p> <p>Within our District we like to think our commitment was to change the culture over time and many people became a part of it. If you really want to change culture or a community you need to apply your ideas with parents and as many different teachers as possible. We did a lot of community talks to all sorts of organizations. We've done talks to the credit union, to the Children's Foundation, to PACs. Any way you can get the word out you just want to create as many connections as possible and just grow that network.</p>	<p>You're much more likely to come across challenges with scheduling. You're always going to be battling teachers for time.</p> <p>If you could have a core group and the students are getting credits for English, Socials PE and whatever else and one or two teachers are able to teach all those subjects and can give the students grades on all those subjects I think that seems to me to be an effective approach.</p> <p>Make sure you have buy-in</p>	<p>is so important--- just being like good with kids.</p> <p>I wouldn't want to just hire a great person who was the most qualified at climbing just as a pure climber. They need to have very strong people skills and I think just a true love of the outdoors, the kind of energy that that exudes a love of the outdoors and outdoor experiences.</p> <p>Skills like knowledge of how to do things in the outdoors can be helpful. However, teachers don't necessarily have to have knowledge of botany or flora and fauna but just knowledge of how to be outside and be able to do things well outside. I really like to try to show off the magic of the outdoors with kids-- for them to realize that it is this magical place that can change the way you see yourself.</p> <p>People have to be willing to put in the time--to spend those evenings and from time to time spend extra time on the weekends.</p> <p>I think it's helpful to have a lot of connections in the community and being able to connect with different types of people. Being able to bring new people in and</p>	<p>Do the research to back up your ventures, gain buy-in and lessen the struggles - "gathering data will save you days and days of time in the future, if not weeks or months, and it will prevent you from making mistakes"</p> <p>It would be very valuable to bring together people from various Outdoor Ed programs from around BC.</p>
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			having just being willing to cold call people that you don't know: the art gallery or farmer or whatever and just ask are they willing to help. Also being willing to ask different organizations, I think that is important.	
Interview Topics	1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?	2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.	3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.	4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?
Oliver E. Coach	<p>1. Administration support/ A person with passion and commitment.</p> <p>2. Program Budget (Administration involvement, fund-raising, and support via Parent Council.</p> <p>3. Creative fund raising: Garage sales, used equipment, etc.</p> <p>4. Community support (in combination with the Administration.</p>	<p>Lessons are well thought out and planned with special touches, for example, "magic trails" where magical things appear on the trail with a focus and understanding of the give and take relationship.</p> <p>Healthy connections with community members including mentors, leaders, First Nations, service providers, parents,</p>	<p>A teacher in this role needs to be open and positive. They need to have a passion for outdoor education that gives them the ability and drive to put the work in.</p> <p>Have a very clear and proper direction. Don't be too ambitious at the beginning.</p> <p>Play into your strengths and then slowly build capacity. Take workshops and perhaps hire service providers for the things you are not as good at.</p>	<p>Try to incorporate your learning from academic subjects (science, biology) as well as local knowledge into your programming. Develop your appreciation and knowledge of First Nations culture and stories.</p>

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	<p>5. Buy-in from the students- -student leadership and action projects.</p>	<p>students, and alumni over time.</p> <p>An emphasis on leadership development. Continually, "raising the bar" for students to meet challenges, gain confidence and mature through life skills and lessons.</p> <p>The combination of an outdoor leadership club as well as grades 7, 8 and 9 streams in outdoor education work well.</p> <p>Start with a club format in a new school to gain numbers and then expand to a tiered system that would include grades 10 through 12.</p>	<p>Don't put yourself at risk nor place the students at risk. Work on your strengths, commit to life-long learning and don't be afraid to ask for help.</p> <p>Be willing to show the students areas where you are working on improving your own knowledge and skills. Let the students know that you are a continuing learner.</p>	
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Interview Topics	1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?	2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.	3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.	4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?
The Roaming Explorer	<ul style="list-style-type: none"> • The school curriculum is taught outside through experiential learning--a hands-on model. • A Cohort Model • Student buy-in and fun. • Support from parents and Community. • Community connections, stewardship and mentorships. • Effective planning, more meetings with trustees or district or principals to ensure safety of students. • Time is the first thing because if you don't have enough time you can't go anywhere. • You need enough money to cover your 	<ul style="list-style-type: none"> • A Cohort Model • Field trips that reflect the strengths of the teachers involved. • Outdoor locations that are located proximate to the school involved. <ul style="list-style-type: none"> • Equipment and logistic support--clothing, extra gear, regular maintenance. • Journaling and Reflection • Programming in diverse seasons and weather conditions. <ul style="list-style-type: none"> • At least two trips and one overnight. 	<ul style="list-style-type: none"> • Build on the strengths of the teachers involved. • Dedication to the program and their work; Passion - must be passionate about what they are doingfor the teacher, the teacher has to have some sort of outdoor passion. • Outdoor competencies including skills in the activity they are passionate about. • Understand that the workload for an OE program is more work than for a regular classroom teacher, and that they will need to work hard. • Avoid Teacher Burnout - need to balance work and home life. 	<p>When I finally started teaching my first year is up on Baffin Island and I did some environmental science there. A lot of the outdoor stuff was kind of guided by the elders and the other folks in the community because I was not the specialist in high Arctic stuff.</p> <ul style="list-style-type: none"> • A lot of my stuff is Experiential Science linked. Tailor to your strengths...what are you into? What are you passionate about?

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	<p>transportation and possibly subs teachers.</p> <ul style="list-style-type: none"> You need students who want to be there---you're getting students who kind of want to be there. Work hard at selling the value to the stakeholders... it's your School District, your administration who are the ones going to make it fly. Without their support you don't have a program. You really got to nail down why they should be financing it. 			
Interview Topics	1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?	2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.	3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.	4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE.
Carpe Diem	<ul style="list-style-type: none"> The program should develop the major outcomes, attached to the curriculum. Relevance: Include as many academics as you can to create validity for the administration and other 	<ul style="list-style-type: none"> Foster Social cohesion - create a trusting environment where students are comfortable to take risks, people feel safe and willing to share their ideas. 	<p>"Teachers should try to create learning environments where students can explore and be inquisitive and inquire and take some chances and push themselves from a cognitive philosophical perspective"</p>	<p><i>The most importance areas of prior education and experience:</i> Practice as a kid in survival and automotive inquiry plus experiences in teaching different grades.</p>

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	<p>people for the worth or value of the program.</p> <ul style="list-style-type: none"> • Identify how things align with the goals and objectives of the school, the mandates and the curriculum. • A Cohort style, integration of subjects and not separated in the class, connect to the curriculum near the end of the class. • Freedom to start and finish when you want, a situation where you don't have to worry about the school's schedule. • Attend to the perceptions of colleagues and administration - seek their support and work on their perceptions by showing them the value of the program. • Address Costs If you can, make equipment to save costs. If possible arrange your own bus and driver's license to help transport costs. You may fundraise to get a bus 	<ul style="list-style-type: none"> • Engage students by giving them the reason why you are doing what you are doing, relevance to place (place-based practice). Relevance brings value when something is attached to something real. • Goals or outcomes/ continuation beyond the class - active citizenship, self-efficacy, volunteerism. • Risk. Students should have chances to challenge themselves, move outside their comfort zones, and responsibility to find solutions to problems, academic and physical challenges or both. • Find create, allow, invite, or give both to access to intrinsic motivation • Invite students to engage rather than looking for buy-in. • Let experiences outdoors drive the learning and connect to curriculum afterwards. 	<ul style="list-style-type: none"> • A teacher has to have confidence in students to support each other, to not leave anybody behind. Create a family-like atmosphere. <p>Allow students some freedom with responsibility and opportunities for inputs and challenges.</p> <ul style="list-style-type: none"> • Demonstrate that this program is a physical challenge, and also an academic challenge. • Need to be able to relinquish control in your classroom environment and hand over more decision making to your students. • You have to have the passion and the willingness to put in the extra time. You are definitely spending more time than a typical classroom teacher when you are running these programs" • You have to know your outdoors - be competent in the outdoors skills that you are including. • Creation of a social environment where people can accomplish challenges that push their comfort zones 	<ul style="list-style-type: none"> • I found teaching special needs taught me more about myself than it did anything else. It really exposes all of your weaknesses... it really does, so does elementary school in some regards, it exposes all of your weaknesses as a manager as a classroom manager or whatever.
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Interview Topics	1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?	2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.	3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.	4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?
Interviewee Responses				
Spirit Hawk	<ul style="list-style-type: none"> • In relation to indigenous education programs, it is imperative to ensure that programs are community-based. There must be a strong connection with what the community sees as priorities. • Another key component in a successful program is engagement: it is critical that programs respond to the needs of youth, link to cultural values, and opens doors for additional educational opportunities and meaningful employment. • Programs offered in a cohort model attract youth with specific goals, and when support by family members and/or leaders in the community can assist with reinforcing the important 	<ul style="list-style-type: none"> • “I think environmental education, by nature, lives somewhat outside of what is perceived to be part of the standard processes and practices” • The magical part of a program is seeing the creation of a learning community that students are excited and proud to be a part of. This was expressed through the demonstration and sharing of their culture to family and friends. • Family and community support is also critical as the learning community is a 	<ul style="list-style-type: none"> • Leadership components are essential to quality programming, as well as reflection and analysis on things seen or experienced on field trips, opportunities for thrills or excitement and challenges that provide a new experience for students to accomplish and learn and grow from. <p>As a group, we work together to ensure everyone has the skills, to make sure everybody has the skills and for some people who may have already developed the skills they work closely and mentor with people who don't.</p> <p>Find out what is of interest to the community and the way that drives the student engagement.</p> <ul style="list-style-type: none"> • You have to also be willing to adapt and change to meet the needs of the community. 	A background working with youth-at-risk and developing programs and teaching students from a number of First Nations who live primarily on reserve.

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	<p>work they are undertaking and can often remove barriers (e.g. childcare).It is necessary to have the community perspective driving the learning.</p> <ul style="list-style-type: none"> • Funding comes from a mix of places and includes contributions of money, products and services. When hearing of the program's success these generous supporters often attract others to become involved. Support comes from a range of sources including: municipal, provincial and federal governments, First Nations themselves, school districts, individual donors and corporations. • Barriers to OE/ EE programs often include lack of human and financial resources. Financial support is required for things like transportation and equipment, but may also be required to address other type of barriers. These barriers can be overcome through well-developed relationships with teachers, administrators and community members. 	<p>reflection of the wider community. These barriers can be overcome through well-developed relationships with teachers, administrators and community members.</p> <ul style="list-style-type: none"> • These types of programs can mesh with the traditional education system. In order to do this, she suggests that they have to be integrated and woven into the curriculum, while maintaining the direction and goals of the community. 	<p>Remember that “everything doesn’t have to happen at the same time or as quickly as what you (you) hope”. You sometimes have to shift from the initial vision and go with it.</p>	
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Pathways Beginning	<p><i>What stands out as the main requirement in your mind that needs to be present in an outdoor education program?</i></p> <p>Attention to the group dynamics. <i>If you focus on the dynamics first, and that could be in the process of learning content, Focus on that first and build the Community. Then everything else follows from that.</i></p> <p>This is particularly the case in the integrated programs where the students are spending the entire semester or school year together. If they get tired of each other they need to have the skills and capacity and connection in order to be successful.</p> <p>Further keys to success:</p>	<p><i>Can outdoor education work in that sort of traditional scheduling or in the traditional system of schools?</i></p> <p><i>Questions:</i> <i>What set of course combinations would work</i></p> <p><i>Where is the site? Is most of the work going to happen at the school with trips to very local places?</i></p> <p><i>Do you meet off site the entire time? Do programs meet at a camp for example and are you going to draw only from that school or are you going to draw from the whole District?</i></p>	<p><i>if there's a general discourse within the school that outdoor education is "playtime" well that is one of the things that you need to work at.---Changing that discourse. Because as long as outdoor education is seen as "play time" it is not going to get the resources, in whatever form those resources come, that it deserves.</i></p> <p><i>The parent Community of the students I had was also very good at promoting educational values. So, say you ran a program one year, you do some kinds of surveys where you get interviews with parents and students and or teachers for the next year that talk about the educational value of the programming--- that can do so much to change that discourse of outdoor education as play.</i></p>	<p>I taught for almost 2 years on a long-term occasional contracts in Education Centers. They were very collaborative Learning Spaces so I got 2 years to absorb some of the best outdoor education teachers in Ontario.</p> <p>I also took any opportunities I could to get my Orca instructors course, my Orca canoe tripping courses, my instructor courses, my First Aid courses, and get mentored by some fabulous outdoor education folks.</p> <p><i>"This experience alone would not have been enough to run a program well and safely without that other kind of mentoring. I feel like it's not something you just jump into."</i></p>

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	<ul style="list-style-type: none"> • <i>Have a vision shared by the staff.</i> • <i>Have the support of the school principal.</i> • <i>Develop departmental support, especially with interdisciplinary staff across departments.</i> • <i>Develop a foundation in good research and other literature or literature that describes successful and exemplary programs.</i> • <i>Having instructors with appropriate skills and background.</i> • <i>Find the programs that have stuck around for a long time and interview those instructors: "what is it that has allowed the program to stay?"</i> • <i>Know the dynamics of the school, the culture... and think about what you're going to give back to them--- to your colleagues.</i> • <i>Transportation can often be a barrier in terms of cost or Logistics we looked at it at our school because our school purchased a mini bus because you've ridden that many bus many times and so I had to</i> 	<p><i>Are you doing one semester or a whole year?</i></p> <p><i>How are you going to get your students? Who is going to want to take it? This links partly back to whether it is your school only or the whole catchment and what grade level?</i></p> <p><i>What is the orientation of the program? Is it interdisciplinary, cultural journalism, outdoor adventure, or environmental science?</i></p> <p><i>What is the purpose of the program? Is this for high-functioning academic students is it for those who are who are more challenged academically? Is it for those who have not normally have access to this kind of programming? WHO IS IT FOR?</i></p>		<p><i>Group dynamics needs to be an important piece in the training of the instructors,</i></p> <p><i>I also had a summer job teaching at a boarding school in the states. This was in the summer just before my teaching degree they asked me to be the English instructor in a program that for part of the time the students were out on a ship doing a biology course. That was a beautiful opportunity to learn about students experiences because the students would go out in rotations on this ship and do their biology course. I was the English teacher and a lot of what we are doing was writing personal essays, so I got to see the intricacies of the student's life through personal essays without ever going out on the ship.</i></p>
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	<i>get my driver's license for it.</i>			
Interview Topics	1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?	2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.	3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.	4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?
Fortunate Free Spirit	<p>It is very important that the students in the program develop a distinct culture or sense of belonging.</p> <p>The program should be organized around 3 themes: education for sustainability, outdoor pursuits, and leadership development.</p> <p>The program should be structured as a cohort in which the students experience one academic term and one term focused on outdoor education.</p> <p>Intend the program to be accessible to a diversity students and backgrounds.</p>	<p>The program content should be integrated across several subject areas.</p> <p>Learning experiences should be structured to be transformative for students.</p> <p>Learning experiences should be relevant, engaging, and challenging.</p> <p>Learning experiences should place emphasis on direct experiences in local community activities and settings.</p>	<p>Teachers must be willing to take on commitments of time beyond regular class assignments.</p> <p>Teachers need to develop skills needed to promote the program to diverse audiences and to attract sponsors and supporters.</p> <p>Teachers should be able to develop and sustain high performance teamwork among students and teachers.</p> <p>It will be extremely helpful for teachers to develop and apply the skills needed for effective fund-raising.</p> <p>Teachers should work to develop a personal repertoire of outdoor skills as well as skills in team</p>	<p>Teachers need to develop and apply skills needed to continually develop and extend the program structures and experience. Effective pre-service and in-service pro-D should help in developing and extending those skills.</p> <p>Teachers should be prepared in group management, team-building, and time management.</p>

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	<p>Foster and develop a support system that includes parents, teaching colleagues, and school administrators.</p> <p>Student recruitment should be designed to attract those who are motivated and willing to invest time and effort in the program.</p> <p>Program activities and contents should be designed and implemented to demonstrate academic and intellectual quality and integrity and as important assets to the school and its community.</p>	<p>Successful OE programs must be developed to break beyond the time structures and schedules that are commonly found in high schools.</p> <p>Teachers will need to help students manage the transition between conventional classroom learning and high level experiential learning outside regular classes and schedules.</p>	<p>building and leadership for students.</p>	
Interview Topics	<p>1. What elements of structure and organization should be in place to create, implement and sustain an outdoor education program as an effective educational experience for students at high school levels?</p>	<p>2. What program formats are likely to be important in gaining success in implementing an OE program in the organizational structure and cultures of a public high school setting, including the expectations of students, colleagues, and parents.</p>	<p>3. What are the most important attitudes, knowledge, and skills required for success in working as a teacher in an OE learning environment.</p>	<p>4. How do these experienced OE Teachers assess the effectiveness of their professional preparation or other life experiences for their work in OE?</p>
Biophilic Salamander	<p>1. It is extremely important to identify and develop settings nearby and accessible to the school that will support and enhance outdoor and place-based learning.</p>	<p>1. OE should be an intentional extension to <i>every</i> subject area--math, language, journaling, art, creative writing...athletics, etc.</p>	<p>1. Assess the readiness of the school for an OE program. What are the attitudes of teachers and administrators; parents; students? What do they</p>	<p>1. Teachers should be encouraged to view teaching as an opportunity for creative problem solving.</p>

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	<p>2. Make a commitment to including outdoor/environmental learning experiences in the school program several times in each week.</p> <p>3. Build a group of teachers or assistants who are committed to the program.</p> <p>4. Develop the momentum of the program to reflect a commitment to continuing as a regular and expected commitment to the school rather than as a "trial run" or "experiment".</p> <p>5. Develop and communicate a clear philosophy about the values and possible outcomes of OE programming.</p> <p>6. A cohort organization will aid in the development of a class as a learning community. At the high school level OE programs are most likely to succeed when they do not involve students in the graduating year because of competition for time and effort to meet graduation goals and requirements.</p> <p>7. Residential experiences should allow students and</p>	<p>2. Develop a cadre or team of teachers or support workers who are able and willing to commit the time and effort to the OE program.</p> <p>3. Seek to build a team that includes a diversity of people with a range of attributes and skills.</p> <p>4. Ideally an OE program should emphasize cultural diversity and support contacts with indigenous ways of knowing and also with non-human species.</p>	<p>want and how well does your program or concept fit.</p> <p>2. Does the school or teachers have any "history" with OE programs--is that history an asset or liability?</p> <p>3. What are the estimated costs of the program--operations; equipment, transport? What is the financial record of the program in previous offerings? Are there any sponsors and donors?</p> <p>4. Teachers in OE programs need to have a personal interest in and value for the environment--both natural and constructed. They should develop their skills in effectively communicating their attitudes and experiences.</p> <p>5. An effective teacher in an OE program needs to develop their skills and attitudes toward innovation and risk-taking and work to enhance their abilities to develop effective and workable proposals.</p>	<p>2. Teachers should be encouraged to select opportunities for professional development that will extend their knowledge and skills throughout their professional careers.</p> <p>3. Teachers should be encouraged to develop contacts with potential community supporters or donors. This will require the development of effective communications and the exploration of various networks and businesses.</p>
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Discovering the Elements of Success for Outdoor Education Programs in Public High Schools

	staff to engage in learning across seasons, in diverse settings, and at various times of day.			
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Discussion of Key Themes Emergent from the Thesis Research Questions and Interview Results and Summaries

A. The importance of healthy relationships between OE/EE programs and the contexts in which they are offered and implemented.

One of the participants in a research interview made the following observation:

“I think environmental education, by nature, lives somewhat outside of what is perceived to be part of the standard processes and practices.”

Many of the interviews included some mention of the importance of having programs such as OE and EE that were outside the structures of the regular school curriculum and organizational structures although also must be accepted by the wider community of the school. Interview participants recognized the need for program teachers to develop active partnerships and a positive reputation with the larger community while also being aware of how their program fits with the goals and objectives of the school and can add value to the school's reputation. An effective program should develop healthy and active connections with community members including parents, mentors, partners, service providers, alumni, and the local or regional indigenous communities. A program should also foster the positive perceptions of colleagues and administration and work to gain their support by showing them the value of the program. Some interviewees noted the importance of gaining support from school administration and made mention of the fact that school administrators often change appointments over time so it becomes necessary to make them aware of the importance and contribution of the program to the school's culture and to the larger community. Note was also made of the importance for OE teachers to understand a community's vision and priorities while being willing to adapt and make changes from initial program visions in order to meet local needs.

B. Desirable characteristics and preparation for teachers in outdoor education programs in high school contexts.

The interviews raised the question of how the interviewee felt about the significant elements of their personal preparation or backgrounds for teaching in OE programs. The interview subjects didn't reveal much about whether their specific pre-service teacher education prepared them for their work in OE. Most of the interviewees felt that they didn't need to be experts in fields that might be seen as directly relevant to OE. That is, they didn't

have to be mountaineers or expert canoeists, although they could build on areas where they had relevant prior experiences and had developed skills. One interviewee commented that OE teachers need to exercise good judgment and care to avoid getting over their heads while also operating in their zone of capability. *Oliver E. Coach* explained how he was filling shoes by taking on a program after the retirement of a teacher. He needed to maintain and know his own capabilities rather than try to copy what was done in the past.

This topic invites consideration of the importance or value of OE programs being taught by more than one teacher. Some interviewees were operating their programs in a team format and appreciated having co-teaching colleagues. However, some interviewees who had solo responsibilities for teaching their programs, also noted the value of inviting and engaging experts who had certified skills in areas of outdoor recreation as assistants for parts of their program experiences.

More than pre-service training, the interviewees described needing experience in the field, especially in the areas where they were exploring new sites and appreciated connections to people, including other teachers and administrators, who would come to support their innovation. I believe that my pre-service training in outdoor education gave me initial ideas and I still use an expanded version of my outdoor education professor's lesson plans today. There plans related to the efficacy of using games or macro-models to teach ecologically complex concepts to students grade 7 through 12 (Stibbards & Puk, 2011). I think further research could go towards looking at essentials in pre-service training that could contribute to successes in teaching outdoor education.

An issue of note here is that many high schools are still structured in classes taught by solo teachers who are subject matter specialists with students often moving as individuals to classes in diverse subjects such as science, math, music, or social studies, and meeting other students and specialist teachers in those classes. The cohort model in which a group of students and teachers work together on the whole curriculum as a group or community was noted by several interview participants as a unique feature of OE. In this structure they may develop strong interpersonal relationships and have extended contact with a solo teacher or small team across a variety of experiences. A useful question concerns how much attention is paid by pre-service programs to developing the skills needed by teachers to work effectively in teams vs the one teacher/class/specialty model of high schools.

The concept of having a specialist Outdoor Education teacher versus several different math/science or humanities teachers who also teach outdoor education is an interesting possibility. Currently, I am teaching in a Junior High as an outdoor education specialist, but the school is changing to a model where all teachers teach a “core” subject and pick up an “option”. As in the quote “Despite efforts over 40 years, environmental sustainability is still on the margins of curriculum in most countries” (Gough, 2016, p.83), it is unfortunate that outdoor education isn’t described or accepted as a “core”/ important/or necessary course, and instead OE lives outside the mainstream and is an optional choice to which students may connect and be active outside classrooms.

Although I do not have the ability to change labels in my school, I do see value in a model of more generalists and less specialists. I see this move as an opportunity to have more ideas and energy going into outdoor education planning and preparations with a team of teachers, rather than being solo on an island on my own while trying to be innovative. I think that multi-disciplinary approaches such as hybrid half-day combinations of Outdoor Ed, Science, Career and Life Management and Physical Education are gaining momentum in high schools and continue to be created and offered across Alberta and BC. Examples of such programs are often operating outside of the regular school structure as in summer programming or alternatives to public education for a year or semester. A notable comment from an interview participant claimed that OE teachers are “...people who try to create learning environments where students can explore and be inquisitive and inquire, take some chances, and push themselves from a cognitive philosophical perspective.” Thinking outside of the box of scheduling, and structure is an important trait in and training for Outdoor Educators.

C. The challenges of time structures.

Most interviewees mentioned class time as a major factor shaping or limiting OE in Schools. In Chapter 2 the Literature Review refers to the *Prisoners of Time* report from the US National Commission on Time and Learning, (1994). (The Education Commission of the States, Education Reform Reprint Series, 2005). This Report claims that schools are still highly structured and scheduled in formats appropriate to work in factories, offices, and farms rather than into organizational arrangements clearly intended to support and foster learning, innovation, and critical thinking.

Some schools and districts have made attempts to change the high school timetable through the implementation of specialized semesters or focus weekdays, etc. Thomas Haney High School in Maple Ridge in BC is an example of innovative structure in time and curriculum that has been operating for some years. However, the School District also offers “traditional high schools” to meet the expectations of some conservative parents (and perhaps kids). High Schools in Calgary have attempted to block off a half day for Outdoor Education, but often students and parents are concerned that they are missing out on something like a different option class or more regular science. It appears there is a constant battle to get out of the traditional timetable and curriculum structure. It takes a lot of repetition, proven successes, and convincing to get OE programs out of the conventional timetable piece. Of course, the universities also play a role here-- they often seem to simply replicate the high school timetable, especially in undergrad programs. However, there are innovations. For example, Simon Fraser University has a one semester integrated theme-based undergrad program which attracts a number of students (a fairly small number and enrolment is limited) each term. The program which is called "Semester in Dialogue" is also team taught and supported further by invited guest specialists.

Some high school outdoor educators respond to the challenges of freeing their programs from the restrictions and constraints of the typical high school timetable by offering their programs in full term or even full year formats. Some school districts have also developed specialized outdoor or environmental schools. Three of the interviewees in my research were involved with full term integrated programs or with entirely separate outdoor schools. However, these options are costly in terms of both staffing and facilities that are outside the budgets of most public-school districts. In some areas Indigenous communities have also developed specialized schools and programs designed to reinforce and extend their cultures and focus on indigenous forms of knowledge and patterns of environmental relationships.

The issue of how structures, schedules, and staffing patterns might be arranged to enable more time for effective learning and teaching likely deserves more research than it often gets. It might be useful to follow up from the *Prisoners of Time* report with studies that consider how online or hybrid learning arrangements have affected conventional patterns especially in the post-pandemic high school context.

D. Student recruitment and retention.

An important issue raised by some participants in this thesis research was the need to recruit/invite/attract students who would be assets to their programs while at the same time wanting programs to be inclusive of students with diverse interests, experiences, and abilities. Several interviewees noted that programs cannot hope to be sustained and supported unless they attract sufficient student enrolments. *Project Wizard* spoke to the idea of sustaining a program by having the reports and projects developed by currently enrolled students or recent alumni shared with prospective new students. These presentations could give potential students encouragement that they will also enjoy the program and can succeed in it. *Biophilic Salamander* recommended building regular connections between so-called feeder elementary or middle schools and the high schools which offered OE/EE emphasis programs so that students and parents would have wider awareness of the availability of OE/EE emphasis programs in the high schools. On the other hand, *Max Cadence* cautioned in a follow-up email that adding things like a shopping excursion to get more student's interest can result in the loss of values of the initial outdoor values to learn in the field. He stated, "We added the Museum of Popular Culture, the Great Wolf Lodge, a Seattle Mariners baseball game and shopping at outlet malls. All these things added student numbers to the trip, which helped with its sustainability from year to year, but that's exactly what it became...a trip, not a field study of Mount Saint Helens."

E. The demands and rewards of teaching in OE programs.

Although the teachers interviewed for this research had experiences actively teaching outdoor education, they described encountering circumstances that required them to get a program going with little time for research, planning and preparation. *Pathways Beginning* mentioned the importance of time for planning and preparation while *Fortunate Free Spirit* shared how her program was organized to allow spare time for teachers to plan and prepare for lessons and trips. I believe it is a combination of teacher personality and circumstance that allows these programs to function regardless of the spare time or preparation time that a teacher is given during the day.

In 2020 a new program started in Calgary with a half day scheduled for outdoor education to serve as a lens to the curricula in science, physical education and the environment curriculum. Those involved mentioned that even with a full schedule and no prep time in a school day they were able to plan and prepare and create a great program for

students, driven by experience and passion to get students outside. My interviews clearly revealed teachers who were committed to reflective practice and were passionate about their work. However, in spite of the energy and enthusiasm shown by my interviewees I think further investigation into teacher burnout and prep time allotted could usefully be explored.

F. Indigenous education and perspectives

Although I found some indigenous learning perspectives coming from *Spirit Hawks* interview, I felt dishonor in writing this thesis while missing a more in-depth perspective of Indigenous outdoor educators. I found a company that is running Indigenous outdoor education programming and is highly successful, but I was unable to get an interview with its Director. Currently a regular priority in our teaching practices in Alberta and BC is to implement and include indigenous connections to the land, history and culture in an attempt to reconcile what was lost years ago. At the graduate level of teacher in-service education, the EcoEd Cohort M.Ed. program offered by Simon Fraser University has a very strong commitment to the involvement of indigenous persons as faculty instructors and resource persons. A portion of the 2-year program includes a several week field-school located in an indigenous community at Haida Gwaii in BC.

An important area for further research and curriculum design in the field of OE and EE would be to take a deep dive into the connections between Indigenous Education and Outdoor Education and how these topics can merge and be complementary. There is also now considerable interest in the inclusion of cultural diversity as an element of ecological/environmental literacy and research in both theory and practice.

General Discussion of the Overall Curriculum Goals for Outdoor Education

The Question of program "magic".

In my interviews I regularly asked participants about what they considered to be particularly distinctive or important as an element of the operation and implementation of a high school outdoor/environmental education programs. In other words, what makes a program have special meaning or significance for students? In raising the question I sometimes asked my interviewee to discuss the "Magic" or special characteristics that they

looked for or considered in thinking about their program experiences or for OE programs in general.

I came to treat the term MAGIC as an acronym: that is, **Meaningful Activities Generate Interactive/imaginative Classrooms**. As noted above, many OE programs are structured as cohorts in which students and teachers work together to create a learning community. For this thesis I propose that it is the building of very strong relationships and deep connections, as enabled by a cohort organization combined with coherent use of time that make a program "magical". Magic is the uniqueness of each program and the passion that burns inside of it.

Magic is seen in the creation of a social environment where people can accomplish challenges that push their comfort zones and where students and teachers learn with and from each other. The philosophical foundation that I would propose for OE programs could be outlined by four pillars: Inquiry, Place, Opportunities, and Experiences that lead to deeper connections to the other-than-human world. Further, I would propose that an element of the Magic is in the dialogue and social interactions between Places and People and in the opportunity to listen to something outside ourselves; "something that speaks to the soul" and stretches human interactions beyond our comfort level.

The magical part of a program is found in seeing the creation of a learning community that students are excited and proud to be part of. A cohort community allows students to follow their own pathways where that is relevant to them - student-centered learning is essential in the true sense of the practice. A family-like atmosphere needs to be created. Teachers sometimes need to work on this-- kids don't always walk into a program already getting along. It is important to work on group dynamics first before covering content.

The Cohort Style.

A cohort style, integrates all subjects not separated in the class, and connects to the curriculum near the end of the class sessions. A cohort style keeps a group of students together to learn over time and through experiences. It entails:

The integration of all subjects not separated in the class, and connects to the curriculum near the end of the class sessions. A cohort style keeps a group of students together to learn over time and through experiences. It entails:

- Building community - relationship-building from being put in situations where students need to depend on one another. Students find through collaboration that they have more capacity than they previously thought.
- Transformative learning - challenge, time, immersion, reflective practice, dialogue, teamwork and promotion of interdependence.
- Close proximity to doing things that include the out-of-doors.
- A commitment to being outside doing things several times a week.
- Includes dedicated individuals who are willing to be facilitators.

Curriculum and content in the cohort context.

Time.

Time is a critical element of a cohort model.

- Time is required for meaningful learning. When boxed into high school 90 minute periods, there isn't enough time to create opportunities for learning, connection, community building, et cetera;
- OE wants to escape the rigid schedule, and so it often needs to be scheduled much as possible for or to exist in a flexible or open time frame;
- “The ones that are the most successful are the ones that can have the kids for the longest period of time without interruptions”;
- Time for OE teachers to *learn from one another and connect.*

Personnel management and school-based outdoor education programs.

The participant known for this study by the alias *Biophilic Salamander* (BS) raised the issue of the need to consider changes to personnel and policies when school administrators, or other decision-makers shift positions and move to new roles or different schools. BS reported personal situations in which he had to fight to gain support from new administrators who may move into position with little background knowledge or appreciation of a OE program. Similarly, issues can arise, and a program's future can be at risk, when a teacher experienced in OE leaves a school with no designated replacement--this is especially problematic when a program is activated by only one teacher. A replacement teacher may not be introduced or oriented to resources, documents, equipment, and program history left behind by the departing teacher. The replacing teacher may have the necessary outdoor skills but little appreciation of special experiences and approaches developed by their predecessor, as well as special styles and unique activities and experiences.

Looking back on my own experiences, I think that in a high school program where I arrived at as a new appointment it wasn't a lack in my ability to teach outdoor education in an effective and innovative way, but rather there was a lack of communication needed for me to step into the shoes of the person who was leaving. The teacher I was replacing was playing a role in parent connection and inclusion. He was putting out fires from parents who were worried the OE science program wasn't as complete as the regular program and he was charismatic and served as the personal face of the program. It took me a year to figure out what he had been doing and by the time I clued in, the program was dead. Some of the people I interviewed for this thesis recognized the importance of having a philosophy, paying attention to staff change-over and maintaining a program's core values as being essential to sustaining a program in outdoor education.

Topics and Issues for Further Consideration

Technology and changing the face of Outdoor Education

What might I advise someone on running a successful program in the 21st Century, during a pandemic when the system has shut down and we are trying to combat a deadly virus? Or, when Ukraine is a country under attack... We need the common system of the timetable grid and the bells and the lectures to blow up, and that is partially what the

pandemic has done. Perhaps, we should rethink the way we do things. John Taylor Gatto in his book called *Dumbing Us Down* (2017) spoke to the idea that school as it is today is not working and this may need a system level change. He refers to the education system as a place to train and educate for roles in business and to follow a planned path. Further research into changing the system of how schools currently operate under bells and timetables would be a worthy and informative feat. Outdoor Education programs find most success by pushing this time-envelope, by pulling students outside of the regular schedule for a time (semester, term or year) and then reintroducing them back into traditional or regular programming.

My principal announces at the end of June, “September is going to be different and I strongly advise that you put your files and binders and lesson plans from years past on the shelf, we need to do something new, try new ideas, be innovative with your colleagues”. Teaching needs to look different. Students can access much of the world’s data and information from the cell phones they carry their back pockets. In my view teaching is not about giving kids information. Rather, it is now about helping students to know how to use the torrent of information coming at them at an incredible speed. They need character building skills, social networking skills, the ability to be innovative, attack challenges and think critically and creatively to solve world system problems beyond just doing the same old things we have been doing. Kids need to learn work ethic, how to apply technology, and how to take care of and connect with the people and places that they are in contact with on a regular basis.

As a passionate OE educator I am biased but honestly, the core work of EE and OE programs is to make students aware of themselves, their connections to the land and others, and to give them problems to consider, act on and to creatively find solutions, while pushing their limits and learning that they are capable and can follow their passions to live successful lives as a democratic, involved and intelligent citizens. Further insights into how so-called free time that gave students chances to have ideas and act on them could also be explored as an important and integrated component of the structure and actions of OE. I recall subject *Carpe Diem* mentioning that creating a task on the fly or changing directions for the day is an important component in experiential learning and problem solving/critical thinking skills that educators should not fear, but rather embrace.

Indigenous education and perspectives.

Although I had some indigenous learning perspectives that came from *Spirit Hawk's* interview, this is an area that could be further explored. I found a company that is running Indigenous outdoor education programming and is highly successful. However, I was unable to get an interview with the Director. In Alberta and BC, indigenous learning is seen as a regular priority for our teaching practices. There is now also a growing interest in considering cultural literacy as an important component of environmental and ecological literacy. Research that involved a deep dive into the connections between Indigenous Education and Outdoor Education and how these topics can merge or complement, would be highly beneficial in many avenues of the field.

In Closing

In Chapter 1 I included a quote from David Orr in which he describes the unfortunate lack of priority for environment- related topics and subjects in the core school. Many of my research participants also described some of the struggles and challenges that they have had to face in order to have their programs accepted or taken seriously in the schools where they work to implement outdoor/environmental education. Too often it appeared that outdoor education was viewed as optional or extra-curricular among the list of possible priorities for contemporary public high schools. There are many competitive proposals for courses to have positions at the centre of modern school objectives: courses in new media, computer logic and artificial intelligence, courses developing data literacy, and courses that foster entrepreneurship as well as designs for learning environments built on virtual and digital realities rather than actual places and settings with real human actors and communities. Further, the growing need to have school programs and student activities address the urgent topic of climate change may also be viewed as being in competition for time, space, equipment, and staff resources. Of course, climate might easily be viewed as an important element of environmental literacy rather than as a competitor with outdoor education. The programs of many modern high schools are also highly weighted as important steps in the competition for places in post-secondary institutions and programs.

Several of my research participants noted the need for clarity about the goals and outcomes of programs in outdoor education and indicated that teachers who advocate for OE will need to participate with and communicate actively and effectively with colleagues, parents, and students about the ways in which OE programs can make important contributions to the

overall purposes and values of high schools. This will be a task requiring clarity, time, and focus and imagination by teachers. Building effective partnerships and networks will be critical if we hope to place OE in the core of the current high school learning experience.

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APPENDIX 1

Interview Summaries

These summaries from the interviewees were included in my thesis to provide the reasons for their pseudonyms, but also to capture more details of what they are about and their fantastic insight on the topic of successful outdoor education programming. Their insights felt like gold in my hands for creating, implementing and sustaining an OE program in the public high school setting.

Summary 1. Project Wizard

Pseudonym - Project Wizard - for his humility and humble nature for what he accomplishes on a regular basis with his students, for the feats he takes on related to student ideas and project work that takes flight, and the wizardry involved with having kids from all over the city able to come together and experience community with limited time and create a connection to place

Background

Connection to place and the importance of this concept was developed teaching in Jasper and having a hand in the Palisades Outdoor Center. Commitment in teaching to connecting students to place. Grew up on a farm where connection to the land was strong.

Essential or Characteristic Elements in your program?

- Students attending adult conferences
- A unique and comfortable atmosphere
- Attention to building community through working together
- Project-oriented work that is student-led, designed and implemented
- An open approach to learning together and finding experts or organizations to support learning
- Focus on connection to place
- Calm intensive 4-5 day programs - focus on real learning that is hands-on
- Validation - through community members, media, sharing stories, word of mouth, people seeing value in the program

Essential Requirements for Success?

- Administrator on board
- Community backing and belief in the value of the program, including community partners
- Active recruitment of students to get them in and realizing what this program is about and what it matters; Need to attract students to the program sometimes by attaching a core subject to an options class - - You need to get numbers in the door
- Building relationships in the program, creating a safe and comfortable atmosphere
- Always be ready to defend what you are doing, meaningful learning
- Need to be having fun, doing fun things
- Develop notoriety through media and advertising to protect the program and validate its value to the community

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- Funding - fundraisers, district support for numbers (teacher: student ratios)
- The place matters - need to be able to connect students to the location/place in a positive way

Attitude, Knowledge, and Skills of a Teacher

- Can't be passive, "you've gotta be pretty, you get your elbows in there and make room for yourself"
- "Just start doing it"
- Able to connect to community partners and bring in experts, not thinking you can do everything
- Able to speak to people in their language
- My knowledge is my humility and ability to learn alongside students
- Able to trust in kids and allow them to find their interests and lead their journey
- Comfortable and confident to use your knowledge and skills you are comfortable with and just start doing things
- Able to speak to people in their language

Formatting

- Try to attach an academic course to an option to create time and legitimacy for the program to students and parents
- Ensure the program is close to an outside space that students can explore, including the community outside of the school building

Magic

- "that ultimate or the high point it is the cellphone is put away they are laying in an open field in the winter, bundled up, looking up at the stars and finally hearing their own voice just hearing other things and just experiencing feeling cold and and they just think that's the greatest thing in the world there's nothing they would describe that they like more as when we have those moments"

Barriers

- To avoid barriers, you need to get as many people on board as possible
- You can't do this on your own
- Gather people with similar values
- Fear - a barrier to teachers that see this as doing something crazy and different, there is pressure to do the same as everyone else (worksheets day after day) - Systemic Fear
- Technology has become distracting to wellness and engagement in learning, can be a tool, but
- Comfort levels - can be limiting when teachers have large class sizes, behavioral problems, IPP students, ESL, high needs in a class grouping
- The pressure of diploma results, which would be better addressed through experiential learning opportunities, connection to place and community
- Support - without enough support, the job can become overwhelming, too much fight to fight

- The system, “we are forcing people through a system that is not benefitting them”
- Time is required for meaningful learning and when boxed into 1 highschool 90 minute period, there isn't enough time to create opportunities for learning, connection, community building, et cetera

Final Thoughts

- Calgary needs an outdoor environmental learning center to create access to all communities - Calgary has no outdoor centre

Summary 2. Max Cadence

Max Cadence – given his name for his need to bike every day, get outside and maintain a balance to keep energy charged as a formidable environmental educator. He is a passionate and has been from a young age, dedicated and committed to his calling to educate and connect students to the community and outdoors.

With a background in geography, Max has spent time at first with creating a field trip to a volcano as a learning tool for a club at his school. He had a hand in creating a program that has been running for 20 years, a semester long, district program that allows 48 students to be accepted to the program and together for that semester, gaining 5 HS credits in life sciences/ biology, pre-calculus/ math, ELA, PE, and Outdoor Education. His current project with team teaching a half day program that includes Explorations in Social Studies 11 and Environmental Sciences 11.

His advice on OE programming is to ensure supports are in place to run a program. Supports are gained by giving a high sense of value to the OE program. This value and support must translate into funding for the program in relation to staffing, equipment, and transportation needs for a program. The program needs to fit in with the culture of the community both inside and outside of the school. A note on staffing and ratios of staff to students is that in the first 2 to 3 years, the staff to student ratio will be low, for example 1 teacher: 11 students. If you value the program, this needs to be funded for in order to get to a sustainable number as the program takes off. EXPLORE pulls kids in from the district, so the school itself starts with a staffing ratio deficit and this requires getting funding from the district for the imbalance.

The conditions need to include support from parents, students, administrators, district representatives, and a strongly aligned program to the curriculum expectations and overall district goals and mandates. BC's new curriculum contains mandates for environmental stewardship and indigenous education. The main condition, though, is you need funding and money to back up that value and support people of given. Your supports need to “walk the walk”. If you are new to a school, you need to use staff allies that have more years of experience to help you get the money to build a program.

The educator needs to have a strong skill in building relationships. Relationships are key in the way cohorts are created to build deep and lasting connections between people and the environment. Relations must be formed to gain support and communicate the value of a starting program. Educators need to be engaging and dynamic. If you aren't dynamic, then

you're not providing those experiences. To be dynamic, you need to take care of yourself and "make sure you still love what you do without life getting in the way".

Leaders need to be competent, confident and feel secure in their ability and role as a passionate educator in their OE program. They need to have a good understanding of the culture of the building, which is also determined by the culture outside of the building. The leaders need to be dedicated to the program and they need to be able to make a claim or statement to gain supports and allies. The value of a program needs to be seen as important for the school, the community at large and something that will bring strength to the communities.

It helps if a principal believes in the program, that way they will be generous with staffing, help to fund the program, and act as a support. As new principals come in, you need to explain to them the importance in the community and culture for that program.

"The linear traditional system doesn't work with a holistic outdoor education program". An OE program would best work with the school within a school program – either a semester 5 credit inclusive program or a half day 2 credit program seems to work well, then you have cohorts, continuity, character, confidence, and relationship building at the core of the program. You need the freedom in OE to structure each day however you want. In reference to the magic of OE programs, Max replied with an acronym from a professor of education in Winnipeg. The acronym is MAGIC – meaningful activities generate interactive/imaginative classrooms. The most important is that in a cohort model with kids grouped together for the full or half day, you can generate more activities and relationship building over a longer period of time. The building of really strong relationships and deep connections makes a program magical.

"So, if we can provide the support and structure for kids through outdoor education that allow them to feel confident and take risks and then accomplish things that they never thought they could before in the environment then maybe they may not be afraid of the environment and they might actually want to do something about it, which is kind of important, to me, that's the magic important part."

Summary 3. Pseudonym - The Travelling Son

Name given for inheritance features of dad having taught OE at the same school. Traveling from the trips he runs each year and community gained from experiences on trips, focus on adaptation. China, Hong Kong, Honduras, Panama, Utah, et cetera. His Master's program a helped his move from outdoor education to outdoor studies, by giving more time to the program and adding in a social studies course. The addition of place-based focus and connection and community building came to the forefront for the best use of time.

Characteristic or Essential Program Elements

- Enthusiastic kids that want to be in the program, the right fit for the program
- A teacher that is operating within their comfort and skill level
- Support from the administration, the district office, teaching colleagues

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- You need to cater to the appetite in the community for the type of program you are trying to start up or run
- Field trips - at least a few to provide the time for community building and cohesion
- Relationships with people outside of the program to connect them with it
- An element of challenge
- Flexibility - to make changes on the fly based on safety, weather, group dynamics, et cetera
- A challenging situation to help build community through helping each other and pushing through a challenge that they experience together
- Food planning preparation and sharing together is a great community builder
- More than just the activities themselves:
 - Group cohesion
 - The building of a community
 - Connection to place

Attitude, Knowledge, and Skills of an (OE) Teacher

- Some experience and comfort in outdoor education and outdoor skills - you don't have to be the best, but a good basic knowledge and comfort, some sort of outdoor background
 - You need to have the skills for whatever you are showing students
 - Flexible and able to adapt to changing conditions inherent in outdoor learning
 - Must be able to build and create relationships with others, the connection piece to gain district-level support, teacher support, students comfort, company service provider relationships
- Organized in your efforts and planning

Formatting

- Depends on the environment, the scheduling structure, which would be ideally a flexible scheduling structure
- The format needs to allow for enough time to create connections to each other and place, some overnight experiences and time enough to create a community within each OE group
- Using weekends for trips can lead to teacher burn out
- A full day worth of time over semester would likely be the best option
- The schedule must consider the balance of other classes and maintaining administrator and other teacher support

MAGIC

- The magic is in the sense of community among the kids, the relationships and the opportunity to learn from all students in a group as teachers, not just the one official teacher of the class

- The rich learning that comes from the experience, which allows students to find their interests and inquire into things they have discussed with others and found as their personal interest to explore (i.e. inquiry-type learning)

Barriers

- There are inevitable battles, struggles and barriers for OE teachers
- Time is the biggest struggle for getting kids out, for building community, for creating connections, for opportunities to share their learning, to conduct authentic inquiry, for planning, for paperwork, for meetings to ensure safety and support from the district and colleagues, time to let conversations carry on
- Burn-out - if a teacher pushes too hard often doing the planning on their own, they are at risk of getting burned out
- Cost
- Support - district level, admin, colleagues
- Scheduling - OE wants to escape the rigid schedule, and so it often needs to be scheduled for or exist in a flexible or open time frame as much as possible
- Group dynamics - each group is unique and so planning needs to adapt to the group you have as far as breaking up cliques and creating a cohesive group connection
- Too much focus on the content can become problematic in building that community first as a base for learning together.

ADVICE OVERALL

- You are never going to be able to do it all by yourself
- You need to find the people around you in the school and community that can help support you
- Conserve your energy as much as you can so you have it when you need it

Summary 4. Humble Innovator

Pseudonym - Humble Innovator - for his raw look at successes in OE from a perspective of gratitude for all of the things that go into great work in outdoor learning. He is part of a team and takes all of the world around him on this journey to connect and learn in a natural setting

Passion - comes from working outdoors, and seeing changes in kid's views around the environment and how they see themselves.

Characteristic Elements included in your program?

- Innovation - creating new and unique opportunities that get students excited
- Connection to the community - specifically to the neighbors and people with expertise or space to share allow students to learn from

Discovering the Elements of Success for Outdoor Education Programs in Public High Schools

- Philosophy - a strong foundational belief system that is outlined by 4 pillars: Inquiry, Place, Experiential Education, and Community
- Winter outdoor concert - an innovative and new experience which included a parent producer, song writing and inclusion of community in and outside of the school
- The use of story and bringing nature to life and to a magical sense of wonder in students
- A community and culture of support that had been created prior to opening the outdoor learning school

Requirements for Success

- Administrative support
- Philosophy and buy-in from admin, staff and students on that philosophy, “embrace the philosophy”
- Community connections and networking
- Research to back up programming
- A culture that is open and receptive to outdoor learning
- Passionate teachers that are willing to work hard, be creative, be innovative, collaborative, and make connections
- Funding has to be sorted out, where is it coming from?
- “The ones that are the most successful are the ones that can have the kids for the longest period of time without interruptions”
- A commitment, buy-in, supportive network of teachers, students, admin, superintendants, parents, community members
- Flexibility
- A multi-faceted approach - coming at a program from varying avenues and creating buy-in along the way

Attitude Knowledge Skills required of a teacher

- Willingness to put in the time and do the work
- Ability to make connections
- Competencies in outdoor skills can vary, but comfort in an outdoor setting
- Ability to be creative and innovative to build unique and new experiences to learn from
- An avenue in outdoor learning to be able to engage students
- A positive outlook on all types of weather and conditions
- Must be collaborative and work well with a team
- Committed to trying new things and embracing the school’s philosophy
- Dedicated
- Believing in the worth and seeing it through
- Ability to avoid burnout
- A teacher needs to have the energy
- Really strong people skills and a true love of the outdoors
- Ability to “cold call” people

What is required in the formatting?

- Need to have as much flexibility in timetabling as possible
- Need to have the kids for as long a period of time without any interruptions
- Avoid forcing transitions indoors during a day, or period of time
- Avoid putting yourself in a position where you need to battle other teachers for time
- Admin needs to make decisions from a place of understanding the benefits of the program, Admin needs to be on board - making presentations in principal/ vice principal meetings can help with this when admin changes from school to school in the public board
- An idea in formatting comes from John Blekinsop, Gillian Judson and Laura Perisol that have been a part of “dual-track” schools where there is an outdoor stream and an indoor stream similar to the formatting of French Immersion dual-track schools And/or an Outdoor School District that comes with support and creates resources to keep people connected

Are there aspects of your program that contribute to its’ “magic”?

- Appreciating and sharing the magic that is the outdoors, nature itself is magical and through story and energy and wonder, a teacher or facilitator can share that and bring it out for students to see and appreciate
- Example: “photosynthesis is just such an incredible thing”
- “I like to try showing off the magic of the outdoors with kids” - “this is a magical place that can change the way you see yourself, there are all these mysteries and stories”
- Doing things that people havent seen before, for example: a christmas/ winter concert that incorporates a Sikwitmak story, tea lights and paper bags, snow falling and lights set up, creating a wonder in parents walking in, add drumming and a gathering of everyone

Barriers?

- Behaviors - not have a good balance of the type of kid in your program, you need to be aware of and proactive with how you set up your program and the types of kids that you are attracting based on scheduling, credit options, location, et cetera.
- Maintaining a positive image/ popularity requires making sure media interviews and radio shows go well, making sure that you are showcasing the things that are going really well and the kids that are doing really well
- Burnout - to avoid burnout, you need a healthy balance of the type of kids in your program, this can be established in the way a program is set up and the credits that are offered
- Funding can be a barrier, to avoid this you need to have a sustainable source of money for things like transportation costs, funds to create access, the use or creation of a foundation, grant or funds access needs to be in place

- Having a teacher or teachers that don't buy-into or don't understand the philosophy can become a barrier to the program. For example, a music teacher in an outdoor learning school that resists being outside, inquiry and innovation. Or, another example is a teacher that has been engrained in traditional education and their ways that resists a movement to teach within the philosophy of a school. The best way to overcome this is to have mentor teachers in place, be selective when picking a team of educators to maintain strength in the philosophy of a school and the willingness of teachers to collaborate and work towards the same goals of the school.
- Time for OE teachers to learn from one another and connect - a great idea would be to have a convention of sorts that uses an open spaces format to allow educators to share challenges and solutions, ideas and supports

Overall Advice?

- Start small, build on successes and then grow, and perhaps even one grade at a time to work through any growing pains
- Make sure you have buy-in
- Talk to people who have done it and learn from their work
- Do the research to back up your ventures, gain buy-in and lessen the struggles - "gathering data will save you days and days of time in the future, if not weeks or months, it will prevent you from making mistakes"

SUMMARY 5. Oliver E. Coach

***Pseudonym** - symbolizing a change in direction from high school basketball coach to OE, and for his work as a mentor for environmental educators in Alberta (GEOEC) and Calgary through PD opportunities, sharing knowledge and making connections. Like Oliver Twist, not afraid to ask for what he wants and go on an adventure to learn and grow more.*

What are your essential or characteristic elements included in your OE program, the things that make your program what it is?

This OE program has built capacity over several decades. Traditions within the program have been maintained over the years, but also Oliver has found ownership and passion to make changes, and incorporate his comfort and strengths into the program. I think the combination of an outdoor leadership club as well as grades 7, 8 and 9 streams in outdoor education work well. The club has a special draw as it requires passionate, dedicated students to join and become part of a family-type community. Characteristic of this program is the skills camp days in grade 8 that lead to the club participation and goal of a 12-day west coast trip. Attention to reflection exercises and students' learning to journal well also seems to be an important component of this program. Other things mentioned is that lessons are well thought out and planned with special touches, for example, "magic trails" where magical things appear on the trail with a focus and understanding of the give and take relationship. This program also has healthy connections with community members including mentors, leaders, First Nations, service providers, parents, students, and alumni over time.

Another key component of this program is an emphasis on leadership development. Continually, “raising the bar” for students to meet challenges, gain confidence and mature through life skills and lessons.

Essential requirements for success in a program?

1. Administration support/ Community support
2. Budget
3. A person with passion in that role
4. Awareness of interest and Sell your program...you need Buy-In

What attitude, knowledge and skills are required of a teacher for success working in an outdoor learning environment? What life experiences are most important for you?

A teacher in this role needs to be open and positive. They need to have a passion for outdoor education that gives them the ability and drive to put the work in. This person can't be afraid to ask for help, and they need a high level of self-awareness - know where their passions are, know your strengths, and this will help a teacher to build capacity by making connections and committing to life-long learning. A person in this role must “never be stagnant” and should always be revamping things.

What is required in the formatting of an OE program? How would you arrange or set up a High School program?

In the formatting of a high school program, Coach would say you need to do your research on the number of kids coming in, the school population and what it is that they want. Consider that high school students have increased academic pressures, so credits may need to align with university programs or career goals. It was recommended to start with a club format in a new school to gain numbers and then could expand to a tiered system that would include grades 10 through 12. The high school program would work best with limited time constraints, like at least a half-day format.

Are there aspects of your program that contribute to its “magic”?

- When kids take over and lead
- When kids are loving it with confidence and passion
- When 45 kids are in a gym silent journaling, the buy-in piece that leads into reflection and learning about themselves
- “Kids have a eureka or breakthrough moment” - that leads to confidence that is through the roof, a love for something new/ a kid gets hooked for life, and an experience dispels previous fears
- It is magic to sit back and see kids in action by caring for each other and the environment (i.e. BC trees) and showing strong leadership.

What have you experienced as the most important barriers to implementing and sustaining your program? Do you have suggestions about how you might have removed or reduced these barriers?

- Teachers are not all aware that they can and should take kids outside - perhaps discomforts, perhaps they are not pushed by admin, but definitely elementary school teachers have an “easy lay-up” to get kids outside every day or at least every week because they have students with them all day.
- Trying to do something you aren’t comfortable with as a teacher and putting students at risk. I.e. trying to do too much too fast without the background research and planning
- “Don’t go crazy in the beginning”
- Expectations need to be clear and consistent

SUMMARY 6. The Roaming Explorer

Pseudonym: The Roaming Explorer for his ability to move and adapt and learn from so many travels, opportunities and locations, a real guru of outdoor education programming and he has a strong grip on what an outdoor program needs to have and the commitment and energy required.

- *Passion - climbing and exploring all over the world, biking, paddling, sailing, surfing,*
- *Taught - Baffin Island, Yukon, Golden, and now in Courtney/ Comox*

Essential or characteristic elements in your program?

- Field trips that were the strengths of the teacher(s) involved
- Motivated kids, families and the community
- Outdoors location where recreation and outdoor education was at the doorstep of the school...i.e Baffin Island
- Yukon - Wood Street School had 30-day trip and momentum from years of running and support in place for things like TOC coverage, bussing, outdoor equipment, and prep and planning time
- Golden, BC - 2 climbing trips a year, including ice climbing
- Journaling and reflective practices, journals were marked in the vestibule of kid’s tents each night
- Teaching school curriculum outside, experiential learning
- Used the cohort model
- Connection including breaking up friend groups

Essential requirements for success in starting up a program in a high school setting?

- Support and honestly it is Financial support needed
- Transportation available - busses
- Journaling and reflection
- Fun - the students need to be having fun
- Student buy-in and interest in being there in the first place, Keen kids

Discovering the Elements of Success for Outdoor Education Programs in Public High Schools

- You need to know what resources you have and plan accordingly
- Hands-on Learning
- This program must be better than a regular classroom might be on a rainy day
- Equipment - extra clothing, gear, teacher ability to fix equipment - kids need to be taken care of and comfortable in the outdoor activity
- Good program promotion and active recruitment of students
- Trips - you need that carrot for kids to come to the program and work towards it in the program - it doesn't need to be extravagant, but at least a couple trips and one overnight

Attitude, knowledge and skills an OE teacher should have for success?

- Dedication to the program and their work
- Outdoor competencies including skills in the activity they are passionate about, basic camp skills, being comfortable outside skills, skills to fix equipment on the fly, on a trip
- Passion - must be passionate about what they are doing
- Work hard - an OE teacher must understand that the workload for an OE program is more work than a regular classroom teacher, they need to work hard
- Good judgment and care to not get in over their head and operate within their zone of capability

Required Formatting in the traditional school setting?

- Time - you need at least a double block of time to get outside for lessons
- Some freedom and flexibility in the timetable
- Combined courses - at least 2, the curriculum should be tailored to that teacher's strengths
- Consistency in the program structure and supports - being able to run trips and having the time built into the program is essential

Are there aspects of your program that contribute to its magic?

- Students connecting with each other, and with the outdoors through personal experiences
- Students having the opportunity for experiences they may not otherwise get
- Mental health barriers overcome, for example, a girl finding solitude in the forest from her anxiety
- The challenge that pushes students out of their comfort zone and allows them an accomplishment and/or learning through that challenge
- Magic for stakeholders is in the community connections, stewardship, creating passions for their futures, career opportunities becoming revealed
- To sit in the forest for 20 minutes and listen to some quiet - that is valuable

Barriers and how to avoid them?

- Don't volunteer to do it unless the conditions are right
- Kids being put in an OE elective when they have no interest in it
- Not enough gear, equipment or resources
- Lack of financial support for subs and transportation, also money for planning time
- Not enough time, ensure you have a minimum of 2 high school blocks - 2 combined courses
- Teacher Burnout - sometimes there is an inability to balance work and home life - for example, 60 field days out with Wood Street School in Yukon is not sustainable in that regard
- Accidents can cause challenges related to risk management and what you can do in a program - it may require earlier planning, more meetings with trustees or district or principals to ensure safety of students

SUMMARY 7: Carpe Diem

Pseudonym - Carpe Diem - I found this name most fitting for your drive to make the most of every teachable opportunity, to read the group and the dynamics and maximize the learning that can happen through creating and recognizing opportunities

Background

With a focus on experiential learning and creating opportunities to learn, he has started a 4-credit cohort high school program known as ES 10 with credits in earth science 11, science 10, phys.ed 10 and social studies 10. Overtime the credits shifts, but always a full semester and cohort style since 2003. (Can add in details from Peter Koci's detailed study on this program in relation to learning features). Grew up in Northern Ontario with outdoor experiences and experiential learning and problem solving led by his Dad in auto mechanics and survival skills. A big feature in growing up was the opportunity to figure it out on your own, not hand fed what to do or the answers.

What are the essential or characteristic elements you included in your outdoor education program?

The essential elements depend on the goals and outcomes you are trying to achieve in the program

That said...

- Social cohesion - creating a trusting environment where students are comfortable to take risks, people feel safe and willing to share their ideas
- Critical voice - student's voice in the process of making decisions, say in what they are doing, choice

- Relevance - attached to major outcomes, attached to the curriculum and can and should be “hard” curriculum, put in as much academics as you can to create validity to admin and other people for the worth or value of the program, get engaged students by giving them the reason why you are doing what you are doing, relevance to place (place-based practice), relevance brings value when something is attached to something real
- Don’t miss opportunities that go beyond just being active outside, there is so much more going on
- Goals or outcomes/ continuation beyond the class - active citizenship, self-efficacy, volunteerism
- Risk - chances to challenge themselves, move outside their comfort zone, and responsibility to find solutions to problems, academic and physical challenges both
- “We are not teachers anymore, we are people who try to create learning environments where students can explore and be inquisitive and inquire and take some chances and push themselves from a cognitive philosophical perspective”
- Find, create, allow, invite, or give access to intrinsic motivators

What are the essential requirements for success in starting up a program?

- Attention to the learning environment features that the students perceived as important factors...the “lens of the students” is important
- Begin with paying attention to social cohesion - create that learning environment and connection or everything else will not be enough or may not exude value
- Perceptions last a long time in these types of programs, perceptions are important in terms of Administrative support, other teacher support, students becoming engaged
- Allow students to follow their own pathways where it is relevant to them - student-centered learning is essential in the true sense of the practice
- The Teacher - the interaction through the teacher and the students creating those relationships, teacher has to have confidence in students to support each other, to not leave anybody behind
- Family-like atmosphere needs to be created - teachers sometimes need to work on this, kids don’t always walk in already getting along
- Laughing, emotions come out and good feeling emotions in a supportive environment
- Allow students some freedom with responsibility, opportunity to have input and challenge
- Invitation - you are not indoctrinating students to think in a certain way, invite to explore, challenge, think, discuss and be inquisitive
- “Experiential” not “environmental” - make your own path through experiences and learning and this leaves pathways open
- Must be able to identify how things align with the goals and objectives of the school, the mandates and the curriculum

- Demonstrate that this program is a physical challenge, yes, but also an academic challenge

What attitude, knowledge and skills are required of a teacher for success working in an OE learning environment?

- Need to be able to relinquish control in your classroom environment and handover more decision making to your students
- To truly know inquiry, which allows students to pick a topic, design their own rubric
- A teacher needs to interact and create relationships in the classroom
- Be able to read the group and raise the bar on a regular basis
- Be innovative and see opportunities or moments for growth, seize those moments
- It takes a special teacher to recognize the cohesiveness of the group and what is needed at different times, during different tasks and find a way to bring a group together and/or back together
- To work hard, “not anybody can do it, you have to have the passion and the willingness to put in the extra time..like coaching...you are definitely spending more time than a typical classroom teacher when you are running these programs”
- Knowledge in the curriculum to be able to tie it in after experiences rather than prior
- Attitude is not looking for buy-in, but rather inviting students to engage
- You have to know your outdoors - competent in the outdoors skills that you are including
- Reflective practice - an educator should be always reflecting on their own work and challenging themselves and their practice

What parts of your previous education or life experiences do you regard as being most important for your work in OE/ EE?

- Experiential education
- Practice as a kid in survival and automotive inquiry
- Previous experience in teaching different grades

What is required in the formatting of an OE program that will likely make it successful?

- Cohort style, integrated all 4 subjects and not separated in the class, connect to the curriculum near the end of the class
- Freedom to start and finish when you want, a situation where you don't have to worry about the school's schedule
- “When you are engaged in something, the worst thing that can happen is all of a sudden the bell goes and you're done”
- Recommend combining at least 2 subjects together so that you have larger chunks of time to do things - really difficult in our typical one block scheduling

- No time limit on learning

Are there any aspects of your program that contribute to its magic?

- The magic is in the creation of a social environment where people can accomplish challenges that push their comfort zones
- The magic is when you see it through the lens of the students to find the key ingredients
- Peter and I working together with different skill sets of an exceptional outdoor educator and an academic opportunist, it is a magical partnership where we already know what each other is thinking, it is a very moving experience that is created.

What are the important barriers and any suggestions on how to remove or reduce these barriers?

- Perceptions of colleagues and administration - you need their support and you have to work on their perceptions by showing them the value of the program
- Risk management - choose perceived risk over real risk
- Costs - transportation especially, but also equipment - if you can make equipment to save cost that furthers learning and saves costs, also having your own bus and license helps transport costs and you can fundraise to get a bus
- Avoid rigidity to your program, it needs to be dynamic and changing through reflective practice and a keen understanding of the needs of the group
- Don't get stuck by attaching experience to the curriculum, let experiences outdoors drive the learning and connect to curriculum afterwards

SUMMARY 8: *Pathways Beginning*

Alias: as a reference to the start and transformation that occurred from me through her ROC program. To symbolize Ontario and the Pathways journal as a continuous reference to using literature and research to support your work and your programming. Pathways also in the sense of the journey and making educated decisions and plans to find your way. And finally, with reference to beginning with bravery to arrange experiences by calling up and asking to hang out and be open to learning and growing continuously.

Background and Current work

- ROC program for 4 years at Mayfield Secondary, Brampton, ON
- University Assistant Prof at University of Saskatchewan in Sustainability Education with a noted class assignment call the natural history journal which invites students to be chosen by a natural being or non-human entity

- Other experience includes working for a camp in the states, shadowing university programs, gaining certifications in canoeing and XC skiing, first aid, et cetera.

Characteristic Elements of a specific program (ROC/ other experiences in education)

- A close-knit group
- Preparing together
- Transformation - another teacher's comment "after ROC, kids are different and think different" and that was in a good way
- Unique and energetic school dynamic
- Journaling and reflection
- Own short school bus for transport, sometimes fairly spontaneously
- Grade 11, where there wasn't too much academic focus in terms of grades and credits for university (Ontario has OACs at that time)

OE Program Requirements for success

- Support - from other staff - maybe you are solving other teacher's problems
- A vision shared by several people
- Attention to the audience - who are the students, what do they need, how should the program be oriented considering the students first
- Principal support and Department support
- Be Ready - I had the training and experience, mentors in place, had deliberately chosen the location, the school, the community, the culture, the principal, had researched other successful programs in the area
- Carefully considered program orientation and courses that will be covered
- Work on group dynamics first before covering content
- I did my homework and was well prepared, this includes active engagement in professional development
- Promotion - grade 11 was chosen to run the program partially because it gave time to promote the program to students in grade 9 and 10
- Students were asked that if they see the value in the program then they need to represent that, share with others that they value the program through their behavior on trips and when talking about the program to others

The essential knowledge, skills, and attitude of an OE teacher

- The teacher needs to have a vision and a solid grounding in Outdoor Education through experiences, mentorship, and professional development
- They need both the hard skills and certifications for outdoor activities and it is essential that they are trained in group dynamics (Queen's University did a great job of training for group dynamics)
- Educated and skillful in group dynamics
- Good safety management and group management
- Prepared with research and background work for finding success

- Knowledge of the area and connections in the community
- Mentors: several, but Burt Horwood and Bob Henderson for sure

Magical elements of OE programming

- 2 things: community building and connection to the land
- Active and holistic engagement through mind-body-spirit
- A high expectation that allows students to step up to the plate
- An elevated level of maturity and respect
- Challenges and challenges together
- Those misery days that are memory days - i.e. 4 days of rain and slogging through the mud
- Being in the presence of the land - physical and neurobiology is affected by the land and connection to place (i.e. Japanese concept of forest bathing, Dr. Shami Kang prescribes nature as a remedy)
- Connection to land can lead to a higher quality of being

Potential Barriers and methods for overcoming these barriers

- Not being prepared and ready can be a problem in this type of program, do your homework - research, building capacity, understanding, training, location
- The discourse - how is the program viewed? I.e. if OE is viewed as “play” or not academic or legitimate, this can be a problem
- Transportation should be planned for in order to allow flexibility and a certain element of spontaneity - bus and bus licensed teacher
- Teacher allocations of time need to be planned for and sorted out to keep everything smooth and colleagues and admin happy

Other Advice and Resources

- Focus on group dynamics first and build the community then everything follows from that
- Ontario Pathways Journal
- Shami Kang - perhaps has done some articles in addition to books related to nature as a prescribed remedy
- Do your research, continue networking and learning
- Look at what you are doing from the parents, students, colleagues or administrators and know how you are in some ways solving their problems through this programming - i.e. helping students mature is helpful to parents at the junior high level.

SUMMARY 9. Shutumin Sapin; Spirit Hawk

Pseudonym: The name was suggested by her when asked what pseudonym she would like or was known for. This name was given for her role “connecting the goals of the community with the resources” as a person who works to find funding and resources for outdoor education experiences in the Squamish/ Whistler corridor. She is innovative, bright and full of spirit. She has creatively and effectively obtained funding from multiple levels of government, First Nations, grants, individual donors, and companies to support outdoor education programming.

Background

- Working with youth-at-risk and developing programs, and teaching students from a number of Nations who live primarily on reserve.
- Immersed within the community, Spirit Hawk is able to build close connections with people in the community and really understand the goals and priorities of the Nation. She has had a hand in developing a cultural center that shares place-based knowledge and indigenous perspectives and ways of knowing.

Critical components needed in OE/ EE programming,

- In relation to indigenous education programs, it is imperative to ensure that programs are community-based.
- A strong connection with what the community sees as priorities. Once you understand the community vision, then you can start to connect that to educational institutions and seek resources.
- The vision needs to be driven by the community and built upon what is of interest in the community that you are in. You have to also be willing to adapt and change to meet the needs of the community. Remember that “everything doesn’t have to happen at the same time or as quickly as what you (you) hope”. You sometimes have to shift from the initial vision and go with it.
- Engagement – the program must respond to the needs of youth, link to cultural values, and opens doors for additional educational opportunities and meaningful employment.
- Programs offered in a cohort model attract youth with specific goals, and when support by family members and/or leaders in the community can assist with reinforcing the important work they are undertaking, barriers are removed (e.g. childcare)
- Leadership components are essential to quality programming, as well as reflection and analysis on things seen or experienced on field trips, opportunities for thrills or excitement and challenges that provide a new experience for students to accomplish and learn and grow from.
- “I think environmental education, by nature, lives somewhat outside of what is perceived to be part of the standard processes and practices”

A note on Indigenous Perspectives

- Seek opportunity for non-indigenous people to learn directly from youth about indigenous cultures, but also for youth to be in a physical environment that empowers them to share information in authentic and meaningful ways.
- She shared that the program design ensures that everyone finds success. “It’s a community-based model that is informed by traditional teachings, that identifies that each person has skills, abilities, and talents to ensure that the group can function effectively as a team or family”. Students work together learning from each other and collaborative to achieve the goals of the program.
- Maintain routine, for example, start each day with a morning circle and songs from each Nation
- Incorporate sessions led by cultural experts and Elders
- To ensure authenticity, cultural components are taught by elders and community experts who draw on their knowledge, and teaching expertise.

The Magic in OE Programming?

- Seeing the creation of a learning community that students are excited and proud to be a part of shown through the demonstration and sharing of their culture to family and friends.
- Witnessing a magical moment when students became mesmerized by salmon who were moving along a spawning channel. They were imagining the journey of the salmon and the challenges they must have had to overcome when just minutes before they were occupied with discussing video games.

Barriers to OE/ EE programs

- Lack of human and financial resources.
- Financial support is required for things like transportation and equipment, but may also be required to address other type of barriers.
- Funding comes from a mix of places and includes contributions of money, products and services. When hearing of the programs success these generous supporters often attract others to become involved. Support comes from a range of sources including: municipal, provincial and federal governments, First Nations themselves, school districts, individual donors and corporations.
- Family and community support is also critical as the learning community is a reflection of the wider community.
- These barriers can be overcome through well-developed relationships with teachers, administrators and community members. After a program has an established track record it becomes easier to secure resources and support. It can start in a small way with an enthusiastic core of students and gain momentum from there.

How can programs mesh with the traditional education system?

- Courses have to be integrated and woven into the curriculum, while maintaining the direction and goals of the community. She shared reflections about a recent program that enabled indigenous students from across the province to be involved in the retrofit of a cabin. As part of this process students developed trades skills, learned about Squamish culture and shared elements of their own. The learning that occurred during the week connected to variety of subjects including: Math, Leadership, Indigenous Studies, Arts, and Trades. This

OE/EE experience not only enhanced their academic careers, but created the opportunity to learn more about themselves, and reinforced how important their unique gifts are a critical part of the health and well-being of their community.

SUMMARY 10. Fortunate Free Spirit

Pseudonym - Fortunate Free Spirit - for her references to timing, location, to be lucky and fortunate with the opportunities that have come to her in her life. The free spirit refers to her ability to see outside of the box and live outside of the box in everything she does. The boundaries between work and family and outdoor pursuits seem very blurred and connected when talking to her

Essential or Characteristic Elements in your program?

- A culture of “Trekkies” and an alumni wall, a sense of belonging
- Integrated curriculum program - the curriculum is woven across the 4 curricula of studies
- Organized learning around 3 themes: education for sustainability, outdoor pursuits, and leadership development
- There exists a dichotomy of academic one term and outdoor education the other term; work term and a play term
- A trip a month, or 4 major wilderness trips
- Outward bound teaching philosophies aligned amongst On-Trek teachers
- Attention to and opportunities for transformative learning was apparent in this program (a reference to Teresa’s thesis on transformative learning)
- Created a program with accessibility to all students kept in mind
- Teachers get to know students as people and vice versa
- Transformation - challenge and there is no hiding who you really are, work through conflict, power of the shared experience, when “lessons reveal themselves” later on and after Trek, relationships that are built
- A strong community that was all bought in and it opened their minds to learning
- Learning that was real, relevant, engaging and challenging.

Essential Requirements for OE program success?

- Do your background research and know your audience
- A support system - beyond the support of the school or the teaching team, beyond the head of the school and to the district level
- The District needs to support lower student: teacher ratios, funding
- Funding - you need money to run a program, could be through fundraising i.e. a Christmas tree lot, an accessible cost for students, bursaries, grants, school and district level
- Time - for teachers to plan, organize fundraisers, maintain transportation (buses), flexibility for field learning
- Money - teacher: student ratios, trips, transportation, professional guides

Discovering the Elements of Success for Outdoor Education Programs in Public High Schools

- Staff - that are willing to work in this pretty “all-consuming job”
- Students - motivated kids that put in an effort to apply and want to be there, they are invested in learning
- Direct experience in your local environment and community to allow a topic like sustainability, which is abstract, become real and relevant through personal connections to their day to day lives (Learning in the Community)
- Timetable - must be able to “ignore the bells a lot”
- Outdoor Education needs to be viewed as good pedagogy, as legitimate as what we are doing back at school - it needs to be viewed as legitimate in its own right, as legitimate and powerful learning
- You need time, you need immersion with a group of people
- Learning needs to connect to real life.

How does OE fit into the traditional education system?

- Works best when the program is taken out of the timetable/ schedule and when the bells in a school can be ignored
- You need flexibility in the schedule and timetable
- Traditional bell and schedule system does not allow for flexibility for field days and outdoor learning
- The traditional system or one block of time for OE doesn't allow immersion with a group of people
- The transition from OE learning back into a classroom is also challenging

Teacher attitude, knowledge and skills?

- Passion beyond reason
- Dedicated, special
- Willingness to spend more time with your students and colleagues than probably your own family - it is an immersive experience
- A special set of hard skills for place-based learning in your own community
- Group management skills
- Administrative skills - setting up trips, hiring guides, driving a bus, fixing the bus, fixing gears, organizing fundraising.

What is the magic in OE programming?

- The capacity to build meaningful relationships, it brings people together
- Building community - relationship-building from being put in a situations where students need to depend on one another
- Students finding through collaboration that they have more capacity than they previously thought they had

- Transformative learning - challenge, time, immersion, reflective practice, dialogue, teamwork and promoting interdependence.

What are the barriers and how do we overcome these?

- Hard work, all-consuming job, burnout
- Support from Administration
- Teacher Burnout - without support, it can be too much for a teacher to handle
- Risk Management issues - bus driving, tired teachers, instructor capacity, policies
- Principals - cost, staffing, structure changes
- The timetable is so complicated, can create problems with the admin.

Any extra advice?

- Don't try to change people's minds, try to bring people alongside who are already onboard
- Try to create a momentum for change
- Story of a teacher who came back from a maternity leave as a prep teacher and got permission from the principal to take kids outside, she started to have teachers come check out what she was doing and following her lead.
- It's not a huge mountain to climb
- It is to see an opportunity, it is to approach leadership with the right pitch, it is timing, it is framing, and it is getting those people that are onside, it is to develop a support system

SUMMARY 11: BIOPHILIC SALAMANDER

Pseudonym - Biophilic Salamander - referring to where he comes from, but also referring to the adaptation that he spoke of to overcome threats over time, to be creative in finding sources of funding that were beyond where the immediate eye could see, and for the emphasis in the interview on true merits in OE programming that connects the soul to the world around us, that provides the opportunity for human connection to the more than human world in an impactful way.

Essential or Characteristic Elements in your program

- A place to connect to
- Passionate people, including his self, dedicated to putting in the hours and the work, never giving up and taking on threats as they arise
- Connection to Elders and indigenous learning
- Overnight or multi-day programs - to allow students to connect during dawn, dusk, daylight and dark
- Opportunities to explore
- Community connection
- Amazing experiences that connect people to nature

Requirements for Success?

- Strong philosophy as to why we would be doing this, why learning in the out-of-doors is important
- Finances in check - use of a foundation, financial endowments, self-supporting within 3 to 5 years, subsidies
- Connection to the curriculum - especially math and languages
- School Readiness:
 - School Culture - where is the staff at, not the individual? Where is the administration at? Where is the overall school at? Are there students into it?
 - Community - what do they want? Is this what they want? Are feeder schools buying-in to the program
 - Place - was there opportunities very close by or right on the school ground to be daily extensions of what a program might be?
- Primary Ingredients - 1. Close proximity to doing things that include the out-of-doors, 2. Commit to being outside doing things several times a week, 3. Dedicated individuals that are willing to be the facilitators of that.
- Momentum - not just a one year trial period
- A place for amazing experiences
- OE should be an intentional extension of every subject area - math - maker culture, language - journaling and creative writing

Attitude, Knowledge, and Skills required of a teacher(s)

- Diversity - a variety of different skills being brought in, which could be knowledge or knack for language, a strength in politics, a keen sense and skill for digital media
- A person in this role needs to have a love for nature, be passionate and motivated, creative, collaborative and driven to intentional build and maintain “amazing experiences” and opportunities for students to find connections both social and with the other than human world.
- A teacher needs to be non-judgemental and have a business sense of how to get to “yes” and how to make connections in the community, school, and with organizations
- They need to be a problem solver that can look outside the box when a threat might come their way
- This should not be an individual, it needs to be more than one person, rather it needs to be a cadre of individuals and a collaborative effort

What is required in the formatting of an OE program?

- The use of cohorts - cohorts are effective in terms of being holistic and creating a cadre of individuals that you can draw on, including teachers in cohorts as well
- Ideally, a residence program would help in the formatting to allow for exploration at different times of the day

Discovering the Elements of Success for Outdoor Education Programs in Public High Schools

- A whole semester that covers curriculum for science, pe, language and math/social studies
- Grade 10 or 11, not grade 12 because of academic pressures
- Lived-experience
- A great handle and prep work for the “real budget” that considers staffing, transportation, equipment, and unforeseen circumstances
- Can’t have staff spending an inordinate amount of time running the program, consider labor codes and scheduling
- Should be walking distance to a place to explore and learn from
- Everyday outside programming

Aspects of your program that contribute to its magic?

- Opportunities and experiences that lead to a deeper connection to the other-than-human world.
- Magic is “something about the dialogue between that social interaction, the place and the people”
- Magic is the “opportunity of listening to something outside of ourselves”/ “something that speaks to the soul”
- Opportunities that “stretch human interactions beyond our comfort level”

Barriers to your program?

Initially, it may have been philosophical threats where people weren’t on board with the purpose of the programming, but after the initial start-up, the threats or barriers to the program and facility were financial. Where to find the money to support the facility and programming? This barrier of finances requires reaching out to or creating foundations, or finding donors, government and school district supports. Imagine if all the money spent on the Olympics went to nature-based facilities and/or programs.