

The Role of Self-Efficacy in Constraints Negotiation: Rural Nova Scotia Physical  
Education Teachers' Ability to Implement Outdoor Education

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SUBMITTED IN PARTIAL FUFILLMENT FOR THE DEGREE OF MASTER OF  
ENVIRONMENTAL STUDIES

In the School of Outdoor Recreation, Parks, and Tourism

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August 2011

## Abstract

Previous research has highlighted a noticeable shift from humans, especially children and youth, engaging in activities in natural environments to an increasing tendency to participate in sedentary activities in front of a screen. Nova Scotia has taken steps to reduce the disconnect from the natural environment many youth are experiencing through implementation of a Grade 10 *Outdoor Pursuits* module into the public education system. However, even with the support of the province of Nova Scotia and school boards, research indicates that experience and attitudinal barriers of teachers implementing outdoor education are as compelling as economic and logistical barriers. The purpose of this study was to increase understanding of outdoor education in two Nova Scotia school boards through analysis of teachers' experiences on the ground. In particular, understanding the constraints teachers face implementing and delivering the *Outdoor Pursuits* module and the relationship between physical education teachers' motivation and perceived self-efficacy, and how they negotiated the constraints they do face. Overall, teachers' implementing the module identified with the importance of getting students outside in their own backyards in the hope of promoting lifelong learning and physically active lifestyles. However, the findings illustrated that although a strong focus of the province and school boards has been on acquiring the physical supports needed, such as equipment and resources, developing self-efficacy of teachers and building social networks was more influential to participation levels. Key amongst the major influences in developing teachers' self-efficacy with *Outdoor Pursuits* were being comfortable with and exhibiting a mastery of activities, experiencing the pursuits under the guidance of someone else who could successfully model it, and receiving peer

support, feedback and discussion to stimulate excitement and the acquisition of knowledge. The evidence from this study indicates that training, the provision of mentors, and creating a structure of peer support are vital to raising teachers' confidence, thereby enabling them to successfully negotiate future constraints.

Keywords: Outdoor Education, Constraint Negotiation, Self-efficacy, Mentoring,  
Nova Scotia

## Acknowledgements

Returning to the classroom with the knowledge of having a thesis to tackle was more daunting than the previous years leading long trips with students into wilderness. Luckily, I landed in a community that promoted a positive learning environment while providing an amazing natural one. Thanks to the School of Outdoor Recreation Parks and Tourism, my classmates, the landscape of northwestern Ontario, in particular Thunder Bay and surrounding areas, and the outdoor community here. The inspiration to continue with this research project was in part derived from my personal experiences here.

A special thank you to my supervisor, Connie Russell who always greeted me with a smile for our meetings and provided the patience to help me understand how to put this together. Her guidance, motivation and provocative insight allowed me to pursue the study I envisioned and greatly assisted me in securing the funding needed to do so. For this I am grateful. Thanks to my committee members Brent Cuthbertson and Tom Potter for their wealth of experience with the subject matter and thorough feedback.

Within Nova Scotia, I would like to thank the teachers who volunteered their free periods, experiences and thoughts while participating in this study. I would like to thank the Strait Regional School Board and in particular Brian Smith for his assistance facilitating the study in the board and for providing background information on outdoor education in the Province. I would also like to thank the teachers in the South Shore Regional School Board who went out of their way to pass along my research interests within the board. Without you folks, I would have never heard the stories.

To my family back in Nova Scotia, thanks for your support and understanding, even though you may just think I am still playing in the woods. Finally, to Lindsay Murphy, for leaving our lovely province for the “north”, a place I think she has grown to love. Your support, patience and laughter were enormous in seeing this “project” to fruition.

This research was funded by the Joseph-Armand Bombardier Canada Graduate Scholarships Program through the Social Sciences and Humanities Research Council. This support has been greatly appreciated.

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**List of Acronyms Used**

ADHD	Attention Deficit Hyperactivity Disorder
AHLC	Active Healthy Living Consultant
COEO	Council of Outdoor Educators of Ontario
NSOLD	Nova Scotia Outdoor Leadership Development (Program)
NSSAF	Nova Scotia School Athletics Federation
PD	Professional Development day(s)
PLC	Professional Learning Communities
SA	Sports Animator
SRSB	Strait Regional School Board (Strait Board)
SSRSB	South Shore Regional School Board (South Shore Board)
St. F. X.	Saint Francis Xavier University

## **Chapter One: Introduction**

### **1.1 Description of Research Study**

In Canada, a country renowned for its vast wilderness areas, rich history of First Nations fortitude and European exploration, and relatively small population density, a connection to natural environments would seem obvious. Many Canadians are enchanted by and identify with the vast wilderness just beyond our communities (Potter & Henderson, 2004). However, over the span of a few decades there has been a noticeable shift from children actively collecting tadpoles with dirty hands and wet feet to virtually conquering cities without leaving the confines of their homes. The transition in society from “biophilia” (Wilson, 1984), where humans have an urge to affiliate with other forms of life, to “videophilia” where the tendency is to focus on sedentary activities in front of a screen has recently caught the public’s imagination (Zaradic & Pergams, 2007).

Louv coined the term “nature-deficit disorder” to highlight that people, especially children, need contact with nature, yet emerging research indicates that today’s youth are not only suffering from diminished contact with nature, but also increased levels of childhood problems such as Attention Deficit Hyperactivity Disorder (ADHD) and obesity (Foster & Grant, 2008; Lowell, 2008). Furthermore, there are well-documented health, personal, and educational benefits associated with youth being active in natural environments, including a renewed enthusiasm for learning, higher levels of creativity, critical thinking, problem-solving and improved performance on standardized tests (Lieberman & Hoody, 1998; Rickinson, et al. 2005; Russell & Burton, 2000).

As a pedagogical approach, outdoor learning lends itself to holistic and experiential learning and enables integration of knowledge from a range of discipline areas (Lugg, 2007). Haluza-Delay (2001) suggests that “adventure and wilderness programs exist on a continuum that blends recreation, education, and personal development” (p. 44). In outdoor education, primary goals of education are personal and social change and the fostering of healthy human/nature and human/human relationships through outdoor experiential learning (Bell & Russell, 1999; Linney & Foster, 2007; Russell, 1997).

The province of Nova Scotia has created a new inroad for outdoor education in the Maritimes, where in the past programs have always been the exception and not the rule. In 2007, the province of Nova Scotia took progressive steps to reduce the disconnect from the natural environment many youth are experiencing through implementation of an *Outdoor Pursuits* module into the public education system. It was introduced province-wide for grade 10 students as one module of a four part curriculum (Outdoor Pursuits, Exercise Science, Personal Fitness, and Leadership) in the physical education stream. I wondered, however, how well implemented this module has been or will be. Are teachers prepared and willing to offer *Outdoor Pursuits*? In Nova Scotia, only two of the five universities offer outdoor education at an introductory level in pre-service teacher training. The general low status of outdoor education in pre-service physical education teacher training coupled with the traditionally low level of participation in outdoor education or “youth camps” in Nova Scotia suggests that perceived self-efficacy in teaching outdoor education might be low (Bandura, 1994; Lin, 2002).

The intent of this research is to test the theory of “constraints negotiation,” which in this case compares the relationships between physical education teachers’ motivation, perceived self-efficacy, and their negotiations in delivering the *Outdoor Pursuits* module in Nova Scotia. The research was approached from a critical qualitative perspective using semi-structured interviews with open-ended questions to gather teachers’ perspectives, their stories of their experiences, and the meanings they make of these experiences. Grade 10 physical education teachers in two rural school boards in Nova Scotia were asked to describe their motivation, confidence, competency, and outdoor experience and training, specifically in relation to the implementation of the *Outdoor Pursuits* module. The intent of this research is to both enable teachers to tell their story and deepen our understanding of outdoor education in Nova Scotia, where to date little research has been conducted.

## **1.2 Structure of Research Report**

Following this introductory chapter, I have divided this thesis into distinct chapters. Chapter Two highlights the existing empirical knowledge of outdoor education in the public school system, in particular in Nova Scotia, and the applicability of the constraints negotiations framework. Topics appearing in this section include, but are not limited to: human-nature connection, outdoor education as a pedagogy, role of the outdoor educator, outdoor education in a Canadian context, teacher training and perceived self-efficacy, the *Outdoor Pursuits* module in Nova Scotia, and the theory of constraints negotiation.

Chapter Three outlines the methodology and methods used in this study and Chapter Four focuses on the teachers' implementation of the *Outdoor Pursuits* module mostly in their own words. Their passages are organized thematically to summarize their views of the constraints they faced and the negotiation techniques they used and how these impacted their levels of participation in *Outdoor Pursuits*.

Chapter Five offers a discussion of the results. Here the participants' experiences are framed within the academic literature to analyze the extent to which *Outdoor Pursuits* can be implemented in Nova Scotia. Emphasis is placed on the development of their perceived self-efficacy through the use of mentors, outside expertise, modeling and peer support. The complex interconnectedness of the themes is also discussed in relation to the constraints negotiation framework.

### **1.3 Outdoor Pursuits Module**

The *Outdoor Pursuits* module for grade ten students is an example of a potentially transformative pedagogy in Nova Scotia. *Outdoor Pursuits* was introduced by the provincial government in 2007 to “rekindle the curiosity, and enthusiasm for activities in the natural world, reconnecting students with their surrounding environment, creating a greater sense of stewardship for the earth and resulting in healthier habits for life” (Nova Scotia Department of Education, 2009, p. 1). The module focuses on the acquisition of various outdoor, interpersonal and technical skills through a variety of learning experiences, both teacher-directed and student-directed. The *Outdoor Pursuits* module is one of the four compulsory modules being taught in the grade 10 physical education

curriculum. The other three modules are *Exercise Science*, *Personal Fitness*, and *Leadership* (Nova Scotia Department of Education, 2009).

The *Outdoor Pursuits* module provides a framework comprised of suggestions on teaching practices and activities, notes on related literature and resources, lessons and assessment practices for learning and teaching. Teachers are encouraged to consult local groups and community members to share resources related to the outdoors. The practice of involving the community is thought to not only enhance resources available to support outdoor teaching, but also encourage and extend the programs beyond school into the local community (Nova Scotia Department of Education, 2009). The aim of the program is to create safe and enjoyable outdoor activities in which students actually engage. The components of this module are “created in sequential order to foster cumulative skills to enhance individual as well as team success” (Nova Scotia Department of Education, 2009, p. 1).

The key components of *Outdoor Pursuits* are team building, a focus on the environment, outdoor adventures, and skills. Many of the components of the module are similar in nature to existing outdoor programs throughout North America. A brief description of each follows:

- i. Team building involves multi-level initiatives, scenarios and metaphors focusing on leadership development, communication, participation, attitudes, and risk minimization through good group dynamics and debriefs (pre-, during and post-activity reflection) (Nova Scotia Department of Education, 2009).
- ii. Environmental awareness includes best practices in the wilderness. Students analyze their impact on the environment and how their actions can minimize

negative environmental impacts. In doing so they experientially and theoretically learn about history, culture and wildlife in their bioregion (Nova Scotia Department of Education, 2009).

- iii. Outdoor adventures establishes preventative measures to minimize risk, focusing first on equipment use. Furthermore, through the act of actively conducting planning and preparation sessions, these actions can serve as learning opportunities and subsequently foster an increase in the degree of safety and enjoyment (Nova Scotia Department of Education, 2009).
- iv. The skills component focuses on basic skills needed for wilderness adventure including emergency procedures with the intent of maximizing skill to minimize risk. Teachers and students are encouraged to involve grandparents or community elders who have had years of wilderness experience, enhancing the connection to past generations and deepening the value of the experience. It is suggested that teachers take every opportunity possible to teach wilderness concepts in outdoor settings to set the tone for the module as interconnected with a natural environment and not centred in the classroom (Nova Scotia Department of Education, 2009).

To support the advancement of Active Healthy Living in Nova Scotia the Province has funded initiatives at different levels. Since 2002, over 40 physical activity practitioners' positions have been created at the municipal, regional and provincial level in Nova Scotia. At the regional level each school board has had an Active Healthy Living Consultant (AHLIC) who develops and supports health curriculum. Furthermore, each school board and the Mi'kmaw Kina'matnewey have had at least one Sport Animator

(SA) who works between schools and communities to improve opportunities for physical activity outside of class time (Province of Nova Scotia, 2011).

#### **1.4 Personal Background and Rationale**

Now, more than ever, qualitative researchers are being asked to situate themselves within the context of their research (Denzin & Lincoln, 2005). Upon my return to academia I quickly realized how significant experiences are in shaping the lenses through which I see the world. According to Denzin and Lincoln (2005), a researcher's work is guided by their beliefs and feelings about the world. Therefore, it is important that I state early on where this research is situated in regard to my own lenses and the relationships that have informed my epistemology. My experiences not only influence my understandings, but may have also established connections with my participants and drawn out particular stories.

Although my outdoor experiences vary, they began in a small town in northern Nova Scotia. As a child I had the ability and desire to roam the backfields, fill the forests with tree forts and swim the waters of the Northumberland Strait. Like many children in the area I grew up playing organized sports and never stepped foot in a formal outdoor education camp or program. Many important lessons took place in this little town that have inevitably shaped my existence, but recounting all of them would require another study. Persisting, however, over time is the landscape and rugged coastline of Nova Scotia that has inspired me to learn more about the natural environment and immerse myself within it.



My first experiences with formal experiential education took place after high school when I participated in a Canada World Youth exchange program. The eight months spent living in Quebec and Brazil with different families, working in a group context and volunteering with a community project changed my worldview. The beauties, marvels and tragedies of lands I could have only imagined previously opened my eyes to new cultures, practices and environments. This experience also stimulated a greater desire for exploration, leading me to participate with an Environmental Leadership Program in Costa Rica, study in Mexico and Cuba, and further travels in Central and South America.

Outdoor education and international travel combined for a perfect fit when I accepted a position with the Costa Rica Outward Bound School. My experience and extensive training with Outward Bound opened the gate for further opportunities in Canada at Strathcona Park Lodge and Adventure Centre on Vancouver Island and most recently as a freelance outdoor educator in Australia (Outdoor Education Group, Land's Edge, St. Phillip's College). Working in Australia for two years was focused specifically on teaching outdoor education curriculum to students ranging from grade three through university where I led multi-day adventure-based programs that drew upon experiences encountered during outdoor activities to develop a sense of self, community, and environment in young people. The well-developed sequential programs run in many Australian states reflect the willingness of school boards and governments to take active roles in outdoor education, supported often by subcontracted providers. My desire for international travel, experiential and outdoor education has been maintained throughout my MES through recent contracts leading 28-day student expeditions with World

Challenge to countries such as Malaysian Borneo, Argentina, Costa Rica, Tanzania and India.

Previous experiences leading outdoor education abroad and witnessing the effects programs can have on inter/intrapersonal relationships and environmental awareness have highlighted the importance of the connections that I experienced as a child interacting with peers in natural settings. I worry that these types of outdoor experiences are now becoming more of an exception, even in rural settings in Nova Scotia. The development of an *Outdoor Pursuits* module may be part of a solution to reconnect youth with natural environments and stimulate healthy human-human relationships. However, even with the support of the province of Nova Scotia and school boards, research indicates that experience and attitudinal barriers of teachers implementing outdoor education are as compelling as economic and logistical barriers (Lin, 2002; Nundy, Dillon & Dowd, 2009; Russell & Burton, 2000).

### **1.5 Research Questions**

In order to increase our understanding of outdoor education in Nova Scotia, it is vital to first analyze the experiences teachers on the ground have had implementing the *Outdoor Pursuits* module. Specifically, I wanted to know:

1. What constraints do teachers face implementing and delivering the *Outdoor Pursuits* module and what opportunities are there in Nova Scotia?
2. What is the relationship between physical education teachers' motivation and perceived self-efficacy, and how do they negotiate the constraints they face?

## Chapter Two: Literature Review



### 2.1.1 Human Nature-Connection

Not so long ago, playgrounds, fields, and treehouses put children in direct contact with nature, but now hours spent virtually talking to friends on MSN, social networking on Facebook and playing adventure games such as “Crash Bandicoot” on Play Station 3 may detach today’s generation from the natural stimuli previous generations longed for (Louv, 2008; Lowell, 2008). In a famous *Peanuts* cartoon, Sally Brown is sitting happily watching television when her brother Charlie enters the room. Sally shouts out for her brother to come and join her as there are huge snowflakes covering a beautiful meadow on the screen. In return, Charlie replies that the same phenomenon is happening outside. “Outside?” Sally replies. Although this is a caricature, Sally’s response may not be considered abnormal in today’s society. According to Louv (2008), an increasing number of children and youth have been drawn to the electrical outlets as previous generations have been to the forests, streams, mountains and oceans.

In the early 1980s, Harvard anthropologist Wilson framed the “biophilia” hypothesis. Wilson described “biophilia” as the urge to affiliate with other forms of life (Wilson, 1984). He argues that the powerful and important bond between human beings

and other living systems is vital to our society's existence (Grierson, 2009). "Biophilia" research identifies the positive reaction that people have to natural settings and the positive effects nature has on human health and child development (Lowell, 2008). In contrast, the emerging trend of "videophilia" (Zaradic & Pergams, 2007) is sweeping the globe as the new human tendency to focus on sedentary activities involving electronic media is widespread.

### **2.1.2 Happy, Healthy, and Enlightened Children**

Although he was not the first to identify the need for children to have exposure to natural environments, Louv, author of *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*, has introduced millions of North Americans to the concept of "nature-deficit disorder" and the importance of connecting people, especially children, with nature. Accustomed to a sedentary indoor-focused lifestyle, many humans may now see themselves as mere interested observers of – rather than part of – the natural world. Societal factors such as the growing concerns about "stranger danger," the increased time spent in front of a screen, the lack of time for unsupervised play and the increase in legal liability cases have resulted in what Louv has termed the "criminalization of natural play" (p. 32). This "criminalization" occurs as priorities of local governments and communities shift away from creating conditions for unstructured outdoor play in common areas to becoming more concerned with property values and lawsuits (Lowell, 2008). Increasingly, rules govern and restrict children from creatively organizing themselves within the natural environment surrounding their homes.

Disrupting our biophilic tendencies is detrimental to optimal emotional and psychological development (Kellert, 1996). Diminished contact with nature has been directly linked with increased levels of childhood disorders such as Attention Deficit Hyperactivity Disorder (ADHD) and obesity (Foster & Grant, 2007; Zimmerman, Christakis & Meltzoff, 2007). Research indicates that new treatments for ADHD include increased physical outdoor activity during the school day and the inclusion of after-school and weekend activities centred on natural outdoor environments (Lowell, 2008). The advantages of these programs in comparison to medication include their relative accessibility, low cost, lack of stigma and no negative side effects (Lowell, 2008).

The educational benefits associated with youth being active in natural environments are well-documented, and include a renewed enthusiasm for learning, higher levels of creativity, critical thinking, problem-solving and improved performance on standardized tests (Lieberman & Hoody, 1998; Rickinson, et al. 2004; Russell & Burton, 2000). In their widely cited study, Lieberman and Hoody (1998) connected outdoor environmental education with benefits such as fostering responsibility, collaboration, a sense of community, and improving relations between students. Through grounded learning in direct, “real world” experience, schools can enhance students’ curricular learning (Dillon et al., 2006; Lieberman & Hoody, 1998; Rickinson et al., 2004) and enable kinaesthetic, affective and sensory learning (Lieberman & Hoody, 1998).

### **2.1.3 Environment**

Carson argued over 50 years ago that our lack of understanding or appreciation of

nature has resulted in our often detrimental use of natural settings. Carson (1956) suggested that instilling in young people a “sense of wonder” about the earth and its marvels and its mysteries will make them care more about nature and the environment. Alas, instead of embracing this concept laid out by Carson and others, our society has further alienated young people from direct experiences in nature.

Direct experiences with the natural environment can serve as a powerful formative agent for a sense of responsibility and empowerment to protect the environment (Ewert, Place & Sibthorp, 2005). A growing body of research suggests that what individuals do in their lives has a direct link to what they believe in and value, and environmental behaviours and attitudes are directly connected with values (Kaiser, 1998; Poortinga, Steg, & Vlek, 2004). As Lowell (2008) says, “it’s not too much of a stretch to say that, if children don’t care about nature today, they won’t care about conserving it tomorrow when they’re adults. And, if one doesn’t care about something, there will be no investment in protecting it” (p. 219).

Research suggests that educational experiences in outdoor settings can be significant in developing environmental sensitivity and knowledge regarding, for example, ecological and sustainability literacy. Lugg (2007) argues that in order to achieve “sustainability” we must challenge institutionalized “unsustainable” cultural values that permeate traditional education systems, through developing more holistic, collaborative and experiential approaches to curricula and pedagogies. The problem of such a paradigm shift is outlined by Orr (2004): “The kind of education we need begins with the recognition that the crisis of global ecology is first and foremost a crisis of values, perspectives, and knowledge, which makes it a crisis of education, not one in

education” (p. 5). Martin (1999) argues for a more socially critical approach to outdoor and environmental education where learners can have opportunities to examine human-nature relationships from different perspectives and to critique social norms that may perpetuate exploitative values and behaviours.

An outdoor environmental pedagogy is one means of creating healthy human-nature relationships (Bell & Russell, 1999; Breunig, 2005; Foster & Linney, 2007). Schools can serve as platforms for enactment of outdoor education curricula that not only respond to people’s disconnect from the natural world, but also instil an appreciation and longstanding involvement with natural environments (Foster & Linney, 2007; Russell & Burton, 2000). The Bondar Report (2007) commissioned by the Ontario Ministry of Education accentuates the critical role outdoor education plays in providing “experiential learning in the environment to foster a connection to local places, develop a greater understanding of ecosystems, and provide a unique context for learning” (p. 17).

O’Connell, Potter, Curthoys, Dymont, and Cuthbertson (2006) demonstrate the potential for sustainable education through outdoor recreation education and practice. Their work is based on Lefebvre’s (2000) criteria for evaluating sustainability education pedagogy, which includes:

- i. Interconnections between social, environmental and economic aspects of issues covered.
- ii. Emphasis placed on interacting and learning with nature.
- iii. Teaching methods and strategies develop skills and attitudes to enable reflection, critical thinking, collaboration and action for social change.
- iv. Materials and curricula support community involvement and participation towards

contextually and culturally appropriate learning.

Nisbet, Zelenski and Murphy (2009) constructed a quantitative model, the Nature Relatedness Scale, to assess the affective, cognitive, and experiential aspects of individuals' connections to nature. The nature relatedness scale correlates individuals' connection to nature with more time spent outdoors. Those people with higher nature relatedness on the scale reported more environmental concern and endorsement of pro-environmental behaviour. The research highlights that an increased knowledge and understanding of environmental issues does not in itself equate to pro-environmental behaviour, but with a physical connection with nature, the likelihood is far greater. Rickinson et al.'s (2004) research suggests that, if well planned and taught, outdoor experiences may enhance students' environmental knowledge and affinity by providing connections between the cognitive and affective domains thus assisting higher order learning.

#### **2.1.4 Outdoor Education as a Pedagogy**

Despite the knowledge that outdoor learning as a pedagogy could raise achievement, increase health benefits and promote pro-environmental behaviour through direct contact with nature (Howard, 1997; Nisbet et al., 2009; Nundy, 1999; Schultz, Shriver, Tabanico, & Khazian, 2004), it is rarely used in the highly discipline-based curriculum that emphasizes in-classroom approaches to learning. During the 1970s and 1980s, especially in Ontario and British Columbia, outdoor education programs appeared in many school boards as a result of public funding for centres, teacher training and the creation of organizations such as the Council of Outdoor Educators of Ontario (COEO);



but the 1990s were dominated by budget cuts and changing priorities that deemphasized outdoor education (Potter & Henderson, 2004).

The challenges faced by outdoor education programs in the 1990s and 2000s, especially in Ontario, saw a move away from innovation towards a “back to basics” curriculum where the emphasis was on greater fiscal accountability, standardization, and a conservative pedagogical approach to education known as the “banking” model (Edmonson, 2004; Russell, 1997). The “banking” model, a term popularized by Freire (1970), critiqued the notion of teachers’ “depositing” information into “empty” students through the practice of memorization of basic facts rather than the development of critical thinking and general understanding of subject matter. In response, there has been an emergence of invaluable research and policy work in Canada, most notably the Council of Outdoor Educators of Ontario’s report, *Reconnecting Children Through Outdoor Education* (2007), that demonstrates the importance of children and youth being given active time outdoors to develop a sense of connection to the natural world. A revival of outdoor education in Ontario now appears to be happening (Ontario Ministry of Education, 2007; Ontario Ministry of Education, 2009).

In order to accurately understand outdoor education in a Canadian context, we must first analyze its evolution in Western societies. Outdoor education is a subset of the broader fields of education and outdoor recreation. The early 20<sup>th</sup> century saw the emergence of the residential camping movement in the eastern United States whereby an emphasis was placed on education coupled with outdoor recreation activities as a means of using small groups to develop leadership and democratic processes in young people (Gitterman & Salmon, 2009). The roots of outdoor education are also found in the

educational philosophy and methods of John Dewey (1938), who is credited with the revival of modern experiential education. He began by examining experiences and their effects on personal development and stressed the connection between experience and learning, referring to it as an “organic connection between education and personal experience” (p. 38).

Outdoor education as a field has had many influences. Sharp (1943) offered the following rationale for outdoor education: "That which can best be taught inside the schoolrooms should there be taught, and that which can best be learned through experience dealing directly with native materials and life situations outside the school should there be learned" (p. 363). The maturity of the field continued and gained support in the U.S. school system in the 1950s through the National Outdoor Education Project. At this time Smith (1955), continuing along the same stream as Sharp, defined outdoor education as “a learning climate for the things which can be learned best outside the classroom” (p. 9). Smith connected outdoor education and the school curriculum as a means of curriculum extension and enrichment through outdoor experience (Hammerman, 1980).

Over time the definitions of outdoor education have broadened. For example, Donaldson and Donaldson (1958) defined outdoor education as "education in, about, and for the out of doors" (p. 63; see also Ford, 1981, p.12). Ford further elaborated on the use of the outdoors to include the use of leisure and understanding through relationships developed with the natural world, history, culture and intrinsic value of natural ecosystems. According to Priest (1986), outdoor education is "an experiential process of learning by doing, which takes place primarily through exposure to the out-of-doors" (p.

13), and Hammerman, Hammerman, and Hammerman (2001) have simply stated that outdoor education is "education which takes place in the outdoors" (p. 5).

The evolution and later simplification of the definition of outdoor education has enabled it to move away from its original focus on mostly nature study to include outdoor experiences designed to meet objectives in different areas (Richardson & Simmons, 1996). Modern outdoor education programs have included specific objectives in distinct study areas such as environmental education, geography and history, thereby creating a holistic context for learning. The umbrella term of outdoor education encompasses many definitions and describes a large movement; however, it has also served to diminish some of the distinctions that set outdoor education apart from other educational pedagogies that take place outdoors. For the purpose of this study, I will focus on the component of outdoor education that is defined in the *Outdoor Pursuits* module that includes various outdoor, intrapersonal, and technical skills as it grounds the research in the curriculum and integrates well with the theoretical framework of this study.

### **2.1.5 Role of the Outdoor Educator**

The term "outdoor educators" will be used to encompass the many other related names such as leaders, instructors, facilitators or counsellors working in outdoor education programs. Regardless of their titles, outdoor educators play an intrinsic role in determining the success or failure of a program (Sibthorp, 2003). Outdoor educators provide more than just necessary instruction and feedback, but also facilitate group problem-solving and assist in establishing desirable norms through active modeling (Luckner & Nadler, 1997).

In a study, O'Brien (1990) determined that the quality of relationship between the outdoor educator and participant was related to the participant's perception of program performance. Particularly, the study found that the quality of the relationship with the educator was significant in predicting: "(a) how well [students] had done on the course, (b) how they felt about themselves after the course, and (c) whether they expected the course to help them in everyday life" (p. 53). Wichmann (1991) found that experienced staff expected higher outcomes of their students and as a result realized greater positive social interaction among group members. From existing theory and research, Sibthorp (2003) concluded it is likely that outdoor educators' support and influence on group and social norms play important roles in the development of participants. Furthermore, research acknowledges that outdoor educators "guide the group through logistical and programmatic decisions using their knowledge, skills, and experience" (Sibthorp, 2003, p. 94).

#### **2.1.6 Outdoor Education in a Canadian Context**

Potter and Henderson (2004) argue that although Canadian outdoor education has evolved alongside other Western countries, it remains inherently distinct as a result of the "scarcely populated, rugged country that is significantly free of human constructs" (p. 76). The use of "wild" remote landscapes or the "north" distinguishes Canadian outdoor education from American or British outdoor education which have a focus on residential or day use centres (Potter & Henderson, 2004). As expeditions are key components of many outdoor education programs, the requirement to develop and put in practice technical skills, personal development and group skills enables students to live

comfortably in nature over time which in turn empowers them (Potter & Henderson, 2004). This helps to connect students with nature, learn to live sustainably and harmoniously, as well as to reduce the fear of and detachment from nature (Potter & Henderson, 2004). Therefore, a main purpose of Canadian outdoor educators is to take people beyond the urban communities to the natural world and instil a sense of adventure where they are no longer separate, but belong to, the natural world (Potter & Henderson, 2004).

Canada's diverse geography and culture ensure that there is not a singular Canadian perspective of outdoor education. Nonetheless, Potter and Henderson (2004) reviewed diverse outdoor education programs throughout Canada to determine commonly shared views. For them, one central premise identified is the notion of integrated travel experience, that combines an interdisciplinary approach to education through approaches such as nature interpretation, heritage interpretation, storytelling, and direct experiences through remote travel using traditional methods (Potter & Henderson, 2004). Key ideas in Canadian outdoor education found in the literature include:

- i. a concern for intrapersonal and interpersonal skills development (Priest, 1986);
- ii. activities that may be initially perceived as recreation and enjoyment based, but are primarily educational as they are connected to curriculum with specific learning objectives (Horwood & Raffan, 1988);
- iii. a blend of camping and travel skills with intra/interpersonal, environmental and cultural awareness through interdisciplinary teaching strategies (Potter & Henderson, 2004);

- iv. the use of experiences tied to travel in natural areas rather than the use of adventure programs tied to simulation initiatives and metaphors for transferring adventure to daily life (Potter & Henderson, 2004);
- v. the active use of stories as a means of connecting students to the rich history of human connection with the natural environment, present day status and future possibilities (Potter & Henderson, 2004);
- vi. the desire to expose people to the beauty and power of the natural environment through the integration of nature into their lives (Duenkel & Scott, 1994; Potter & Henderson, 2004); and
- vii. the teaching of skills required for safe survival in natural settings to facilitate an understanding of everyday life realities and connections that our actions, or lack of, have on the natural world and to dispel the myth that humans are separate from nature (Duenkel & Scott, 1994; Potter & Henderson, 2004).

There are several ways to become trained in outdoor education in Canada. One method is through many of the college programs that are available. Most of these courses are two years and include a balance of theory and practice. Private institutions and organizations also provide leadership training courses which focus more specifically on technical skills and are conducted over a short intense timeframe. An example is the Canadian Outdoor Leadership Training program (COLT) at Strathcona Park Lodge which lasts one hundred consecutive days and focuses on mountain travel, sea kayaking, white water kayaking, rock climbing and canoeing. Three or four year university programs are also available and often focus more on theory and less on applied technical skills. Many

providers such as Outward Bound, the National Outdoor Leadership School (NOLS) and residential camps also provide extensive in-house staff training courses.

Outdoor education training is happening throughout Canada on a variety of levels. Many programs in summer camps, schools, colleges, universities, and commercial programs offer training in leadership development, team-building, technical skills, environmental education and remote travel (Potter & Henderson, 2004). However, from my own observations, I would argue that by and large this culture and practice of outdoor education is not widespread in Nova Scotia. None of the community colleges or six universities offer diplomas or degrees specific to outdoor education - Acadia University has a degree in recreation offering only minimal content on expeditions and remote travel - and there are only a few residential camps. Notable exceptions are the Big Cove YMCA Camp, which will be 125 years in operation in 2014, the various youth, adult and corporate programs offered by the Nova Scotia Sea School, and the Nova Scotia Outdoor Leadership Development (NSOLD) program. NSOLD was founded in 1978 and is managed by the Physical Activity Sport and Recreation responsibility centre of the Nova Scotia Department of Health Promotion and Protection; it seeks to enhance the skills of outdoor leaders in the province through experiential leadership development. Today NSOLD relies heavily on volunteers; courses include outdoor camping skills, wilderness navigation, outdoor survival, environmental interpretation and wilderness and remote first aid.

### **2.1.7 Teacher Training and Perceived Self-Efficacy**

Outdoor leadership is not an ability that is solely gained through classes or

studying theory, but is a long-term, developmental process based on several key factors (Fox & Mcavoy, 1995; Propst, 2002). Propst (2002) states, “It is critical to examine antecedents, intervening variables, and their interrelationships over time” (p. 320) to help clarify these relationships. My study does not measure leadership per se; rather, I focus an analysis of factors affecting outdoor educators’ abilities to implement or lead outdoor education programs.

Social cognitive theory (Bandura, 1977) explains that confidence in one’s ability to learn and subsequently perform a behaviour is the result of the ongoing and reciprocal interaction between a person, the environment, and already learned behavioural patterns (Bandura, 1986). Central to the social cognitive theory is self-efficacy, which along with other determinants governs human thought, motivation and action (Bandura, 1997). Bandura’s (1977) theory of self-efficacy applies well to understanding the developmental process of outdoor leadership which rests in the assumption that “what people think, believe and feel affects how they behave” (Bandura, 1986, p. 25). According to Bandura (1977), self-efficacy refers to personal judgements of one’s capability to act in specific situations that may contain novel, unpredictable, and potentially stressful encounters. Perceived self-efficacy suggests that a person’s beliefs about their own abilities will directly affect their performance (Nundy, Dillon & Dowd, 2009). One of the primary components of outdoor leadership is perceived self-efficacy, which also appears to be a predictor of someone’s continued participation in outdoor leadership activities (Propst, 2002). The development of perceived self-efficacy however is complex and exerts its influence through four major mediating processes. They include cognitive, motivational,



affective, and selection processes. These four processes will be discussed, as they are integral to understanding engagement of outdoor leaders.

The cognitive process relates to an individual's self appraisal of capabilities. The stronger the perceived self-efficacy, the higher the challenges people will set for themselves and the more likely they are to commit to them (Bandura, 1993). Most courses of action are initially shaped in thought, resulting in people's beliefs in their efficacy and influencing their anticipated scenarios and rehearsing them. If people have a positive approach and visualize success in their scenarios, these provide positive guides that support performance (Bandura, 1993). The opposite is also true, that when people visualize failure and dwell on the things that could go wrong, their performance is diminished as they are fighting self-doubt.

Self-beliefs of efficacy play a key role in the self-regulation of motivation (Bandura, 1991). Most human motivation is cognitively generated. People motivate themselves and guide their actions anticipatorily by the exercise of forethought. They form beliefs about what they can do. They anticipate likely outcomes of prospective actions. They set goals and plan courses of action designated to reach future goals. People motivate themselves by setting goals then mobilizing their skills and effort to accomplish them. Once people attain their goals, those with a strong efficacy then set higher, more challenging goals (Bandura, 1993).

The affective process is the emotional mediator of perceived self-efficacy. It involves the capability to affect how much stress or depression one experiences in threatening or difficult situations. Perceived ability to exercise control over stressors plays a central role in anxiety arousal; therefore those individuals who exercise control

over threats control their levels of anxiety. High anxiety arousal may lead to difficulty coping and magnifies the severity of possible threats from things that rarely happen. Through such inefficacious thinking, people distress themselves and impair their skills and judgment. The opposite is also true, the stronger the instilled sense of coping self-efficacy, the higher probability of the individual taking on bold and challenging activities (Bandura, 1986). In summary, Bandura (1993) believes that in challenging situations, people base their actions on their coping efficacy.

People are also partly a product of their environment. Thus far the list I've presented has centred on efficacy-activated processes whereby people exercise some control over their environment. Therefore, beliefs that personal efficacy can shape people's lives is directly related to their choice of activities and environments. People avoid activities or situations where their coping abilities are not perceived to be sufficient to carry them out, and conversely people undertake challenging activities or situations that they believe to have the ability to handle. By the choices people make they create different competencies, interests, and social networks that determine life course (Bandura, 1993). On a daily basis we make choices that affect our life's course to varying degrees. A common example is career choice and development. Bandura (1993) argues that the stronger a person's perceived self-efficacy, the more career options they consider, the better they prepare themselves and the more successful they are in challenging occupational settings. Therefore, the power of self-efficacy directly affects our life paths through choice-related process (Bandura, 1993). In this case, a teacher's perceived efficacy "refers to beliefs in one's capabilities to organize and execute the course of

action required to produce given attainments” (Bandura 1997, p. 3).<sup>1</sup>

An individual’s behaviours or choices are influenced by his or her perceived self-efficacy, and a key component to developing perceived self-efficacy and leadership development in the field of outdoor education has been mentoring. Many outdoor education organizations rely on new staff working or shadowing experienced staff through a mentoring process aimed at enhancing self-confidence and self-identity (Jeruchim & Shapiro, 1992). Having opportunities to see other people manage tasks and stressful scenarios successfully is key to peer persuasion that one has the ability to succeed in given activities (Nundy, Dillon & Dowd, 2009). As self-efficacy increases through outdoor skills and knowledge, so does the probability of increased participation

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<sup>1</sup> There has been considerable research in the field of teacher efficacy and as such two distinct strands have emerged. My study focuses on the research of Bandura (1977, 1997) that identified teacher efficacy as a type of self-efficacy where people construct beliefs about their capacity to perform at a given level of attainment. These beliefs influence how much effort people put forth, how long they will persist in the face of obstacles, how resilient they are in dealing with failures, and how much stress or depression they experience in coping with demanding situations (Bandura, 1997). The second strand is based in Rotter’s (1966) social learning theory and the work of the RAND organization whereby teacher efficacy is the extent to which teachers believe their action or the environment reinforce and control student learning. According to Tschannen-Moran, Hoy, and Hoy (1998), teachers with a high level of efficacy believed that their ability could strongly influence or control students’ levels of attainment and desire to achieve. As such, it was assumed that student motivation and performance are significant reinforces for teaching behaviours. On the contrary, teachers who believe the environment overwhelms their ability to have an impact on a students’ learning identify with the notion that their teaching efforts lies outside their control as most of a student’s motivation and performance depends on external factors such as their home environment, social and economic realities, or physical and emotional needs of the student (this has been labeled *General Teaching Efficacy* (GTE) (Ashton, Olejnick, Crocker, & McAuliffe, 1982)). According to Tschannen-Moran, Hoy, and Hoy (1998) the intertwined conceptual strands of teacher efficacy from the two distinct fields of thought has contributed to a lack of clarity about the nature of teacher efficacy. To ensure clarity in this study and based on fact that the intent of this study is not to differentiate between the strands of efficacy, I have grounded my research in Bandura’s ideas of self-efficacy (1977, 1997).

in outdoor activities (Propst, 2002). As one participates more in outdoor activities, more opportunities for leadership development present themselves. As previously mentioned, continued participation is considered to be a precursor of leadership (Nundy, Dillon & Dowd, 2009; Propst, 2002; Schuett, 1993).

Creating conducive learning environments rests heavily on the talents and self-efficacy of teachers, especially when learning is taking place outdoors where student perception is normally one of recreation and enjoyment. Hanna (1992) studied the barriers faced by teachers implementing outdoor education in the United States. The paper concluded that a collaborative approach using team teaching to increase confidence and experience of teachers is beneficial, as the biggest barrier to teacher confidence is the impact of limited training (Hanna, 1992). Other research also supports the importance of training and peer support when implementing outdoor education (Nundy, Dillon & Dowd, 2009; O'Donnell, Morris & Wilson, 2006).

In the United Kingdom, the success of the “learning outside the classroom manifesto” strategy related directly to “teacher training, competency and confidence amongst those who would be expected to plan, manage and implement outdoor learning” (Nundy, Dillon & Dowd, 2009. p. 62). Even with full government support, Nundy et al. (2009) identified a gap between pre-service teacher training and personal experiences as key problems impacting teachers’ confidence in implementing out-of-classroom learning. Research indicates that experience and attitudinal barriers of those implementing outdoor education are as compelling as economic and logistical barriers (Lin, 2002; Nundy, Dillon & Dowd, 2009; Russell & Burton, 2000).

Training is a critical component to the development of teacher identity and usually

lead to enhanced self-efficacy amongst teachers. Coupled with training is the need to offer opportunities that Nundy et al. (2009) describe as “the development of a collaborative group identity capable of confidently engaging with pedagogies that take them and their pupils outside the classroom as a normal part of teaching and learning” (p. 64). If training and peer support are not present, teachers were more concerned, less confident and less likely to be involved in outdoor education (O’Donnell, Morris, & Wilson, 2006). Therefore, for solid programs for both teachers and students, adequate levels of training and peer support systems are vital.

Nundy, Dillon and Dowd, (2009) argue that confident teachers are more likely to engage in innovative pedagogic practices. Self-efficacy research supports this argument as self-efficacy has a positive impact on individual success, confidence, and future development (Propst, 2002). However, “there is a marked difference between possessing knowledge and skills and being able to use them well under taxing conditions. Personal accomplishments require not only skills but self-beliefs of efficacy to use them well” (Bandura, 1993, p. 119). Thus, the relationship between mentoring, feedback, goal attainment, motivation, the affective process, self-efficacy and continued participation are integral aspects of outdoor educators.

### **2.1.8 The Nova Scotia Context**

Nova Scotia is known for its highlands, shallow lake systems, short rivers, and extensive rocky shoreline that stretches for 7,400 km despite the overall length of the province being only 575 km and its width 130 km (The Green Guide: Canada, 2003). Perhaps surprisingly given the landscape, outdoor education has traditionally taken a

backseat to organized sport. According to the National Report Card for Active Lifestyles, Nova Scotia has the highest percentage of youth participating in organized sport in Canada (32%), but this does not equate to a healthy populace (Report Card, 2009, p. 50).

Canada received a failing grade in physical activity level with the Atlantic provinces having the lowest percentage of the proportion of children and youth meeting the guidelines for 2007/2008 (Report Card, 2009, p. 38). Perhaps paradoxically, the obesity epidemic affecting Western societies coincides with the highest rates of participation in organized sport in history (Louv, 2008). Although Canadians continue to receive high marks in infrastructure, equipment, proximity and accessibility to practice physical activities, those reaching the daily minimum of 90 minutes of activity represent less than 15% of the population. Simply put, the culture of organized sport in Nova Scotia is not stimulating the majority of youth to pursue an active lifestyle. The Physically Active Children and Youth (PACY) (2003) study of a random sample of 1654 children in grades 3, 7, and 11 across Nova Scotia supports this assertion (Campagna, et al., 2002). Participants wore uniaxial accelerators for seven consecutive days to measure physical activity. Results showed that 90% of the boys and 92% of the girls in grade 3 achieved the recommended level of 60 minutes or more of moderate or vigorous physical activity on five or more days per week. In grade 7, only 62% of the boys and 45% of the girls achieved the recommended level, while only about 13% of the boys and 7% of the girls in grade 11 did. This stunning figure for secondary school students, especially girls, necessitates a call to action for a transformative approach to educational practices in Nova Scotia.

### **2.1.9 Pre-Service Training of Physical Education Teachers in Nova Scotia in Outdoor Education**

As was previously mentioned, in Nova Scotia, only two of the five universities offering Bachelor of Education degrees offer introductory outdoor education courses. Acadia University is the only institution offering a related degree in Outdoor Recreation and Sustainable Tourism; the university also provides introductory courses for physical education teachers. St. Francis Xavier University takes physical education students on a five-day wilderness excursion prior to the beginning of the first term and offers an elective course in Outdoor Experiential Education. The University of New Brunswick in Fredericton offers Outdoor Education as an optional minor as part of their Recreation and Sports Studies Degree and also offers an elective in Outdoor Education for pre-service teachers that has been running since 1974. The remainder of universities in the Maritime provinces continue to teach traditional methods of physical education practices. The low status of outdoor education in pre-service physical education teacher training coupled with the traditionally low level of participation in outdoor education or “camps” in Nova Scotia suggests that perceived self-efficacy in teaching outdoor education might be low.

## **2.2 Theoretical Framework**

### **2.2.1 Constraints Negotiation**

In order to gain a solid understanding of the breadth and depth of constraints negotiation research, one must look at the origins of research into barriers to participation in leisure activities in the field of leisure studies. As Crawford, Jackson and Godbey (1991) noted, “although work on leisure constraints and barriers dates back at least to the

Outdoor Recreation Research Review Commission (ORRRC) studies of the early 1960's, the main body of empirical research activity has occurred" in the 1980's (p. 309). The level of theoretical, conceptual, and analytical sophistication has drastically increased to a level where negotiating constraints is the largest type of leisure research (Samdahl & Jekubovich, 1997).

Through the 1980's research on leisure constraint and barriers began to move away from the assumptions that barriers, such as time, money and equipment, were inert obstacles to participation (Jackson, 2005). A gradual shift from a focus on barriers to participation to the notion of constraint negotiation followed the publication by Crawford and Godbey (1987) entitled, "Reconceptualizing Barriers to Family Leisure." In this paper they made claims that changed the leisure constraints subfield. First, they argued that constraints affected preferences in addition to participation levels. Second, they broadened the field of constraints to include more than just an intervening factor between preferences and participation, but to also include intrapersonal and interpersonal constraints. They defined these various constraints as the following:

- Intrapersonal constraints are the individual's psychological qualities that affect the formation of leisure preferences (e.g., anxiety, perceived lack of skill).
- Interpersonal constraints are the social factors that affect the formation of leisure preferences (e.g., friends or family members who prefer similar or other activities).
- Structural constraints are a mix of factors that intervene between the development of leisure preferences and participation (e.g., lack of time, lack of money).



A flurry of research followed in the 1990's and qualitative methods were used in many cases to explain what previous quantitative methods had missed. For example, Scott (1991) illustrated that people often take innovative steps to negotiate constraints that they face. This was the first time that negotiation and constraints were discussed simultaneously. Kay and Jackson (1991) demonstrated how people manage to participate in an activity despite constraints. They outlined strategies people use to adjust time and financial restraints on leisure that included reducing participation, saving money to participate, trying to find the cheapest opportunity, reducing the amount of time spent on household tasks, and reducing work time. Shaw, Bonen, and McCabe (1991) boldly proposed that it is often the people who are more constrained who participate more frequently than those who are less constrained. They essentially questioned the long-standing assumption that more constraints or barriers imply less participation in leisure activities.

The next step in constraints negotiation theory occurred with the development of a sequential hierarchy approach by Crawford, Jackson and Godbey (1991). Their findings indicated that past research had examined structural constraints, but these are probably the least important in shaping leisure behaviour; instead intrapersonal and interpersonal constraints were more influential. In the hierarchical approach, intrapersonal is considered the most proximal and powerful (see Figure 1).

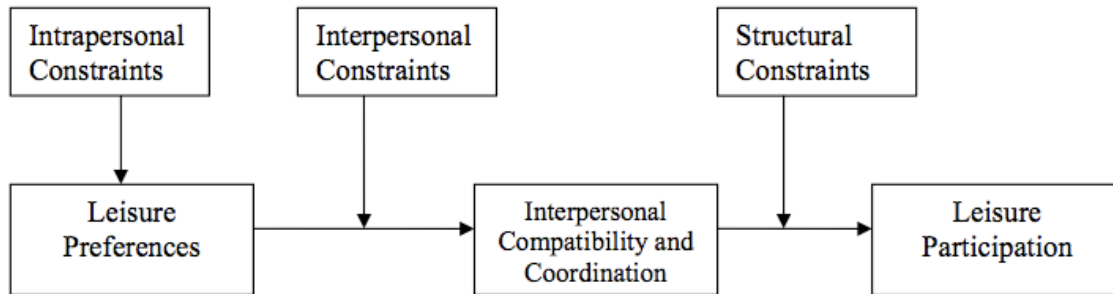


Figure 1: Hierarchical model of leisure constraints (Crawford, Jackson & Godbey, 1991, p. 313).

From research conducted in previous studies (Kay & Jackson, 1991; Scott, 1991; Shaw et al., 1991), Jackson, Crawford, and Godbey (1993) began a revision of the hierarchical model of leisure constraints. Six propositions surfaced. First, participation is dependent not on the absence of constraints, but on negotiating through them. Second, such negotiation may modify rather than foreclose participation; therefore variation in experiences of negotiation of constraints can be viewed as well as variations in the experiences. Third, prior successful negotiation of constraints may be linked to the desire to diversify and thus increase levels of participation. Fourth, anticipating one or more interpersonal or structural constraints may prevent a person from wanting to participate. Fifth, anticipation is not limited to only the constraints, but also a person's anticipated ability to negotiate the constraint. Finally, the initiation and outcomes of negotiating constraints depends on the relationship, interactions and relative strengths between constraints on participating in an activity and motivation for participation (Jackson, Crawford, & Godbey, 1993).

Jackson, Crawford, & Godbey (1993) concluded that the idea of constraints as insurmountable obstacles was not justified. Furthermore, they began to realize that one's

preference to participate does not necessarily end in either participation or non-participation, but rather in the level of participation (See Figure 2 and compare with Figure 1).

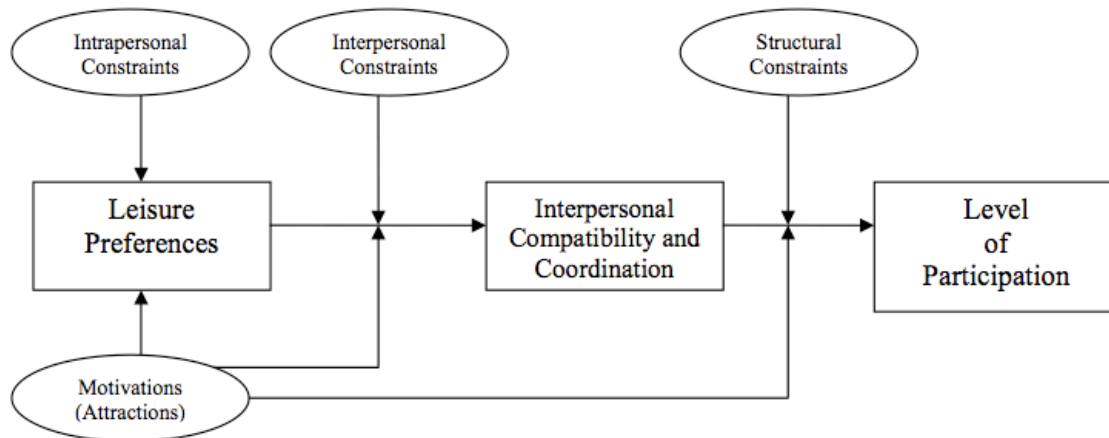


Figure 2: The hierarchical/negotiation model (Jackson, Crawford, & Godbey, 1993, p. 9).

More recently, Mannell and colleagues (Hubbard & Mannell, 2001; Mannell & Loucks-Atkinson, 2005) have improved our understanding of how constraints operate in people's lives and how they interact with other key variables like preferences and motivations. The results from these studies showed that the relationship between motivation and participation was mediated by negotiation. Loucks-Atkinson and Mannell (2007) extended the research by drawing on social cognitive theory and incorporating a negotiation-efficacy construct. They examined the impact of self-efficacy in constraints negotiation, with the notion that successful negotiation of leisure constraints may lead to increased confidence in one's ability to negotiate future situations when constraints arise. Direct relationships were found between negotiation-efficacy and people's ability to negotiate indicating that higher confidence in the ability to successfully negotiate resulted in greater efforts to negotiate.

White (2008) further generalized the theory of constraints negotiation through a quantitative statewide sample study for Arizona State Parks. The study built upon recommendations from previous studies to include social cognitive theory and self-efficacy to better understand of the negotiation process. Negotiation-efficacy positively influenced motivation to participate and negotiation efforts and negatively influenced perceived constraints. Data also showed that a predictor of participation and use of negotiation resources and strategies was motivation. This study provides more evidence that motivation is the most influential factor in participation and a potential trigger for encouraging the constraint negotiation process. Furthermore, the study concluded that constraints negotiation provides valuable insight into people's leisure choices and behaviour and contributes to the subfield by examining the interactions of motivation, constraints, negotiation, and negotiation-efficacy and their effects on outdoor recreation participation (White, 2008).

Most relevant to the context of Nova Scotia is a study conducted by Thompson, Rehman and Humbert (2005) regarding prevalent constraints to physical activity in Antigonish, Nova Scotia, a town of 20,000 in the Strait Regional School Board. The most prevalent constraints identified for grade 3 students were structural and included cost, geographic location and lack of equipment. For grades 7 and 11, more frequent constraints included a combination of structural (school work, time, costs) and interpersonal (lack of partners). For grade 11 students, academic responsibilities and reduced ability to access organized sport with town "rep" teams limited to a talented few were particularly salient.

A unique barrier noted in this study was that many grade 11 students considered

themselves too old to start new physical activities. Thompson et al. (2005) outlined the importance of developing physical skills and self-confidence early in life, so that new forms of activities are considered options for maintaining active lifestyles. The current dominant practice in Nova Scotia of emphasizing sport specialization at a young age adversely affects diversification of physical activities with age as it manifests a mentality of having to start young and having to be physically talented to be involved (Thompson et al., 2005). A recommendation made by Thompson et al. (2005) encouraged schools and other community programs to introduce a variety of physical skills at a young age to facilitate participation in new physical activities. Of equal importance is providing safe and welcoming environments for adolescents to start new physical activities, such as outdoor adventure activities. Developing alternatives such as snowshoeing, cross-country skiing or mountain biking at an early age can lead to the adoption of life skills whereby participation continues throughout one's lifespan and is potentially passed on to future generations.

### **2.2.2 Use of Constraints Negotiation in this Study**

Constraints negotiation was employed as an appropriate theory to distinguish between intrapersonal, interpersonal, and structural constraints affecting Physical Education Teachers' implementation of the *Outdoor Pursuits* module. Constraints negotiation has been used in the past to assess the participation of outdoor educators at residential camps in the United States (Jackson, 1993). Although participation in my case is mandatory as it is part of the curriculum and not a leisure activity, the theory of constraints negotiation remains relevant given the degree to which the curriculum is

implemented will vary across school boards and among teachers. (That said, further analysis of the applicability of this theory is discussed in Chapter Five).

In order to grasp how constraints negotiation provides the framework for this study, emergent factors in the three levels of constraints were identified and analyzed. Prior to the study, I hypothesized that examples of intrapersonal constraints affecting teachers may include such psychological qualities as perceived self-efficacy (cognitive, motivational, affective, and selection processes), interpersonal constraints such as peers and community, or structural constraints such as a lack of training or financial support would emerge. Further, I analyzed the relationship between physical education teachers' motivation and perceived self-efficacy, and how they negotiated the constraints they faced.

## Chapter Three: Methodology and Methods

### 3.1 Methodology

Denzin and Lincoln (2005) use multiple methodological metaphors of qualitative research to describe the ways researchers have for “studying things in their natural setting” while “attempting to make sense of, or interpret, phenomena in terms of the meaning people bring to them” (p. 3). The researcher as a quilt maker who “stitches, edits, and puts slices of reality together” (p. 5) is one metaphor that works well to describe the interpretive experience of my study. I approached the research from a critical qualitative perspective using semi-structured open-ended interviews to gather accounts of experiences, perspectives and meaning from participants’ stories. The interpretation and understanding of these narratives was an interactive process with my participants as I worked on quilting my thesis.

One of the quilter’s responsibility in this process is to acknowledge my conscious and unconscious motives, desires, feelings and biases (Scheurich, 1995); although complete neutrality is not possible (Atkinson & Silverman, 1997; Fontana & Fray 2005; Scheurich, 1995), it is vital to emphasize the participants’ fabric above all else. Nonetheless, no matter how hard one tries, interviewers are part of the interviewing picture (Siedman, 1991). As such, the interviewer must recognize his or her involvement in the process, from question design to analysis, and understand that to some degree the responses or meanings made remain a function of the participant’s interaction with the interviewer. Furthermore, the interviewer must use her or his knowledge and skills as best s/he can to minimize the distortion that can surface due to participation in the process (Seidman, 1991).

Although there are many techniques available to understand educational organizations, such as examining personal and institutional documents, observation, exploring history, and surveys, Seidman (1991) believes that the primary way a researcher can investigate an educational organization is through accessing the experience of the people who make up the organization; “If the researchers’ goal is to understand the meaning people involved in education make of their experience, then interviewing provides a necessary, if not always completely sufficient, avenue of inquiry” (p. 5). This can be especially true when the researcher is interested in understanding the meaning of participants’ experiences, such as their thoughts, attitudes, and beliefs (Thompson et al., 2005).

Kvale (1996) describes the qualitative research interview as a construction site for knowledge. “An interview is literally an *inter view*, an inter-change of views between two persons conversing about a theme of mutual interest” (p. 14). Incorporated in the process is building the kind of intimacy common to mutual self-disclosure (Johnson, 2001), a key to two-way exchange (Jennings, 2005). Furthermore, according to Seidman (1991), “at the heart of interviewing research is an interest in other individuals’ stories because they are worth it” (p. 3). When describing the purpose of in-depth interviews, Seidman explains that it is not to get answers, test hypotheses or evaluate terms. Rather, “at the root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make of that experience” (p. 3). In this study, because no hypothesis is being tested, the focus is not to generalize the findings to a broader population, but instead to present the experiences of the participants in such a light and depth that readers can make connections to their own experience, learn how the



participants' (and perhaps their own) experiences came to be, and deepen their understanding of the constraints these reflect.

### 3.2 Methods

Kvale (1996) writes that the Greek origin of the word 'method' means "a route that leads to the goal" (p. 4). As mentioned at the onset, the purpose of my study was to address the following questions:

1. What constraints do teachers face implementing and delivering the *Outdoor Pursuits* module and what opportunities are there in Nova Scotia?
2. What is the relationship between physical education teachers' motivation and perceived self-efficacy, and how do they negotiate the constraints they face?

#### 3.2.1 Interviews

Recounting stories has been a major way through recorded history that humans have made sense of their experiences (Jennings, 2005; Seidman, 1991). Asking questions or interviewing in a general sense has been a basic mode in such inquiry. According to Glesne and Peshkin (1992), interviewing is an "opportunity to learn about what you cannot see and to explore alternative explanations of what you do see" (p. 65). Through interviews, grade 10 physical education teachers in two rural school boards in Nova Scotia were asked to describe their motivation, confidence, competency, and outdoor experience and training in relation to the implementation of the *Outdoor Pursuits* module. The interviews were designed to capture "what happened, why it happened, and what [it] meant to the participant" (Thompson et al., 2005, p. 424) in relation to

constraints negotiation. Interviews were audio recorded and ranged in length from approximately 45-75 minutes in length.

### **3.2.2 Participants**

The problem of external validity in qualitative research is how to take a small number of participants from a large sample population and not have research be idiosyncratic to them, and thus irrelevant to the larger population. The key to overcoming this in quantitative research is to select a sample that is representative of the larger population through the random selection of participants (Seidman, 1991). In the case of interviewing in qualitative research, random sampling is problematic given the rich data generated in interviews precludes large numbers of participants. Additionally, participants are volunteering their time to participate in the study, which implies a degree of self-selection. According to Seidman (1991), then, self-selection and randomness are not compatible.

A reframing of validity is thus required. In-depth interviews seek to shed light on the experiences of individuals rather than seek generalizability (Seidman, 1991). Common trends may surface between different individuals experiences that can be seen to be connected through common structural, social and personal forces. These are highlighted in the discussion of interview data and further inspected and explored. Also, by sharing stories from the participants' experiences, readers may draw connections to their own experiences and better understand the complexities of the experiences (Seidman, 1991).

Although randomness is impossible, nonetheless I did make an effort to include a range of participants in this study. The twelve participants were grade 10 physical education teachers from the Strait Regional and South Shore Regional School Boards; these two regions were selected as they are in distinct areas of the province (northwest and southeast) and are representative of rural Nova Scotia. The participants work at various schools, situated in different social, economic, and geographical areas. They volunteered to be interviewed for this research between the months of May and September 2010. The interviews were all conducted in the schools where the participant worked, either during school hours or after school, and for the most part in the teachers private office. The in-depth nature of the interviews allowed for thorough exploration of the realities they face on a daily basis and shed light on the complexities of working in the system as a whole.

Of the twelve interviews conducted, the five from the South Shore Regional School Board (South Shore Board) were done in May and June 2010. These participants were contacted through snowball sampling. Board approval to send out a general email to recruit participants was not granted. I found the participants instead by using personal contacts in the board who put me in touch with grade 10 physical education teachers in their school and provided contact information for other teachers in the board. The remainder of the participants were contacted via email (see Appendix A: Email to Potential Participants), phone and in person at the school.

The Strait Regional School Board (Strait Board) granted approval for a general information and research request letter to be sent out to all grade 10 physical education teachers in the Strait Board via the Active Healthy Living Consultant (AHLIC).

Unfortunately, approval was granted with only two weeks remaining in the school year. Subsequently, initial interest in participating was low and only one interview was conducted in June 2010. A second letter via email was sent out two weeks into the following school year in mid-September and I dropped letters off personally at most schools (see Appendix B: Information Letter). The remaining six interviews were done in September. All of these teachers had the same teaching position the previous year.

Of particular note is the lack of female representation in the study. Only one female teacher was interviewed in each board. In general, the number of females teaching grade 10 physical education is low in both boards. At the time of the study only three females were actively teaching grade 10 physical education in the Strait Board and one in the South Shore Board. The lack of female voice in this study will be further discussed in the limitations section in Chapter Six.

### **3.2.3 Questions**

A semi-structured approach was taken, with a list of guiding open-ended questions tied to the research goals, as well as room for general conversation. The questions were developed, in part, through noting key issues that came up in the review of relevant academic literature and the experiential foundation I have gained delivering outdoor education programs for high school students in western Canada, Australia and while leading expeditions abroad. These questions were further honed by seeking feedback on them from knowledgeable informants, such as previous work colleagues, current teachers practicing in Nova Scotia, academics and pre-service teacher trainers (Glesne & Peshkin, 1992).

The open approach allowed for the collection of data regarding issues of concern and still provided space for other issues to emerge (Samdahl & Jekubovich, 1997). Semi-structured interviews allowed me to explore participant experiences and delve into my research questions. My inherent understanding of the research question allowed me to probe for more detailed responses and to gain more depth in understanding the specific attitudes of the participants (See the Appendix C: Interview Guide).

### **3.2.4 Ethics**

Permission to conduct this research was granted by the Lakehead University Research Ethics Board and this study followed the university's standard ethics policy for conducting research involving human subjects. All participants were made fully aware of the purpose of the research (see Information Letter Appendix B), their right to anonymity and their ability to withdraw from the research or refrain from answering any question(s) at anytime. Written permission was obtained from participants on an informed consent document (see Consent Letter Appendix D). Anonymity has been maintained by using pseudonyms and removing names when indentifying features, such as schools or specific locations.

### **3.2.5 Pilot Study and Post Interview**

One of the Oxford Dictionary's definitions of a pilot is "to guide along strange paths through dangerous places" (Fowler, Fowler & Thompson, 1995). Although the dangers of this study may not appear evident, this definition remains fitting for this study because many consider the qualitative approach to research to be an adventure (Rubin &

Rubin, 1995). I undertook a pilot study to ensure proper planning for the adventure, to see if my initial ideas for the envisioned study were appropriate and to hammer out some of the practical aspects of the study. Mock interviews with teachers in Nova Scotia working in the field of physical education were used to test the methods and improve the interview structure, while simultaneously giving me experience-conducting interviews. The teachers who participated in the mock interviews were people with whom I had participated in outdoor education trips. According to Seidman (1991), a pilot study offers a good opportunity to step back and reflect, to see if the methods and the approach are meeting the goals and objectives of the study. For me, only minor changes were made to the layout of the questions following the mock interviews, but the practice in interviewing did serve as a worthwhile preparatory task.

### **3.2.6 Data Analysis**

According to Glesne and Peshkin (1992), analysis does not refer to an isolated stage in the research process; to the contrary, it is an ongoing process that should begin as soon as data collection begins. This notion is echoed by Gubrium and Holstein (2001) who see analysis as a practice beginning from the moment the first interview starts through to the writing of the thesis. Interviewing is not just a process of data acquisition. It is also a “time to consider relationships, salience, meanings, and explanations—four analytic acts that not only lead to new questions, but also prepare you for a more concentrated period of analysis that follows the completion of your data collection” (Glesne & Peshkin, 1992, p. 81). As an interviewer, it is important to capitalize on interesting data that may surface during interviews whereby listening analytically is

crucial to exploring thoughts of interest as they surface. A number of unanticipated themes emerged as a result of the exploratory nature of this study.

Thematic connections were used as a tool for organizing excerpts from transcripts into categories derived from coding based in the constraints negotiation literature, specifically intrapersonal, interpersonal and structural constraints (Crawford, Jackson & Godbey, 1991). Theoretical coding was further used to break material down into subgroups (Seale, 2001, p. 657). The use of theoretical coding assisted in drawing out patterns and connections between the categories (the three levels of constraints) into themes. Specifically, I used a systematic approach of sorting emerging concepts into subgroups and extrapolated the themes based on the frequency particular ideas came up and the emphasis participants placed on them. The themes are listed in their order of importance, starting with the most frequent/most emphasized.

It is in the analysis process that the narratives of the participants are represented and/or reconstructed by the researcher (Jennings, 2005). Drawing back on the metaphor of the researcher as a quilt maker and seeing how the interview is a social interaction, it is during this phase that the quilter puts his or her patchwork together. I made a conscious effort in the following chapter to present the findings in the participants' own words as much as possible to highlight the individual voices in this study, while still seeing similarities amongst the patches and the holistic composition of the quilt.

## Chapter Four: Teachers Perspectives

### 4.1 Introduction

By understanding the relationship between physical education teachers' motivation and perceived self-efficacy, and how they negotiate the constraints they face delivering the *Outdoor Pursuits* module, I sought to deepen my understanding of outdoor education in Nova Scotia public schools while analyzing the constraints and opportunities to its implementation. In this chapter, I present how the relationships between constraints and negotiation directly impacted the levels of participation in the implementation of the *Outdoor Pursuits* module in the South Shore and the Strait Boards. To do so, I provide passages from the interviews organized thematically to summarize the views of participants in such a way that their stories will hopefully enable the reader to learn how they think and feel, thus deepening their understanding of the realities of implementing the *Outdoor Pursuits* module.

I organized this chapter into four sections: rationale, constraints, negotiation, and recommended opportunities. The first section provides a general overview of participants' rationales for implementing *Outdoor Pursuits*. The second section identifies constraints impacting the teachers implementing the *Outdoor Pursuits* module, organized into three themes: Intrapersonal, Interpersonal and Structural constraints. Using the constraints identified in the previous section, the third section represents how some teachers negotiate these constraints as they implemented the *Outdoor Pursuits* module. The final section will focus on recommended opportunities identified by teachers that will help improve implementation of the *Outdoor Pursuits* module. To shed light on the



complexities, a comparative analysis of the overlap between sections is sprinkled throughout.

#### **4.1.1 Development of the Outdoors Pursuits Module**

Prior to presenting the specific rationales teachers offered for implementing the *Outdoor Pursuits* module, it is first beneficial to understand the design process behind the module. The development of the curriculum was a cooperative effort of 13 individuals with a vast range of experience, from practicing teachers to professors to provincial government employees working with the Department of Education. The team acknowledged that the curriculum needed to be developed in such a way that it would enable teachers to select from a range of pursuits requiring different degrees of commitment and knowledge, for example, from initiatives like the “human ladder” to “Leave No Trace” to an overnight camping trip (Physical Education 10, 2009). Which pursuits to select would be based on a number of factors, such as teachers’ level of comfort, experience, certifications, availability of resources and access to suitable locations. Kyle<sup>2</sup>, a member of the curriculum development team, summarized the rationale behind the design:

I think there are a lot of untapped phys ed opportunities out there. We obviously knew there were limitations and we tried not to be extremely specific. We started to look at things that we were planning, like you had to have a camping trip with an outcome. We kind of backed away from that knowing that different areas have different opportunities and it can really be quite dependant on who is in your area and what resources are in your area or what the comfort level of teachers is in that area... A lot of the outcomes now are a little more general and can be taken by the person in charge, the phys ed teacher, who can go in a bunch of different direction or to different levels.

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<sup>2</sup> Pseudonyms are used for all participants.

Given teachers have the freedom and flexibility over which pursuits to use and the extent to which they will be carried out means that every program differs based on a number of contributing factors, some of which will be highlighted in this chapter.

#### 4.1.2 Participants

The 12 participants of this study vary in age, experience teaching, personal outdoor experience, and level of outdoor education training. The following two tables provide a brief summary.

<b>South Shore Regional School Board</b>				
<b>Pseudonym</b>	<b>Years teaching</b>	<b>Started teaching because</b>	<b>Outdoor recreation or organized sports experience</b>	<b>Outdoor education training</b>
John	6.5	Loved coaching, being around young people, and the lifestyle of being a teacher.	Involved in organized sport, mainly basketball. Is not involved in outdoor activities in leisure time.	None. Participated in several training sessions. Has no specific courses from university.
Andy	6	Loves working with kids. Had lots of great coaches growing up.	Went camping growing up. Played competitive sports.	University courses in Outdoor Recreation. Level 1 canoeing & Wilderness First Aid.
Kyle	15	Positive experience with phys ed in high school, enjoys physical activity as well as exercise science.	Strong athletics background. Coaches several teams. Involved in outdoor education during high school and had a positive experience.	Member of implementation team. Took 2008 provincial in-service to introduce <i>Outdoor Pursuits</i> module.
Bob	7	Loves athletics, played sports and could relate to experience of playing sports at a high level.	Played professional hockey. Little personal outdoor recreation experience.	Took 2008 provincial in-service. Levels 1/2 canoeing.
Andrea	5	Liked school, related to teachers, always involved in athletics.	Played varsity sports in university.	Outdoor components in university degree, but nothing in-depth.

Table 1: Participants from the South Shore Regional School Board (SSRSB).

<b>Strait Regional School Board</b>				
<b>Pseudonym</b>	<b>Years teaching</b>	<b>Started teaching because</b>	<b>Outdoor recreation or organized sports experience</b>	<b>Outdoor education training</b>
Dave	10	Enjoyed coaching, friends were in the phys ed program and spoke highly of it. Teaching naturally followed.	Coached soccer for a number of years. Enjoys outdoor activities in leisure time (i.e. hunting, canoeing, and skiing). Took class on overnight camping trip.	Introductory weeklong off-campus course during phys ed degree at St. F. X. for leadership, teambuilding, trip planning, etc. First aid instructor.
Kim	16	Had summer jobs with kids, loves working with kids.	Involved in athletics. Coached different teams.	None.
Jack	18	Started coaching in high school, very sports minded.	Coaches several teams. Camps in leisure time with his family.	Introductory weeklong off-campus course during phys ed degree at St. F. X. for leadership, teambuilding, trip planning, etc. Lots of certifications including Wilderness First Aid and Level 1 canoeing
Steve	6	Likes working with kids, loves sports, being active and fit.	Had taken groups of students on overnight camping trip.	Took a 4-day introductory trip during Outdoor Education course for education degree at St. F. X.
Bill	13	Enjoyed school as a student.	An outdoorsy person. Taken groups of students on camping trips for past several years and mentored other teachers on camping trips.	One component in university. Wilderness First Aid, Level 1 canoeing.
Richard	23	Had a mentor teacher in high school and took an intense phys ed. course.	Has taken groups of students on overnight camping trip for 3 years.	Introductory weeklong off-campus course during phys ed degree at St. F. X. for leadership, teambuilding, trip planning, etc. Took 2008 introductory in-service and board in-services.
Chuck	16	Involved in athletics from an early age. Taught swimming and liked teaching and helping kids.	Coaches soccer. Coached baseball and hockey.	No training in university. In-services over past 5 years in the board.

Table 2: Participants from the Strait Regional School Board (SRSB).

## 4.2 Rationale: Lifelong Learning for All

Before I present the teachers' experiences with *Outdoor Pursuits*, it is helpful to first examine why they became involved in the first place. Chuck, for one, wanted to see a revival of outdoor education in the public school system to diversify the curriculum:

Our young people aren't aware of what is out there, so we got to get the students out there into the environment... I think it cycles, I think if you look 20 or 30 years ago a lot of things were done outside with not a lot of equipment and there was a lot of benefit from that. And then phys ed moved strongly into sport education and then we found that wasn't the right way either. So we need to diversify and do all of the other elements. And I think we've come back full circle again, we have to educate kids on what's in their backyard. Lots of those skills [that] used to be taught on the farm or as you grow up are lost. So it's back onto the teachers to get them back into the outdoor environment.

All participants mentioned the importance of getting kids outside and trying different activities. Providing opportunities other than traditional physical education activities carried out in the confines of the school gymnasium was often mentioned. Jack, for example, said:

I think the kids are not going outdoors anymore and I think a lot of kids are staying inside and playing with these video games or computer games or Facebook or whatever. I think it is trying to get kids to go back into the outdoors and doing something on their own because right now kids are not doing anything unless their parents are organizing it. They're not organizing themselves; it's not like what we used to do when we were kids. So, I think it is trying to get kids to go back outdoors and reengage themselves with what is available to them in the outdoors. You know it is very available to us in Antigonish.

As well, the personal and group development associated with unstructured play and engaging with natural environments was mentioned as important, although that often goes beyond the stated curriculum. Dave argued that by providing students with opportunities to develop teamwork and leadership skills while simultaneously addressing topics such as sustainability and conservation are positive aspects of outdoor education.

Furthermore, he stated that such skill development not only benefits the students, but can be seen in deeper connections between teachers and students. Steve echoes this idea:

I love taking kids out in the woods and seeing their interactions. They're totally out of their element but they're more relaxed I find. They're doing things that they like to do, it's structured but it doesn't feel that way. You get to see all sorts of things with the kids that you never see in the school. And I find when we come back from that, everyone is a lot more well behaved for you. They really enjoyed it. It's great!

Dave too thinks connecting with students outside of the classroom “makes school easier” in that he is “not dealing with discipline issues.” He suggested that having camps before starting school could be particularly beneficial:

I think it's serving the interests of possibly stressed-out teachers or unenthusiastic students who have discipline issues.... [Camps] create that opportunity to develop that sense of community within the school, which develops from outdoor ed. This is what needs to be focused on.

Andy calls outdoor education “smart education” because it gives students the chance to get outside, to experience different activities or situations with which they may not be initially comfortable, and to challenge themselves. Andy likes seeing students in a different light where students who are normally less engaged emerge as clear leaders outside of the classroom:

Different things that they can bring into it from home or whatever clubs that they might be involved... You end up getting the students that wouldn't typically be the leaders in the class, they start to take over in different environments and it just gives your students more of an opportunity to build on their skills or show what they can do in different ways, so that is one of things that excites me about it.

Similarly, Andrea outlines how students can share in ways that may not be as noticeable in the normal school environment:

I think it engages learners that maybe we are not getting to in a typical classroom. We have a lot of kids who have a naturalistic point of view of looking at the world and nature and do a lot of this on their own and we really have not seen the value of this type of education. And now that we are bringing it in I think it really

appeals to the students that have the skill set in this area and the students that may not excel in math class but if you put them outside and they really get a chance to show the skills they do have, I think it is a real bonus for those kids.

The teachers also felt that there is a general increase in the engagement with and enjoyment of physicality, including for those students who are not necessarily competitive or sports-minded. John summarizes this:

I'm not necessary worried about the kids that really enjoy phys ed because it doesn't really matter what you do, they're going to enjoy it. I am really wanting to gear things towards the middle-of-the-road kids and the kids that really dislike phys ed and I think that [*Outdoor Pursuits*] is potentially something that could entice them to come and broaden their range of what phys ed is. Phys ed isn't just rolling out a soccer ball and going out and playing. A lot of kids still treat it that way and it is still the mindset of a lot of parents too, so trying to change that. If you get kids to go essentially on a hike or a camping trip that could be awesome and I think that that would really entice them and to broaden what they want to know or what they can do.

#### **4.2.1 Lifelong Learning**

A vast majority of the participants interviewed outlined the importance of bringing the students outside of the gym, not only for immediate benefits but also for what can be referred to as lifelong learning. Kim, for example, stated:

I think it is to give another place for physical education and lifelong learning. Things that the kids can do forever. They can do that when they become adults with their families, if they are learning these skills a young age.

Kyle expands on this:

It's an untapped area where a lot of kids would have a positive experiences and definitely try to get them out there into the outdoor environment as opposed to inside the gym all the time, which is not really practical once you leave high school. Really, because we teach kids to be physically active and we spend all of our time in the gym, then they leave and there is no gym to go to or they just don't want to go to the gym, but they all have the outdoor environment to go to.

Similarly, Richard said:

I think it provides something other than traditional phys ed. We are so used to teaching basically games like basketball and hockey and so on and this [*Outdoor Pursuits*] provides lifelong activity that kids can go out and pursue after they get out of school because often times those other sports, the traditional sports there are not as many opportunities to do them when they finish school. So lifelong learning and lifelong pursuits. It is great!

Another topic that came up frequently was the importance of, to use the words of Bill, “educating students on what is in their backyard” and getting students out and active in their community. Bill hopes that the excitement generated through such endeavors might serve as a catalyst to “pull students away from their screens and introduce them to physically healthier activities.”

### 4.3 Constraints

Although the teachers were positive about *Outdoor Pursuits*, they nonetheless had some concerns. John, for one, stated:

I think it is awesome in theory. In practice I think it is very difficult to get the experience that kids should have. I could sit there and meet two or three of the outcomes by being in a classroom, is that really what I want to do, no! It’s just not the experience that I think the kids could have. I think that in some places it can work wonders, here I think it is very difficult for it to work.

Most participants had similar concerns and the constraints outlined in this section highlight the realities teachers face in implementing the module.

According to Andrea, the limitations “with getting any program off and running is the comfort level of the teacher, the support and money to get it up and going.” Andrea’s statement neatly points to prominent themes in the three inter-related categories of constraints. The first category, Intrapersonal, was the dominant constraint identified by participants. As well, teachers identified social parameters and the technical skills and equipment available to them. Many of the interpersonal and structural constraints,

however, did not exist separate from teachers' perceived comfort level or their intrapersonal constraints. Therefore, the main constraints in the final two categories, Interpersonal and Structural Constraints will be tied back to teachers' perceived comfort level. Finally, the findings revealed some differences between the two school boards, which will be highlighted in relevant sections throughout this chapter.

### **4.3.1 Intrapersonal**

Teachers were clear that their personal feelings of comfort and experience were the most influential factor related to their participation in implementing *Outdoor Pursuits*. Andy put it simply: "Somebody with limited experience is going to be pretty tentative to take students out because you... want to be able to do it yourself in order to teach students how to do it." As Andrea said, "if the people don't have the background, the interest or experience then they're apt to steer clear." Examining the relationships that exist between motivation, childhood experience, interest and experience as they relate to teachers' perceived comfort level is the focus of this section. The themes are listed in their order of relevance based on the order of frequency the idea came up and the emphasis participants placed on the theme.

**4.3.1.1 Comfort level.** For all of the participants, the perception of comfort was essential to their perceived ability to teach the module. Specific to each case, and to some extent the different school boards, were key variables such as adult experience, personal interest, motivation, and childhood experience. Understanding these variables and how they related to one's perception of self is paramount.



For example, Andrea, indicated that “comfort level... (was) by far the biggest concern” and she clearly sees the link between comfort level and the social and environmental uncertainties of teaching outside:

A lot of the instructors didn't necessarily feel comfortable outside, so it was not a comfort area for them. Traditionally, trained physical education teachers are used to the gym and bouncing balls and hockey sticks and then when you put us outside of our comfort zone.... especially with grade tens that you don't know, that are coming in brand new to your school and we don't know how they're going to handle themselves.

Andrea connected teacher levels of comfort with their past experience, training and familiarity with students. For Bill, a member of the curriculum development team, his experience as an outdoorsy person contributed to his high comfort level teaching *Outdoor Pursuits* with students:

I'm an outdoor person myself, with students out there I feel completely comfortable. I am a person where I plan everything out right down to the detail and I make sure the kids know exactly what they're doing and safety is the most important. If safety is compromised at all, I just shut everything down. I'm very comfortable. For four years I've taken students camping with groups as high as 30 and never had any troubles whatsoever yet, not saying that it can't happen but I felt very comfortable taking that large of a group. I have taken them from hikes on camping trip to canoeing to low ropes courses to fire building. Everything that is involved in it, I've done and I feel very comfortable in teaching it but again it is just a safety component.

Bill's high level of comfort can also be attributed in part to his planning and his safety protocols, both of which stem from his experience level.

Understanding the interrelationships that constitute the development of a teachers' comfort level is complex. For example, how does Chuck gain the insight to know emphatically what he is comfortable with and that he “wouldn't go outside of [his] comfort zone, especially in the outdoors”? How does Dave, who feels “very comfortable” taking students outside, determine that “maybe I'm comfortable enough

with my background that I could handle 15 students in an activity where maybe somebody that doesn't have the experience or the background in the same position should only have six students”?

Experience, it appears, is key and emerged as having the most influence on the teachers' comfort level. Figure 1 displays the prominent variables impacting participants' comfort level in the category of Intrapersonal Constraints; adult experience is proximal because it was mentioned the most, with the most emphasis.

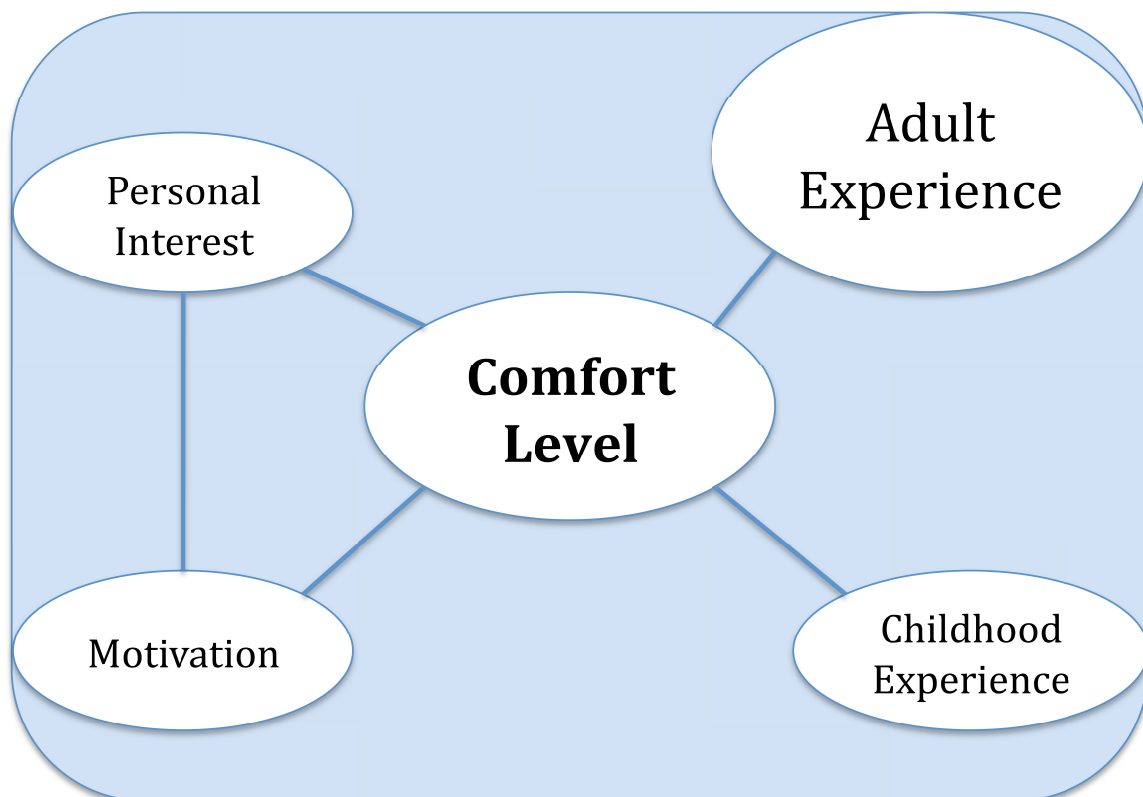


Figure 3: Intrapersonal Variables Impacting Teachers' Perceived Comfort Levels.

There was slight variation in experiences of comfort between participants in the two boards. In the South Shore Board more emphasis was placed on the notion of

comfort, with every teacher mentioning it, especially those who did not have a strong background in outdoor pursuits. In the Strait Board, however, more emphasis was placed on experience as the means of attaining a higher comfort level. Given the interrelatedness of teachers' perceived comfort level with other variables, it is more useful to discuss comfort in conjunction with the other themes, adult experience, childhood experience, personal interest, and motivation, which I will do in the following sections.

**4.3.1.2 Adult experience.** Whether speaking in the first person or extrapolating to others, personal experience was expressed as a potentially limiting factor by all participants. Richard put it bluntly: "obviously if you don't have experience it would be limiting to you." While some teachers implementing *Outdoor Pursuits* do partake in various outdoor recreation activities on their own time, according to Bob, "a lot don't have that background. They are usually past athletes." The low level of formal outdoor education through certifications or university courses coupled with the lack of informal experiences, such as participating in outdoor activities in their leisure time, can negatively impact teachers' comfort level in teaching the module. John's statement clearly expresses the feelings of a teacher with low formal and informal outdoor pursuits experiences:

I'm scared to death. Like honestly, I haven't had the intensive training. If I had spent a couple of months doing something, then I would feel confident doing something like that [like outdoor pursuits]. Growing up I wasn't really a camper. I wasn't really into the geo-caching or anything like that, so I'm just not as comfortable with it myself... Do we want to take the class into the woods for two to three days when I myself don't really go into the woods for two or three days on my own? Like, do I go and play rec league softball or soccer, sure, so I am more adapted at the team aspects as far as this stuff goes... My personal opinion, there are a lot more people like me that are teaching phys ed that don't have that experience. Yes, I have gone camping, yes I go to camps like hunting camps and

things like that, but I don't have that sort of experience, that really hard-nosed experience. Can I break down a basketball jump shot for you? Absolutely! But can I go out there and be totally comfortable in the woods? No.

John represented the majority of the participants who argued that a lack of personal experience was the number one factor-limiting teachers from implementing the *Outdoor Pursuits* module. This was particularly true in the South Shore Board where, in general, adult experiences in outdoor pursuits were fewer.

Formal training as it relates to experience also emerged as a dominant constraint.

Indeed participants identified it as the key constraint. Steve, for example, noted:

More than anything I think it's qualifications. Making sure you have the qualified people that they have the certifications to offer certain things. The first aid, the remote wilderness first aid, the canoe certifications.

Training for teachers had varied throughout the province, with the introductory conference on the *Outdoor Pursuits* module held in 2008 at Oak Island, Nova Scotia and subsequent sessions held during board in-services. Bob noted the challenges of implementing the new material learned during these in-services:

Some of us still, even though we had our hour session here and there [during different in-services], it is not enough to implement it into your program as easily as it would be for them with that experience.

He continued:

We have access to [resources and equipment], but ummm, [the conference presenters] did a great job as the presenters but to go back and use some of those things in your classroom it is sometimes difficult because you don't have the confidence that you would as the person that is actually doing that.

Additional themes such as feelings of nervousness or intimidation, or the "fear factor of people" (Bill) around the potential of injury to students in a wilderness setting were also mentioned. These will be discussed in further depth in the coming sections as they relate

directly to other themes, such as safety, liability, the “feeling of being alone” (Bob), student preparation and student behaviour.

**4.3.1.3 Childhood experience.** Unlike several participants from the South Shore Board who expressed low comfort, two other participants from the South Shore expressed high levels of perceived comfort. Andy, in particular, talked about how his positive and formative childhood experiences contributed to his enthusiasm and comfort level:

When I was growing up I did a lot of camping and that sort of stuff... I am pretty gungho to get students out and do that sort of stuff now. I've taken lots of students out on the land and it has always turned out pretty well, I never had any major issues. So I guess it is really individual, some teachers may not feel comfortable and some people would. I guess it all depends on their own experience.

However, the opposite was also present with teachers who didn't participate in outdoor activities in their childhood. Jack, from the Strait Board, expands on this in his growing concern that new teachers coming into the profession have had little general outdoor pursuits knowledge:

It seems like a lot of kids today, kids that I teach today, a lot of them are working and they don't have a chance to go and do those things that I had a chance to do when I was younger. I didn't work when I was going to high school so I was able to go outdoors and go camping and these kind of things with my parents. They're not getting the opportunities that I had, although it is different opportunities because they are getting experience in the work world, they are not getting experience with the outdoors, which is unfortunate.

**4.3.1.4 Personal interest.** A catalyst for the level to which the module is being implemented was the personal interest of each participant. For example, when discussing his stance on teaching *Outdoor Pursuits*, Dave explained:

What excites me is my personal enjoyment. Like I hunt, canoe, and ski and that is who I am, that is where my background is. I have a big background in sports but I think my personal leisure time and my downtime is through outdoor pursuits of all sorts...What concerns me is I like doing these things, but think of other

students that may not have another teacher that is interested in going that extra mile to make those things happen.

Similarly, Andy said:

Whatever your interests are what you will try to pass on to your students. Like if you're excited about it, chances are the students will feed off that. So with my own background those are the ones that you tend to lean towards, whatever your strengths are as an educator, so those are some of the things that I have participated in a lot so those are the types of things that I try to incorporate a little bit more into what I do in the classroom. Like I was saying, it all depends on the teacher's strengths and weaknesses as well... There might be some teachers who would push different types of content just because that is what they have a background in and they just had different opportunities or whatever the case is, we're not all experts in all the different areas.

John shared another example:

I do believe that people are trained well enough, but not necessarily because of what the board or what the province may be doing but because of what their own experiences are.... Just like Hebville Academy is an awesome track and field school, why because they've had a teacher there for 30 years that really was into track, there is a direct correlation right there. Like, for me I am a basketball coach and during free gym times I make sure the basketballs are out there. Why? Because I'm selfish and I want to make sure that we have some more basketball players. That's plain and simple. But if I was totally into the outdoor pursuits, I would be pushing more the phys ed. 10 programs... So as far as the teachers I think there are some that are really great and there are others people like me who could meet the curriculum outcomes but not be giving them the experience that it is designed for.

Predictably, the majority of the teachers who exhibited a strong personal interest in outdoor pursuits made a greater effort to incorporate those activities in their course.

**4.3.1.5 Motivation.** Directly related to personal interest is motivation. According to Andrea, “I think it could take some dedicated special teachers to really get out there and break this open.” A key component to getting “out there” is the motivation to do so.

Steve, for example, exemplifies a strong sense of motivation and passion:

Like I said last year we didn't get out once because it wasn't a good winter for snow. It really sucked and was too bad. But I'm hoping for snow, but that the school still opens. Keep the school open but give me a lot of snow.

Andrea, acknowledged the additional motivation and passion needed to overcome some of the logistical and transportation issues that surround school outings:

Any kind of trip that you do with the school, the hoops that you have to jump through, it is a real mess to deal with... And it's not so easy when you take into consideration your normal teaching responsibilities.

The module itself was also praised by several participants as providing them with the motivation to continue to be actively engaged in their profession. Richard describes his feelings:

I think it is a great course. For me, it's great! I find it so different from our traditional phys ed program. It's kind of like a breath of fresh air for me, it is something different after a dozen or more years of the same old stuff... Like I said, it gets you out of the gymnasium for a little bit, which is great, so yeah I think for the most part our goals are being met.

**4.3.1.6 Summary.** From the interviews, it was evident that the perceived comfort level of participants teaching *Outdoor Pursuits* related directly to their perceptions of self in relation to their adult experiences, motivations, childhood experiences and interests. However, these are not the only factors in play and the interconnectedness of the themes makes it complex. I now turn our attention to other factors, namely interpersonal and structural constraints.

### **4.3.2 Interpersonal**

It became clear from the data that there were significant differences between the boards in terms of interpersonal constraints and the support available to teachers to negotiate these constraints. This section will highlight the prominent interpersonal themes that constrain participation in both boards, and that elucidate the differences between the boards

**4.3.2.1 Students.** Crucial to any outdoor education program are the individuals who are taking part in the activities. In ten of the twelve interviews, teachers specifically mentioned the impact students have on their comfort level; of particular concern was the trust and maturity level of the students. Andrea describes a previous trip and the potential of doing a future one with an incoming grade 10 class:

My big pull to go on that trip is that I knew the kids that were going and I knew them well. And there was a level of trust there. Coming into a new grade 10 group that I've never met before for the first semester I don't think there is any way that I could have done that.

Similarly, Bill explains:

I mean I think as you teach the outdoor ed component, I think personally myself you need to know your students first. If I have a group of students and I think they're going to be a liability I just don't take them, that is camping trip wise or if you're going out on the water. If I don't trust them, I just don't take them.

Understanding and developing a relationship with students beyond the gymnasium environment was seen as a challenge, especially when the interest of the students is perceived as low. Bob commented:

They do not want to get out of the school. They find comfort inside the gymnasium and they don't want to be out of the school. They are outside all summer, but it depends what class you are with.

Because grade 10 physical education is mandatory, not an elective, teachers cannot assume all students are intrinsically interested, indeed many students may see the course as a means to an end in regards to graduation. However, the opposite also appears to be true. Dave led a camping trip with grade 10 students two years ago and recounted:

The kids come back wanting to do it again and again and again. Are we going again this year? So that speaks for itself.

Three other participants who have conducted overnight camping trips echoed the connection Dave made with his students and their desire to do more. However, getting



students to the point where the teacher feels comfortable taking them outside in the first place remains a major concern. In the end, according to Chuck:

It depends on your clientele and whether or not they are actually ready to do it. Whether or not you have a lot of risk takers that may put you in a situation where you might put someone in jeopardy.

The concern teachers have with student safety, trust, and liability can in part be grounded in one's perceived comfort level. If teachers foster relationships and increased their trust of students, they had a higher probability of involving students in additional outdoor pursuits. As such, students emerged as having a direct impact (either positive or negative) on the perceived comfort level and subsequent level of participation of teachers in *Outdoor Pursuits* (See Figure 4).

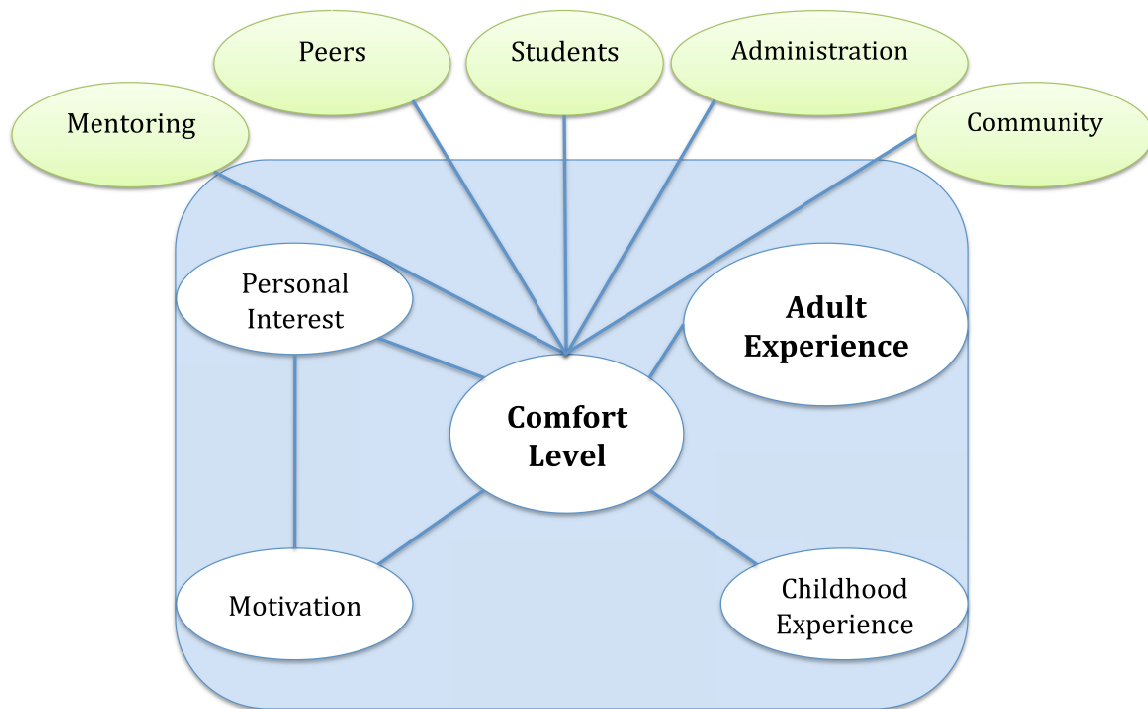


Figure 4: Intrapersonal (inside blue box) and Interpersonal (highlighted in green outside) Variables Impacting Teachers' Perceived Comfort Levels.

**4.3.2.2 Lack of board support.** Having a similar impact on comfort levels was the presence of support networks, particularly mentors. Both the school boards have gone to some lengths to support the implementation of the *Outdoor Pursuits* module through such actions as developing resource material, acquiring equipment, and providing it on a rotational basis. However, some participants argued that the lack of professional support available at the school level negatively impacted the delivery of programs on the ground.

According to Bob in the South Shore Board:

It would be extremely beneficial to me and to our school to have someone at the board that was an expert and that could float and do some of the things that we need to do because most people in my field, their background, well I can't say most, but a lot don't have that background. They are usually past athletes... And that is one of the things preventing getting kids outdoors in certain situations, I kind of need the backup, I need chaperones or other teachers or other people like yourself that knows about those types of things and to keep it interesting to the kids because of the background that those people have and the knowledge that they have. Like I was a hockey player, so that is all I did.

The presence of an Active and Healthy Living Consultant (AHLIC), the Sports Animator (SA), or an outside consultant was seen as something that could help teachers, particularly those with a lower comfort level, get outside and gain valuable experience.

Similarly, Andrea acknowledged the benefits gained through board-run in-services, but stated that the practicality of implementing this new knowledge without support on the ground is difficult:

We did have an in-service last March where we had a gentleman come in and talk about camping. He showed the different types of stoves and all the resources that are there. How you can get away with not buying a \$500 tent and using different types of material and yadda yadda. It was good, but at the end of the day it came down to the discussion about in a typical grade 10 classroom and the maturity level wise and the behavior level wise, can I realistically take 30 kids into the woods overnight or what ones could you take?

From the perspective of risk management is taking out a large group of students allowed, and furthermore, what does it mean if teachers do not know the risk management policies? In the Strait Board two in-services focusing specifically on risk management were held in the fall and winter of 2010, similar in-services were not provided in the South Shore Board.

**4.3.2.3 Peer support.** The existence (or lack thereof) of peer support also emerged as a constraint. The support teachers received from peers varied by schools and by experience teaching. When asked about peer support in the school for example, Bob commented simply:

Everyone is busy and it is difficult, where at the junior high level you have some access to people that aren't as busy.

Regular teaching commitments can be compounded in larger schools and the significance of a single program such as *Outdoor Pursuits* can be diluted. According to Kyle:

A lot of times teachers in your school have their own things to worry about or their own courses so you may not always get that support... I mean if I am running a phys ed program in a school of 60 teachers, I'm not gonna get a ton of support from teachers in the school. I have another phys ed teacher and it is kind of a partnership.

Further, creating partnerships with peers in a department or throughout the school takes time. When asked about his own previous experiences taking students away from the school and some of the constraints he imagined that young teachers might face, Dave said:

I have got support from other teachers because a lot of times when I say I want to go skating or skiing or hiking it is expected that you pull that off when the student teachers are here. In terms of coverage, [the school administration] are expecting them to be younger and wanting to participate but it's been that a lot of the older teachers were fighting to leave the student teachers here so that they could go (laughter). So it does pan out pretty good after a few years. But starting teachers without their connections and support and tight relationships with other staff, I

don't know how well that person would handle and maybe older staff wouldn't come forward for younger teachers as quick.

**4.3.2.4 Administration.** Fundamental to any successful program is the support of the school administration. Although most participants praised the support they received in their school, concerns were nonetheless expressed by five participants. The main concerns stems from administrators' uncertainty about activities carried out off school grounds and the perceived increased level of liability. According to one teacher, lack of support within the school was a concern:

Just for the fact that I think most schools and most teachers and some administrators don't understand. As soon as they hear outdoor ed they think liability and not safe. Not, ummm, I just feel like some schools don't feel comfortable with it and that starts right from the administration. Because I know there are a few schools that phys ed teachers are really having a difficult time being able to do outdoor ed because of the fact that the administrators who, I wouldn't say they are not supportive but they're nervous of the support that they're given.

Similarly, Kyle said:

They know that you have to implement a curriculum but I don't know if camping and outdoor pursuits is going to be the first thing that they come after you to help you out with, because really camping specifically is not really in an outdoor pursuit outcome

**4.3.2.5 Other constraints.** Additional constraints emerged around coverage, supervisions and chaperones. The cost associated with covering substitutes was mentioned along with the concern over not having chaperones to cover ratios, particularly those who are qualified and comfortable. This can be especially pertinent when there are parental concerns about the activities being proposed. Steve explains the reality he faced when organizing an overnight camping trip:

A lack of understanding on the parental standpoint, I mean they always get nervous when you're talking about bringing kids out to the woods. I mean they trust you but at the same time they're not quite sure and it hasn't been done a lot in

the past, so you have those kind of hurdles to go through and making sure that the right people are there so that the parents feel comfortable and the right information has gone home.

Several participants acknowledged that mustering parental support was paramount to the success of a trip and the future development of *Outdoor Pursuits*. Another constraint mentioned was a lack of clear communication between the different levels within the school system and the parents, which can create misunderstanding and induce what one teacher described as “fear mongering practices” by some parents opposed to outdoor activities.

### 4.3.3 Structural

Structural constraints were often some of the first constraints mentioned, such as equipment, funding and location, however their significance and prominence varied as the conversation evolved. It is important to state that the majority of the themes listed in this section were not stand alone, but interconnected with other constraints mentioned in this and the previous two sections.

**4.3.3.1 Class time.** The question of how to fit the *Outdoor Pursuits* module into a semestered school system emerged as important for participants in both school boards. Short class periods and a segmented school year were the most common concerns. The constraint of class time was mentioned by all participants from the Strait Board and two participants from the South Shore Board. Here are a few examples:

Chuck: I have an hour block for outdoor ed and my next block is the grade 3's. So I have an hour or I have 55 minutes to work with, for most days.

Kyle: Scheduling to try and find the time to do a suitable job outside and still be back for next class without having to worry about coverage all the time or manipulating the schedule.... Here I mean we have the woods, and it is pretty

remote, we have good trails, but if you want to go on a trip anywhere by the time you get the bikes out and the kids, you can go 10 minutes up the road and 10 minutes back and your class is over. There are obviously limitations.

Andy: Unless you are planning like a real trip where you take the students away for the day or even overnight, the normal everyday classroom time, you just don't have an opportunity to do all that. And time-wise as well, you know, we just have about 45 minute periods here and that is not really enough time to get them outside, get them organized and get them engaged in whatever you're doing.

In particular, according to Bill, certain activities require a longer time period:

For example for me to teach canoeing it takes days, we don't have a pond or lake right beside the school so I can't go out and teach for an hour. You have to take, like, a day or two days.

Beyond the concerns about daily schedules, the length of available time in the school year also mentioned. As Jack explained:

Because there are four modules it is hard to do everything. I mean I would love to do all the different outdoor pursuits that are possible, but again time is a factor.

Further, Steve said:

It is more of a time restriction than anything else. You want to make sure you take your time with it, especially with stuff like fire building, using equipment or packing the packs. We share [the equipment] so when I use it I go slow so it doesn't get abused, the students are understanding how it works properly and they are following the proper safety precautions.

For Dave, outdoor education does not in fact easily fit into the current system. He

explains:

I think an outdoor experience is a field trip, it's a day trip, it's a weekend trip, it is a weeklong thing. I think it's hard to implement it in our system because as a teacher you have to negotiate coverage, it's a lot of extras. It's a lot of extra work to feel that enjoyment. The ski trip, it was awesome and I am glad I did it, but I just put 10 times as much work into that one day as I did if I just showed up and did an hour lesson in the gym.

**4.3.3.2 Equipment & resources.** Equipment and resources pose various constraints, from simply not having enough to conflicts that arise from having to share

resources within geographically large school boards. One teacher in the South Shore Board acknowledged the effort the board has made in acquiring various types of equipment, but knowing what is available, when it is available and how to acquire it remained unknown to her. Even once equipment has been acquired, several participants expressed concern regarding the logistics behind maintaining and storing it. Dave commented:

I do enjoy this idea that the board has equipment, I think it is frustrating in the sense of maintenance and responsibility of it because as it circulates through schools, teachers may not treat it as their own, with that ownership that they have to take care of it so much... But if you're only doing one camping trip a year why have all this gear and funding on equipment when its just going to sit packed away until the next year?

Bill also talked about the challenges teachers face with sharing certain types of equipment that can fall into disrepair if not cared for properly or neglected:

The board also has 30 mountain bikes, 15 of them are here right now which were shared, but I don't think the sharing thing is going to go. You can't share that type of stuff, maintenance is just crazy. I got them last year at one point and of the 15 bikes, there were eight or so broke. By the time you get someone to come in and fix them cause it's not on our time (I don't have the time to fix them even though I did do a bunch of them) but to fix them and use them and then send them to another school we only had two weeks.

The logistical challenges of maintaining the equipment as well as transporting it around can prove both costly and a logistically draining task. One teacher suggested that these tasks alone could be someone's full-time job.

**4.3.3.3 Liability.** Described by John as the “big sticking point,” concerns about liability were mentioned in both boards and among teachers with various levels of teaching experience. Although teachers' understanding of the protocols, procedures, paperwork and ratios varied, the effect that possible liability had on participants' comfort levels was overwhelmingly negative. According to Bill:

The biggest worry about the outdoor ed that I have personally is liability.... I know in a lot of places they say a waiver is just a piece of paper. If something happens it doesn't do anything for anybody.

Several participants mentioned the additional paperwork involved when conducting activities outside of the gym along with the perceived increase in liability. Further, participants mentioned a “gray area” where specifics of what is allowed or not are not clearly outlined or understood; in many cases the rules vary by board or by school. In general, limited participant, administrative, and in some cases school board understanding of waivers heightened uncertainty.

The concern over liability appeared to be felt most by participants who were less comfortable with outdoor pursuits. John, for example, commented:

The liability thing for me is the big sticking point. I can get every piece of paper in the world that will say this is what can happen and get parent signatures and everything else, but it doesn't mean scratch if you have to pay out X amount of dollars if you're in a lawsuit because somebody broke their leg in the woods. Like, the different procedure and protocols, that's a big thing for me, that makes me nervous about it.

Having liability on the minds of teachers prior to or while conducting outdoor pursuit activities had a direct negative relationship to their perceived comfort level (see Figure 5).



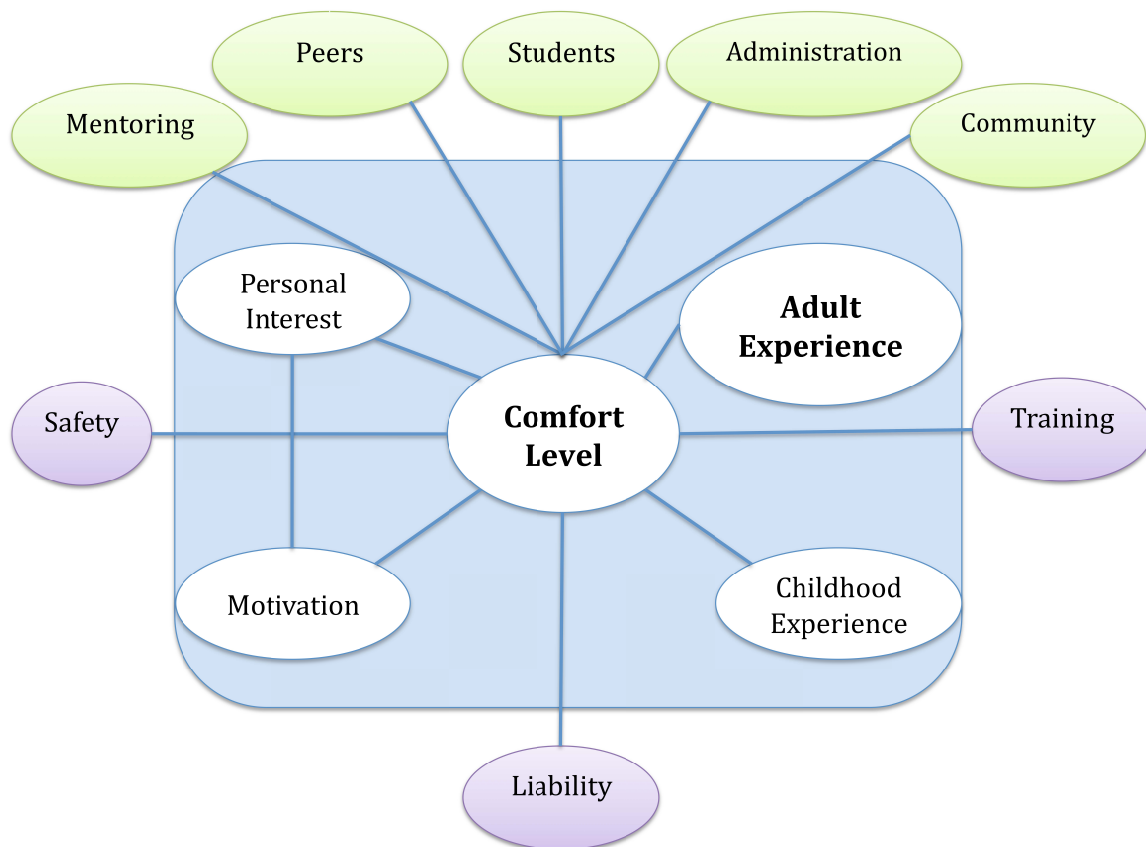


Figure 5: Intrapersonal (inside blue box), Interpersonal (green highlight), and Structural (mauve highlight) Variables Impacting Teachers' Perceived Comfort Levels.

On the flipside, having *Outdoor Pursuits* become overregulated also posed a concern for several participants, especially if specific ratios or rules prevent participation in certain activities. Dave explains:

What worries me is that we don't get safety regulated out the window. We can't go camping or skiing because of your chaperone to student ratio. For example, you can make it 12 to 1 but the rulebook says 8 to 1 then you can't do it... I think as a teacher, I should be the one that goes over the checklist of suggested guidelines for such activities, but if it did come out in these safety guidelines saying that it's got to be this ratio and that ratio in this procedure and I'm not giving that flexibility to make it work, that worries me.

Imposing ratios thereby removing teacher discretion also raised concerns about the practicality of the rules. Bill put it into context: "Suppose I have 22 students and only one

other chaperone with a ratio of 1 to 10, what do I do? Leave two kids at home or break the rules?" This scenario also raises the question of who is liable if someone is injured when the ratio is off. Does it rest solely on the teacher or does the board have a responsibility to assist teachers with meeting the ratios?

**4.3.3.4 Logistics & transportation.** Several issues pertaining to liability and paperwork seemed to intrinsically relate to the logistics behind some of the outdoor activities. Andrea explains:

The actual logistics of trying to put it together is almost a nightmare... From the permission forms and everything down to the child abuse registry checks for people driving.

John shared a specific example:

As far as I'm concerned, because of the fact we are rural, it seems like the ideal locale but for us to leave the campus, we have to have RCMP knowledge that you're actually out there because we don't have any sidewalks, we're next to a major sort of highway so even to have the walkathon type thing, to be leaving the campus, it is really tough.

The structural constraints that occur before even leaving the school grounds limited participation in several cases. Also daunting for some were the logistics of organizing bigger events where transportation to a location off school property is required. This organization can be further compounded when a teacher has several classes. Kyle explains:

Because I may see four or six grade ten classes in a year... for me to plan an outdoor trip with every grade ten class is a pretty large task because you can't combine them all because trying to take 60 to 90 kids at once is not conducive either. So there are challenges around your numbers, your schedule, and your resources.

Smaller schools also faced challenges with limited resources and availability of physical education courses at each grade level. Scheduling and coverage constraints also increased in smaller schools where staffing is also stretched.

**4.3.3.5 Weather.** True to the culture, Nova Scotians love to talk about the weather and it emerged as a factor in half of the interviews as a constant constraint, especially by participants who did not have a strong background in outdoor pursuits.

According to Steve:

Depending on how cold the winter gets, like last year it was so rainy and slushy you couldn't really do a lot outside because the kids are miserable. And the year before, there was a tonne of snow and it was freezing so then the kids weren't really interested in doing a shelter when they're standing there freezing.

Three teachers mentioned the limitations associated with having a semestered school system and trying to organize outdoor activities to fit into the seasons. Richard remarked that it is somewhat limiting to try to get everything done in September and October or May and June. John had different feelings about getting students out in the spring that did not directly relate to weather, but more the realities of a Canadian spring:

We can't get into it too much at the end of April because the flies will drive the kids crazy, not to mention teachers.

In general, accommodating to the elements in Nova Scotia emerged as a limiting factor, particularly the constant changing weather patterns and generally wet winters.

**4.3.3.6 Life commitments.** Another element that emerged in the interviews was that physical education teachers' time is a prized commodity as many of them coach teams and supervise the gym as well as have non-school responsibilities. Bob describes his normal day:

I have got three kids and I commute.... 50 minutes, so I am up at 5:30 and get here for 7:30 then I have extracurricular things after school, we are just finishing track and field and I coach volleyball.

For teachers with young families, the availability of time was even further reduced by their personal commitments at home.

**4.3.3.7 Other constraints.** While less prevalent, the following constraints also were mentioned in the interviews. Having guest speakers or experts in related fields come to rural Nova Scotia was not always possible, especially when trying to coordinate the visit with the schedules of the school and the sequencing of the *Outdoors Pursuits* module. This can be further compounded if there is a financial cost associated with providing outside support associated with personal development (PD) days, substitute teachers, or transportation. Accessing different sites also emerged as a constraint, especially when key facilities were not located in easy proximity to the school. Finally, class size garnered several comments such as “I haven’t yet come to a way to work it with 30 students” (Kyle) or “even if I had the experience it would be hard for me to take a whole class” (Bob).

With all the intrapersonal, interpersonal and structural constraints now identified, in the next section I turn my attention to how these teachers negotiated these various constraints.

#### **4.4 Negotiation**

While a broad range of constraints to teachers participating in the implementation of the *Outdoor Pursuits* module were identified these teachers also managed to negotiate those constraints. Their strategies identified for overcoming the constraints and either

establishing or maintaining their participation in the implementation of the *Outdoor Pursuits* module are presented, as well as key elements that made a big difference, namely their own motivation to participate and their access to support personnel.

#### **4.4.1 Intrapersonal**

Techniques for negotiating constraints to participation were evident in all the teachers' stories. Key in the category of Intrapersonal Constraints were techniques which increased teachers' experience level which in turn heightened their sense of comfort. Only the key themes of comfort level, experience leading outdoor activities, and motivation will be examined in this section.

**4.4.1.1 Experience.** According to Bill "reading it out of a book is just not going to cut it." Emerging in the interviews was the importance all teachers placed on direct experience as a means of developing their own comfort and their general knowledge of outdoor activities. When Bill first got involved with *Outdoor Pursuits* he had an interest but no actual experience doing formal outdoor education with students. He gained some experience through a student teacher who, along with others from the university, ran programs with his students:

That's how I learned. They came and did the three modules with the kids and I learned with the kids and I just sat in with the kids and went through it and it was great.

Learning alongside the students enabled him to feel comfortable as he did not have to take a leadership role and gained valuable firsthand experience. Bob echoed the value that can be gained from developing self-efficacy in a safe environment:

That is the difficulty, it's not being comfortable with it... If there is someone who is professional and is extremely comfortable, that helps people that tend not to be as comfortable with it.

For some teachers their comfort level increased through practical in-servicing or other training activities to a degree where they could directly implement what they learned into their classes. Andy stated:

I took a small little PD day on orienteering this fall and I was able to go from a couple of hours there to implementing a unit in my class. Same with the archery, I took a two day introductory course this fall and I was able to do it for two or three weeks in my class.

Bill acknowledged the benefits of having courses such as wilderness first aid as “it makes a world of difference as to knowing what you can do and what are the limitations” in relation to negotiating the feelings of nervousness and intimidation.

Once the experience level of a teacher is at a point where their comfort level enables them to participate in outdoor pursuits, they can continue to increase their level of comfort by “getting out there” according to Richard. He explained:

You’re a little apprehensive your first time, but after you go through all the safety precautions and you plan for your trip, it becomes a little easier each time you do it. I guess I am a little bit more comfortable with doing things now than I would have been in the past.

He continued,

Actually, I mean getting out there and doing it on your own perhaps before you actually take the kids out. I’d go out for weekends to familiarize myself with the territory. I know whenever we go to pick a spot to go camping, I go out there and search the area before we go out.

Although implementation of *Outdoor Pursuits* has increased since the inception in 2008, especially in the Strait Board, where a higher degree of negotiating practices were identified in the interviews, Chuck acknowledged the need for ongoing personal development. He commented:

I think we're doing okay. I think we could do better but better will only come with experience. As teachers experienced more outdoor ed modules or experiences per

se, then they're going to feel a little more comfortable to deal with a group of 20+ students. So it will come with experience, with actually doing it.

**4.4.1.2 Motivation.** The motivation to get out and gain experience occurred not only in professional settings, but also through personal efforts. Some teachers acknowledged their interests and skill sets differed from the ones necessary for *Outdoor Pursuits*, but they recognized the benefits associated with the practice of outdoor activities. Kim recounts:

I actually e-mailed [the Active Healthy Living Consultant] yesterday and told him that I want to sit down with him and hopefully.... figure out how I can get trained with this kind of stuff. Because I want to do this.

Personal motivation emerged as a key factor influencing the negotiation process and in indicating the level of implementation of the *Outdoor Pursuits* module. Personal rewards were also highlighted by two teachers as being motivational. They conducted several overnight camping trips with students and related how wonderful it was to see students participate in the activities and learn through student reflections or personal actions how it was a positive experience for them.

#### **4.4.2 Interpersonal**

Although constraints did exist in this category, the overall perception is that the interpersonal aspect positively contributed to the constraints negotiation process. From the interviews, it was evident especially in the Strait Board where all of the participants acknowledged the work and commitment of Dr. Andrew Foran, a professor in the education department at St. Francis Xavier University (St. F. X.), and the Board's Active Healthy Living Consultant (AHLIC). In contrast, analysis of the participants comments from the South Shore Board showed that the lack of a mentor figure negatively affected

their comfort level, ability to gather resources, and subsequently implement aspects of the *Outdoor Pursuits* module.

**4.4.2.1 Mentors.** The presence of Dr. Foran in the Strait region was hailed by all participants in that board for his positive contributions. Foran was described by participants as “phenomenal,” “awesome,” “fantastic,” “a great resource,” “a wealth of knowledge,” “willing to work with anyone,” and as “a person who does stuff in kind.” He obviously has developed strong relationships with these teachers. For example, Bill clearly states that his own role in developing outdoor activities in the school system was directly connected to his relationship with Foran:

I had a student teacher, which was involved in the outdoors a little bit. He kind of told me a few things about what Frank Gallant does in Antigonish. We went to a low ropes course that is at the Fresh Air Society shelter. This kind of spurred me on to get things going. At the same time Dr. Foran was my student teacher's faculty advisor. So he basically came in and started talking about the outdoor stuff and I said that I was interested in the outdoors, it kind of got things going that year. That spring he came in, he did a canoeing course with my grade 12 leadership course and he also did some orienteering during the same day. We had some things set up and everything dispersed out from there. It has been great. He is basically willing to work with anyone. He works a lot with the board and has worked a lot with me and also he has been great in regard to resources... Working with the board. He does stuff in kind. Basically we did wilderness first aid again a couple weeks ago and he teaches a course with minimal cost to the board. He will put his time in, you just have to pay for the books or the board does anyway. And when he came [for] the time with the students, he did their canoe course free of charge, they didn't have to pay anything. He did everything and he sent them their certifications level C or whatever it was then. It is a really good relationship, I can't say better things about him in regards to all the help that he has done. He is quite an advocate, that's for sure.

Steve agreed and also connected his relationship with Foran to his own comfort level:

I have no problems taking kids out and showing them things. I'm confident enough. Over the last few years with Andrew Foran we have learned quite a bit of stuff and got the training. So I feel confident.



Foran also received praise for the work he is doing with pre-service teachers and masters students. Dave, for example, commented:

I'll give credit where credit is due. I think my education course at St. F. X. and my masters program from Andrew Foran pushed the button a little. I think that he pushed me or didn't necessarily push me but through his teaching challenged me to better my teaching. So I think courses at the university level in your education programs help support teachers to do more... He is creating so much interest in his courses at the university level for studying teachers or bachelor of education teachers and I think he is feeding our system as an individual very well by preparing educators.

The connection teachers in the Strait Board have with Dr. Foran and his students had a direct relationship on their ability to negotiate constraints and in turn increased the number of teachers actively implementing *Outdoor Pursuits*. To summarize, Kim states:

St. F. X has been phenomenal helping out and we have been as a board really lucky to have them and to have those student teachers coming into our classes with the experience that they have. They do a lot because they're trained in it and they're able to borrow all the equipment from St. F. X. It's been phenomenal, that's been really good.

**4.4.2.2 Board support.** To support the development and the implementation of the *Outdoor Pursuits* module, which falls under the new Active Healthy Living curriculum, each school board had an “Active Healthy Living Consultant [AHLIC] and Sports Animators [SA]” who worked in conjunction with provincial Department of Education staff. Funding provided by the Department of Education and the Department of Health and Wellness enabled boards to provide professional development to teachers through in-servicing and the development of Professional Learning Communities as well as funds for resources and equipment. The extent to which the boards support *Outdoor Pursuits* varies, however, as it is currently only one module of four.

In the Strait Board the participants overwhelmingly acknowledged the positive contributions the board made through Brian Smith, the AHLIC. Dave explains:

We are fortunate that our consultant is in avid supporter of the outdoor education model and an outdoor person himself...

Chuck agrees:

I think that in our board here Brian Smith has tried very hard to get the high school teachers to come in and go through some various experiences and give us some tools that we can work with and bring back into our schools... And our board and Brian have done fairly well in accessing opportunities and/or equipment.

Bill offers further praise of Smith, particularly his help in securing the funding available for specific schools and at the board level:

Brian and our board have been so supportive. From the superintendent right down to programs and Brian... Excellent... Here the last four years I have applied for grants and got two grants so far. My first grants I got 12 sets of camping gear that include backpacks tents, cooking gear, sleeping gear, basically everything that you need to take. In the second grant, I got six canoes with all the life jackets, paddles, safety equipment and plus I got a trailer made to haul them. So I have those and through the board I got 30 pair of snowshoes... But with that a lot of the equipment and the board has jumped in and Brian has been great with regard to buying the equipment. They have 30 sets again of backpacks and everything that goes with it, sleeping gear, sleeping pads, cooking gear, tarps and all that stuff to do your core camping skills.

In the South Shore, no one acknowledged the specific role of the AHLC, but the role of the school board was mentioned. According to Kyle:

I think the school boards are doing a good job of getting people involved who access things for teachers or schools. I mean, there are Sports Animators who are helping, we have [people] at the board level who are collecting resources for you and putting them out there... [The board is holding] PLC's, professional learning communities... Now all the phys ed teachers are now being pulled out and having a chance to talk to each other... I think that the school board is supporting those things more and that is coming from having the equipment and Sports Animators which is kind of new to this environment.

Although the board has taken proactive steps in the acquisition of resources and providing support personnel, Andrea, wondered whether they were actually used enough to support the implementation of *Outdoor Pursuits*; she argued that:

Sports Animators is the way to go. I think they can open a lot of doors. They are there to support us when we are busy in the classroom all day every day, so they can make some connections and help us organize the trips and I think that sometimes we... not really... resist but we don't want to put anyone out of their way or admit that we can't do it all and sometimes we need to because they're the people who can connect that person or myself with a teacher that was comfortable in that area and possibly provide them a sub or time. The gentleman that came for the in-service, he was great and he was, I don't know which government agency he worked for, but he came in and offered if you do this and you're not comfortable give me a call we'll send someone down.

An example of the support that Bob received while working in another board highlights the benefits associated with having experts assist in the program delivery for both the students and the teacher.

So sometimes I would like to be able to take them somewhere but it is just that I need the backup. And that is where it comes in, there used to be a guy in Halifax and that is all he did. And you would call him and he would come and teach the kids the ropes course and then he would teach them how to do canoeing, teach them how to go and build a shelter and it was all a lot of fun for them and it was great for the teacher because they could get involved and help the kids and he would oversee what you are doing. It would be a comfortable situation for a teacher just to have and make a call and it was part of the curriculum to get that outdoor education for these kids. So it was nice.

It is clear that board support and to a greater degree a mentor can positively affect the comfort level of teachers implementing the module. The presence of both these factors in the Strait Board has resulted in teachers having a higher perceived level of comfort and as a result a higher level of participation in various *Outdoor Pursuits* than those in the South Shore Board. According to Bill:

I think, personally, our board [Strait Board] is head and shoulders over the rest of the province with regards to outdoor ed. We have tons of equipment. We have been in-serviced. Again I go back to Dr. Andrew Foran at St. FX. He has been paramount as a resource for us. Basically anything that is needed he has been there for us. He is a great resource that we have.

**4.4.2.3 Students.** As presented earlier, the constraints that emerged about students relating to their level of maturity and interest influenced how much teachers trusted them.

In this example, one can see how much mentorship intersects here and can help teachers negotiate those constraints. Even with limited personal outdoor pursuits experience, Kim explains how she worked with Frank Gallant, an expert from the community, along with a group of students she trusted to successfully lead her first camping trip:

I've done that with my girls only and because of the students that I did it with I was quite comfortable. At the time I had Frank Gallant with me and again I always like to have another adult with me who is comfortable in the field.

Bill has further expanded his program to incorporate peer teaching as another means of engaging students and creating a school culture of outdoor education:

What I have been doing the last two years was I took my leadership class the first day and then the second day my grade tens come and my leadership kids teach the grade tens so they do the peer teaching. And then the third day after everything is done we all come home. So it is kind of a shared type of thing, it works really well.

Other participants stressed the need to instill excitement as a means of developing student interest and an outdoorsy culture within the school. According to Chuck:

Within your class time just get the kids excited about it and if the kids are excited about going outside and doing different things that will eventually translate into other classrooms because they're going to talk about it and they're going to mention it and the other teachers will hopefully catch on that the kids are enjoying this and it is part of the curriculum.

For Steve, his belief in the importance of student interest in getting outside was reassured on one of the coldest winter days:

When we first launched with the grade tens a couple years ago, I had a class of 15 girls and three boys. I will never forget on the coldest day of the year, so its -30 with the winds. And I was sitting in here and I was thinking what are we gonna do with them today and they weren't showing up and when I stuck my head out the door and looked down the hallway they're all standing there at the other door with their hats and suits on and they were ready to go and they were like. "Come on, sir we are waiting for you." And I was like, "No, its too cold." And they were like, "Na, we don't care, lets go." We went out for 20 minutes and came back in, warmed up for 10, went back out again, so they were loving it. And, I mean, ever since that experience, I take them out whenever. It doesn't matter. If they are ready

to go, we'll go and the kids love it.

Sharing such student experiences and testimonials within the school, the board and with parents also has been beneficial in enlisting support on a broader scale.

**4.4.2.4 Community.** Over half of the participants used the phrase “beg, borrow and steal” when referring to a means of acquiring needed equipment. This notion of having community resources at your disposal reassured teachers. Dave, when describing how he organized a camping trip, explained:

We begged, borrowed and stole. I think if the student interest is there, the support is there and they [the community] will help you make it happen, it will happen.

In a specific example, Andrea explains how she enlisted the community to successfully coordinate biking at the school:

My group wanted to do biking and when you have a trail system that actually connects to the school, it is great. So we contacted the Lunenburg bike barn and we got a whole vanload of bikes shipped down and we had them for a week. It was a great experience. It went a hundred percent smooth as it never does in the school system.

The support present in many of the communities included community recreation groups that were willing to lend gear out to schools glad that it will be used and with the hope that such use will continue in the future. The knowledge of how to access these resources emerged more from teachers in the Strait Board than those in the South Shore.

**4.4.2.5 Outside support.** Having the capability to bring in outside expertise was also highlighted as a means of negotiating constraints, especially in the South Shore Board. These experts ranged from specific school board staff to community members such as guides or outdoor educators. Andy explained:

I have hired guides to take students out and you go along with them and you are there to manage everything, but you are not necessarily the teacher in that case but you are more there to run the background and make sure everything goes

smoothly... The teacher at that point is more of a facilitator by bringing in experts and having them really teach the class.

This sentiment was echoed by Chuck:

So, if you had someone who would come in and do some sample lessons with you, sort of team teach more, I think that would be very beneficial.... With the appropriate help in place, we could do something like an overnighter.

Experience gained as a facilitator or team teaching with an expert was described as a means of further developing personal experience, which over time could directly relate to an increase in comfort levels. This increase in comfort was apparent in six teachers who participated in activities with students under the guidance of knowledgeable community members. Now these teachers are mentoring other teachers in their boards.

**4.4.2.6 Peer support.** The existence of peer support and, in particular, modeling programs in the Strait Board was also a key differentiating factors between the boards.

When Steve was asked if he thought teachers were willing to offer *Outdoor Pursuits* in the board, he responded:

In the beginning no, I think in the beginning it was relatively new and they started talking about taking students out of school and I think people were afraid of that, scared of getting kids out in the woods. I think with the more training like Andrew's [Foran, St. F. X.] provided for this and we have had some PLC's and Brian's [Smith, AHLIC, SRSB] trying to put on some stuff. And we had a lot in servicing around it and now you're starting to see a lot more of comfort around it especially when you see the other schools doing it and having great success. We kind of model ourselves after Canso where we follow the stuff that they did. And so Canso modeled St. Mary's. So we would go back and see some things that he's done and tweak it a little with their advice. So I think you're starting to see a lot more people who are comfortable with it

The opposite is happening in the South Shore Board, according to Andrea, as many teachers are still waiting to see peer support in practice:

I am sure that when they get teachers out there and we see how smoothly it can run when it is organized and neat and tidy. Then I think we would see a lot more of it but until then than I think it will just stay in the background.

The lack of visible participation of peer teachers not only limits the learning that can be gained through trial and adaptation with other schools in the board mimicking successful programs, but also decreases the impetus teachers put on each other to get out and experience it. Bill, for example, took out a group of students camping with another school and another teacher who was not comfortable. Not only did the students receive a safe and enjoyable experience, but the other teacher gained a valuable learning experience while feeling safe and comfortable. Bill is not the only teacher offering up his services to accompany other teachers on various *Outdoor Pursuits*. In the Strait Board four of the teachers interviewed vocalized a willingness to help other or new teachers and two other teachers noted that there were now “experts” in their board willing to come in and help with whatever they did not feel comfortable with.

These types of experiences happen at a board-wide level, but also within the school.

According to Andy:

I have also seen a lot of schools where there may be a different teacher that doesn't necessarily teach phys ed but they have quite a background in some of those things but the two teachers can switch for a certain period of time, even if there is two phys ed teachers they can flip-flop their classes. If one teacher has a certain strength in an area they can do that part and the other teacher will manage their class.

Support within schools as well as at the board level not only increases comfort but also increase interest and motivation. Dave detailed the changes that can happen when positive communication takes place:

I think as other schools boards have equipment and funding the buck gets passed or the word gets spread. Well that school went on a camping trip then maybe our school should do that. Administrators talk and consultants talk and phys ed teachers talk and things can snowball through a system where there is little support there can be a lot in years to come or in a short time.

**4.4.2.7 Administration.** A concern was raised that some administrators were uncertain about activities happening off school grounds and the perceived increased level of liability. Mustering administrative support was brought up by many of those interviewed. The actual support present in each school within the board varied, however as was mentioned in the constraints section, a general lack of understanding was frequently raised as a factor constraining teachers implementing the *Outdoor Pursuits* module. According to Steve, although he claimed to receive support from his own administration, his perception was:

I think in order to try and take it to the next level you have to try and get a lot more school administration on board... Just to get them to understand that you could only take it so far but you want to go further and show why that is important. When they see it, you're going to get more support from them and in turn if you need more funding they will understand.

Creating a clear line of communication was the main method employed by several teachers to ensure that administration knew what was happening with the program and could explain it to others. Jack, for example, said:

The big thing is to get schools on board and say look this is part of the course now and this is what you need to do. You need to establish your program and get your outline done, this is the first thing I do at the beginning of the year. I have my outlines all straightened away and I go talk to the principal and he signs off on it. As soon as he signs off on it, he sees that my *Outdoor Pursuits* and he has agreed to that and my signature goes on there and then the student has to agree and he writes his or her name on a sheet and says that they're going to participate in all these activities and there are 4 modules in the grade 10 program and one of them being *Outdoor Pursuits* and then the parent has to sign. So we're all partners in it and they all have to be in agreement and have signed it in order to be a member of my class and in order to get a mark for my course.

#### **4.4.3 Structural**

Key techniques identified to negotiate the structural constraints were very board-specific as well as connected to the other categories of Intrapersonal and Interpersonal.



To avoid redundancy, only the negotiation techniques specific to structural constraints will be discussed in the following section.

**4.4.3.1 Equipment.** This theme emerged in every data set and the specifics relating to the acquisition of equipment was mainly examined under the theme Board Support. However to further expand on the spending of funds, Andrea acknowledges that in the South Shore:

The equipment, our board has done a good job with that, by providing a bank of gear that each school is welcome to spend their budget how they want on their gear but the board has tried to solve that by having a set of camping gear held at the board office so that different schools in our boards can book that for periods of time if needed.

Richard in the Strait Board emphasized the ease of acquiring the equipment:

It's great we can get access to a lot of this equipment from the board office. So if we needed more sleeping bags or more of these things, all you have to do is e-mail him and they come up within the next two days. That's fantastic.

Prior to acquiring the bank of gear at the Strait Board office, many of the participants relied on community support to substitute for the lack at the school. However some teachers worked with what they had. Richard explained:

You may have to be innovative and look for ways. If you really want it to happen you can make it happen but sometimes it takes a little extra work and a bit of begging and such.

Although equipment emerged as important in all of the interviews, when asked about which of the three scenarios was the most likely to be problematic (lack of personal experience, lack of peer support or lack of equipment), none of the participants indicated that lack of equipment was the top inhibiting factor for new teachers implementing the module. This indicates that although equipment is a prominent constraint, the ability to negotiate this constraint is high.

**4.4.3.2 Logistics & transportation.** Although logistics and transportation emerged in the majority of the interviews, it was also noted that the bulk of the schools in both boards are located in a rural setting or have adjacent green spaces where they can access wooded areas or trails. However, not all of these spaces were viewed by participants as usable areas for *Outdoor Pursuits* that would provide students with the experience teachers sought. In several cases the participants who viewed the spaces around schools as functional used these spaces with a high degree of success as doing so eliminated some of the issues surrounding logistics, transportation, and access. As well, in some cases the “fear factor” surrounding liability diminished as the locations around the school were not deemed “as remote”.

Participants who regularly conducted off-school day or multi-day trips emphasized the importance of clearly articulating goals and curriculum needs with administration, fellow staff and board personnel at the beginning of the school year to allow for ample time to prepare and cover interrelated constraints such as coverage, chaperones, logistics, and transportation.

**4.4.3.3 Resources & training.** Increasing greatly since the inception of the module has been the literature and resources made available to teachers in both boards. Textbooks with units designed specifically for outdoor education is something that was available from the beginning, however the increased exposure surrounding *Outdoor Pursuits* has led to the creation of a new textbook. Along with the increased awareness of the resources, the desire by the Department of Education to broaden the knowledge base of educators in the field of outdoor education has also been heightened. This is especially evident in the Strait Board. According to Bill, “I think that as the years go on we are

getting trained more and more.” Given training emerged as having a direct impact on teachers’ perceived comfort levels, increasing the levels of training suggests an increased ability to negotiate participation.

**4.4.3.4 Schedule.** Finally, a last negotiating technique that emerged related to scheduling, particularly in the case of Steve who had some problems with a camping trip the previous year. Cold weather made for a long night of camping and some of the students and parents were displeased with the group being out there. He explains:

Because [last year] we did it little later in October and we ran into some problems with weather and parents. So this year we bumped it up a little bit to please that group of people but we're also trying to hold a little information session [to overcome] some roadblocks and hurdles.

Successfully negotiating parental concerns and misconceptions was addressed as a key factor by Steve for this year’s trip, but also for creating support for the longevity of *Outdoor Pursuits* in the region.

**4.4.3.5 Summary.** Now that the various ways these teachers have managed to negotiate the range of constraints they encountered have been identified, I turn to the final section of the Results chapter to discuss the teachers’ recommended opportunities that could be pursued to further implement *Outdoor Pursuits*.

## **4.5 Recommended Opportunities**

With the inception of the *Outdoor Pursuits* module in Nova Scotia, the Department of Education took an initiative to provide an opportunity for teachers to get students outside and exposed to outdoor activities. Along with the constraints and negotiation techniques previously outlined, a list of recommended opportunities also

emerged in the data set whereby the possibility for further progress or advancement exists at various levels.

The general nature of the module has allowed all participants to become involved to some degree and the optimism of many of the participants about the possibilities of outdoor activities in the region has bolstered support. According to Kyle:

I see us locally as a group of young phys ed people who are excited about the new curriculum and definitely see it as a way to get outside and do those outside activities.

Andrea furthers this sentiment by highlighting the resources available:

I think the options are endless when it comes to [*Outdoor Pursuits*] especially when you think of our local communities and what we have here.

For the majority of the participants, the optimism does not exist independently from future opportunities. Emerging as the prominent opportunity for further developing the module as a whole involves providing an expert of some sort who is able to assist teachers with whatever their needs may be.

**4.5.1 Outside experts.** The experts as well as their approaches were consistently raised as important. Three of the five participants from the South Shore Board mentioned that the expert could be someone working at the board such as the Active Healthy Living Consultant or the Sports Animator. John envisioned it as such:

If they would take it very seriously, I think there could be training for the Sport Animators in the area or the Active Healthy Living Consultants so that they could be the pros and they could maybe teach us.... They could be the team leader and you could be the understudy until you could feel comfortable enough to take these people and they can provide that training.

Bob, who also expressed a low perceived comfort level when participating in *Outdoor Pursuits*, shared similar sentiments:

I think they should do what they did before and have someone at the board that is actually hired to help with that unit or actually several people who are experts in that field that could come and were booked in at certain time of the year for each school and they could pick part of the unit and they would have a paying job... We could book it through them and say we have 20 grade 10 students and we are going to go to Keji and do an outdoor trek and learn how to build shelters and we have someone at the board who meets us there and we can go do it... Like I said, the best way for a teacher with little experience would be to have someone actually come in and help them get through the process of teaching a class so they would have some experience to go by. This year we've built shelters and we know how to do it, this is how you are going to run your program, then the next year it is so much easier for that teacher to get out there and do it. Because there is some familiarity and they are comfortable with it. So, that is where I am pushing.

As well, the other option of using experts from the community or by contracting experts in the private sector was suggested. As John said:

Potentially if the funds are there, you could hire out somebody else and have them be the leader.... they could have different insurances that we may not have or have a different sort of training that makes them more or better suited for this and again the liability factor may be kind of pushed in a different direction instead of the onus being directly on the teacher... Some of the onus has to be on me, no question, I have the responsibility of students in regards to safety, no question but I would feel a lot more comfortable if there is somebody else there.

The notion of having an outdoor educator on rotation for a week or two in the Strait Board to assist with activities, ensure adequate teacher/student ratios, and team teaching was mentioned by several participants. However, the presence of an Active Healthy Living Coordinator who is engaged in outdoor pursuits, a visible mentor in Foran, and the availability of knowledgeable student teachers appeared to reduce the need for participants to recommend increased outside experts in the Strait Board.

**4.5.2 Educating the educators.** Training was outlined by the participants as having a positive impact on perceived comfort levels (see Figure 5 on page 70) as well as increasing opportunities for further advancement of current practices and expansion of activities. Providing courses throughout the school year and intensive courses in the

summer where the opportunity to learn and develop skills was outlined by a participant in the Strait Board as a means of not only getting the program running, but advancing it further in the board. Another member of the Strait Board delved deeper and proposed outdoor training for all pre-service teachers to increase the possibility of interdisciplinary teaching and peer support for *Outdoor Pursuits*. According to Kim,

I think it should be a prerequisite if you're going to be a teacher to have an outdoor course but right now it is an elective at the university here at St. F.X. I think every student and every teacher should be given that course and that way there it is part of the program, part of the curriculum, they might be able to help the teachers that are going to be running the programs because we definitely need help.

**4.5.3 Time.** Although no clear prescriptive negotiation strategy emerged for managing the class time required for *Outdoor Pursuits*, participants mentioned potential opportunities such as focusing more on place-based learning and using adjacent areas rather than having to rely on traveling to other locations. Furthermore, two participants mentioned offering *Outdoor Pursuits* as an extracurricular activity to ensure higher levels of student engagement and motivation through self-selection. This would also enable them to run activities such as canoeing on the weekends rather than during normal class time, which acts as a constraint. Superseding this notion of spending weekends offering extracurricular outdoor activities to students was adapting the system in such a way that extra time would be available for activities during the week and if some activities push into the weekend then it would be counted towards their teaching time; this happens in some schools, however it is not a universal practice, and is more of the exception rather than the rule.

**4.5.4 Scheduling freedoms.** When factors align such as nice weather, availability of proper equipment and a willingness of all parties to get outside, to then not have the

proper paperwork in place can be discouraging on many levels. Richard says he has confronted this issue and outlined the need to have blanket permission slips in place to enable opportunities for spontaneous outings to occur. As well, three members from the Strait Board requested a morning time slot for the course to be available for more in-depth experiences to occur. Andrea noted:

If they could give me at least two mornings in a six-day cycle where I can take a grade 10 class from 8:30 to 12 and head out to the Fresh Air Centre with Frank Gallant or even have Andrew come over with some students for a whole morning and work right out here, that would be great, but one hour, by the time you get them out there and get things organized then it's time to head back to English or chemistry or whatever.

One way of having more time that several teachers mentioned is through interdisciplinary teaching, integrated curriculum or team teaching where more than one subject would be taught in the natural environment. Dave explains:

I am more of an integrated curricular supporter or cross-curricular supporter than I am of specifics. And when curriculum starts becoming more thematic throughout the subjects I think it is easier to buy other teachers in and right now my concept of, like, GPS and navigation and geo caching is somehow connected with physics, geography, history and how all that overlaps. Ideally as a system it does but when teachers have that professional learning communities and the time to develop a specific lesson and co-teach or team teach I think it embeds the curriculum better in the students. It's not while Mr. Johnson did this without us and that's good or that sucked while if Mr. Johnson, Ms. Chisholm and Mr. Smith all got together and took three blocks and did that and it overlapped from the hiking aspect to the math concepts, to the physics aspects whether it's displacement and so on and so forth. I think that is where outdoor belongs. There is a lot of outdoor courses or lessons that are great but I think it has got to show somewhere in the curriculum. It wasn't just a ski trip or a camping trip. We did camping but we did foods, chemistry from the boiling temperature and so on and so forth. I think if specifics can be connected to lived experiences... I find outdoor ed has the experience to build curriculum around. Kids can hold on to it and it's not just something coming out of a chapter of a book. I am big in supporting that concept.

Such an approach requires teachers planning for students to understand the interdisciplinary connections.

**4.5.5 Get out with peers.** Creating a sense of community amongst peers was recognized by three participants in the Strait Board as a potential opportunity to grow both personally and at a board level. Andrea and Bill mentioned the benefits of going out as a group of teachers in late summer to experience outdoor activities as participants themselves. Jack also highlighted the advantages of getting together with peers in order to discuss what people are doing in their classes and more specifically what practices are achieving desirable results. Currently, teachers said such communication takes place during in-services or professional learning communities, but they argue that having these interactions happen in non-traditional environments such as on a camping trip is an opportunity to increase the breath and depth of personal and group understanding of *Outdoor Pursuits*.

**4.5.6 Camps.** Dave sees an opportunity for both teachers and students in having “camps” prior to the beginning of the school year. He suggests the benefits could range from engaging youth in healthy activities to connecting students with their peers as well as their teachers. By doing this at the onset, Dave believes that you create a school culture, which in turn can curb discipline issues and make connections with students that will transition into the classroom or the school environment.

I would like to see our board with facilities or opportunities to ensure that the kids have that opportunity that probably isn't met through families. My suggestion for our system would be if it is curriculum and you don't want it on extra curriculum time, it is to have administration support these types of activities. Like I suggested the camp before school to get away from our NSSAF [Nova Scotia School Athletics Federation] sports model and look at maybe kids that have less interest in competition and more interest in the healthy active living. If we take a lot of possibly unhealthy students on camping trips that are capable of hiking for a couple of days or a day and doing various things, I think we are meeting their needs in terms of health care and preventative health and giving them the opportunity because those are the kids that obviously aren't getting those



experiences at home. Without having those experiences, teaching them lifelong healthy lifestyle habits becomes very difficult.

Providing this opportunity prior to the school year is something Dave said is being done to some extent by sports teams, clubs, student councils, and private schools, who, in particular, often utilize pre-school camps especially for residential students to help build bonds within the school environment to reduce feelings of homesickness and increase learning. Dave believes that this would be advantageous in public schools as well to help further develop a sense of community within the school.

**4.5.7 Outdoor education for all.** Furthering this concept of developing a sense of community in the school system as a whole is the acknowledgement by several participants of the need to increase outdoor education in general. According to Chuck, if there was more of an emphasis on sequential programming with outdoor education starting in elementary school then by the time students arrive at high school, they would be better prepared. Richard, too, likes the concept of involving students at both ends of the spectrum:

Because kids love getting outside and they get bored being in the gymnasium all the time, it would be nice to see it spread both in both directions. So both higher in grade 11 and 12 as well back in junior high.

Furthermore, by developing sequential programs students could also be involved in the teaching process through participating in peer education. Bill has developed something like this in his high school:

What I have been doing the last two years was I took my leadership class the first day and then the second day my grade tens come and my leadership kids teach the grade tens so they do the peer teaching. And then the third day after everything is done we all come home. So it is kind of a shared type of thing, it works really well.

**4.5.8 Administration.** Highlighting and communicating the potential benefits of *Outdoor Pursuits* to other teachers and administration emerged as a key recommendation for further development. One potential option to achieve this is offered by Steve:

There should be some kind of in-servicing for the administrators from either an Active Healthy Living Consultant or some of the phys ed services. Basically saying this is what we are training our teachers to show the students and now we want to show it to you because we need your support for additional funding to take this further and I think once they're out there doing it and they see the difficulties and the success that comes along with it and why it's important I think their support will really help to get the funding or whatever it is you need to finish the program, you have that support and you feel more confident going forward.

**4.5.9 Summary.** An array of constraints were described in this chapter from intrapersonal to interpersonal and structural. It was evident, however, that these were not impossible barriers to participation, but that teachers' negotiated these constraints. As well, the teachers had many ideas for furthering the implementation of *Outdoor Pursuits*. In the next chapter, I connect these teachers experiences of implementing a particular approach to outdoor education in the Nova Scotia context back to the academic literature.

## Chapter 5: Self-Efficacy, Motivation and Constraints Negotiation

### 5.1 Introduction

Although a broad range of themes, issues and opportunities emerged in this research, the key focus was the comfort level of teachers implementing the *Outdoor Pursuits* module. In the Results chapter, I presented much in the participants' own words to enable the reader to get an authentic understanding of the teachers' perspectives. As evident in the teachers' words, examples of intrapersonal, interpersonal and structural constraints existed to various degrees in teachers' daily routines, however these did not result in them either participating or not, but rather impacted their level of participation. This is not surprising given *Outdoor Pursuits* is a section of the curriculum; I expected some level of participation, but that the level of participation would be dependant on a number of key variables.

In this chapter I will step back in order to provide further insights by framing teachers' comfort level within the literature on constraints negotiation, and more specifically self-efficacy. As I noted in Chapter Two, self-efficacy is based on the premise that "what people think, believe and feel affects how they behave" (Bandura, 1986, p. 25). Now, in this chapter, I will outline how the development of teacher efficacy shapes not only how these teachers behave towards *Outdoor Pursuits* but also the extent to which *Outdoor Pursuits* can be implemented in Nova Scotia. I will be directly comparing the Strait Regional School Board and the South Shore Regional School Board, as their differing emphases on the use of mentors, outside expertise, modeling and peer support impacted teacher efficacy in enlightening ways. The final section will discuss

how constraints negotiation played out in this study, in particular the relationship between the key variables impacting teachers' level of participation (as depicted in Figure 5 on page 70). I will also discuss the key negotiation techniques used by teachers and their recommended suggestions for further implementation of *Outdoor Pursuits*.

## 5.2 Constraints

### 5.2.1 Structural Constraints

Structural constraints emerged early and often in most interviews. How much they shaped the level of participation varied and was, in general, less than intrapersonal and interpersonal constraints. For this reason, I have organized this section in reverse, starting with structural constraints in order to connect it back to intrapersonal constraints through the literature.

By imposing the theoretical framework of constraints negotiation (Crawford, Jackson & Godbey, 1991; Jackson, Crawford, & Godbey, 1993) on the analysis of data, structural constraints were easily identified. The question of how one fits the *Outdoor Pursuits* module into a semestered school system emerged as an issue in both boards, with class time, a segmented school year, and the geographical locations of schools compared to the amount of time available and logistics necessary to conduct *Outdoor Pursuits* were concerns. Many participants also mentioned equipment and resources, where issues ranged from simply not having enough to conflicts around having to share within geographically large school boards. In general, Walker and Virden (2005) in their study of constraints on outdoor recreation found that participation were influenced more by time, trip costs, and geographic accessibility than other types of non-outdoor

recreation activities. These findings coincide with the prevailing structural constraints of this study.

However, rather than serving as a barrier to implementing the *Outdoor Pursuits* module, time, equipment, resources, and geographical constraints seemed to merely alter what activities could be done. Negotiation techniques such as “begging, borrowing or stealing” as a means of accessing community resources were highlighted by the majority of participants as feasible options to overcoming issues relating to a lack of equipment. These findings indicated that although a great focus of both boards has been on acquiring equipment and resources, they were the least important in shaping teachers’ behaviour and that intrapersonal and interpersonal constraints were more influential on participation levels. Research supports these findings that economic and logistical factors are not as compelling as attitudinal barriers and experience (Nundy, Dillon & Dowd, 2009).

Furthermore, according to Walker and Virden (2005), institutional policies and practices can be a more subtle form of constraints, but just as restrictive. In this study, liability and regulations were mentioned often in both boards and among teachers with various levels of teaching experience. Similarly, concerns surrounding weather and the seasonality of activities were outlined as constraints. It is important to note that although natural environments present features perceived as constraints to one person (e.g., weather, terrain, and presence of wildlife), the very same setting may be perceived as an opportunity for others (Virden & Schreyer, 1988). Participants in this study who consistently outlined weather, environmental factors, or limited access to adequate terrain as constraints were mainly those participants who also identified themselves as having less experience or a lower level of comfort. Further research into these findings would be

interesting, as limited studies linking comfort level or perceived self-efficacy with the types of constraints indentified has, to my knowledge, yet to be done.

### **5.2.2 Interpersonal Constraints**

It is important to state that the majority of the constraints emerging as structural were not stand-alone, but were interconnected with intrapersonal or interpersonal constraints. Deciphering the interpersonal constraints on their own was indeed challenging. The presence (or lack thereof) of a support network, particularly a mentor or an outside expert, was significant. The teachers in the South Shore Board, in particular, argued that lack of school board staff, an Active Healthy Living Consultant, or an outside consultant was a key inhibitor for teachers' implementation of the module. As well, administration, if they were uncertain about activities happening off school grounds and the perceived increased level of liability, emerged as an additional constraint. The lack of support networks was of particular importance to those participants who self-identified as having low personal experience and comfort with outdoor pursuits. Recent research into UK government initiatives such as the "learning outside the classroom manifesto" found that the benefit of having opportunities to see other people manage tasks and stressful scenarios successfully is key to the development personal confidence and also helps to create a peer support system or network (Nundy, Dillon & Dowd, 2009). As one participates more in outdoor activities, more opportunities for leadership development present themselves. As *Outdoor Pursuits* is relatively new in Nova Scotia, having a peer support system may be an integral part of its eventual success or failure.

Students were also identified in ten of the twelve interviews, specifically in regards to the impact they had on the comfort levels of teachers in relation to student safety, teachers' trust of students, and liability concerns. In contrast, when teachers fostered relationships and increased their level of trust with students, they were more likely to involve them in additional activities as part of *Outdoor Pursuits*. Contrary to the hierarchical model of constraint negotiation (Jackson, Crawford, & Godbey, 1993), a recent study by White (2008) identified interpersonal factors as having the highest influence on constraints and social aspects as having the greatest impacts on motivation. In my study, interpersonal factors were critical elements in implementing *Outdoor Pursuits* and developing confidence in teachers by establishing a sense of unity and identity, particularly in the Strait Board.

### **5.2.3 Intrapersonal Constraints**

Intrapersonal constraints were ubiquitous within the interviews. Low comfort level was especially evident in the interviews where the participant indicated little formal experience through certifications or university courses coupled with a lack of informal experiences, such as participating in outdoor activities for leisure. Further, those teachers who exhibited a strong personal interest in outdoor activities put forth more effort to incorporate those activities in to their course. As such, it was evident that the perceived comfort level with teaching *Outdoor Pursuits* was directly related to teachers' perception of self in relation to their adult experiences, motivations, childhood experiences and interests.

I also observed that the interconnectedness between interpersonal and structural factors impacted teachers' comfort levels and experience, especially when negotiating constraints. Still, there was variation in this group of teachers. How can we understand why some participants thought of *Outdoor Pursuits* as a breath of fresh air and were quite comfortable, whereas others described being overwhelmed, slightly nervous or utterly scared to death? It appears that what Bandura (1997) described as the cognitive process through which people construct beliefs about their capacity to perform at a given level, for example their perceived self-efficacy, is indeed an important consideration. Key to understanding the concept of teacher self-efficacy is recognizing that self-perception of competence may not be based on actual level of competence. This distinction is important as teachers can under or overestimate their actual ability based on their understanding and use of the skills required for particular activities (Bandura, 1997).

Understanding the foundations of teachers' perceived self-efficacy sheds insight into how they perform, or whether they even choose to pursue, a particular outdoor activity. For example in measuring their own camping efficacy, they may not only be asking themselves to judge whether they can set up a tent, pack properly, light a camping stove, build a shelter or adjust a backpack, but they may also judge their ability to manage a group of diverse students under variable conditions that present different levels of challenge. For this group of teachers, the subskills for camping were marginal compared to the capabilities necessary to safely and efficiently manage a group of students in an ever-changing natural environment. In these conditions, the possibilities of harsh weather, unexpected medical conditions, and actions carried out by students of varying capabilities are ever present as potential scenarios. Managing a group of students



under such taxing and potentially rapidly changing conditions requires a high level of anticipatory skills to prevent incidents from occurring, proper planning for potential scenarios that cannot be prevented, and acute problem solving skills in a natural environment. Therefore, perceived self-efficacy is not a measure of the subskills one possesses, but a belief about what one can do under different sets of conditions with whatever skills one has (Bandura, 1997).

Teachers' level of self-efficacy also tends to determine the level of performance students attain in the classroom (Woolfolk & Hoy, 1990). A teacher with a high level of self-efficacy tends to provide the most beneficial learning environment for their students, but teachers' sense of instructional efficacy is not necessarily uniform across different subjects (Bandura, 1997). So, for example, while Bob felt very comfortable teaching any number of students to play hockey in the gym or John felt comfortable teaching students how to break down a jump shot, neither felt the same level of comfort camping with students in a natural environment. Thus, these teachers who judged themselves highly efficacious in the gym did not exhibit the same assurance level with their efficacy teaching outside. According to research (Nundy et al, 2009), then, not only would these teachers be outside of their comfort zone, but such self-doubt in their efficacy can create learning environments that are not as conducive to learning.

Over or underestimating one's capabilities also dictates how well a teacher uses the skills they possess. According to Bandura (1997), "a capability is only as good as its execution. The self-assurance with which people approach and manage difficult tasks determines whether they make good or poor use of their capabilities. Insidious self-doubts can easily overrule the best of skills" (p. 35). The uncomfortable feeling exhibited

by teachers, even those with years of experience, can undermine their beliefs in themselves and the extent to which they will implement *Outdoor Pursuits*. In contrast, those teachers who had a strong sense of self-efficacy were able to carry out such activities as hiking trips, canoe training and overnight campouts. White (1982) found that a resilient sense of efficacy enables individuals to do extraordinary things through productive use of their skills in the face of obstacles. My findings are supported by Bandura's (1997) assertion that "perceived self-efficacy is an important contributor to performance accomplishments, whatever the underlying skills might be" (p. 37).

What has emerged from my research, then, is the complexity of relationships (see Figure 5 on page 70) that contribute to participants' comfort level, or more specifically, teachers' perceived self-efficacy. Understanding the impacts of these relationships on determining teachers' capabilities to organize and execute *Outdoor Pursuits* is fundamental. Congruent with the complexities surrounding the developmental origins of perceived self-efficacy, Bandura (1997) identified four major influences as mastery experience, vicarious experience, physiological arousal, and verbal persuasion, to which I will now turn my attention.

### **5.3 Negotiation Techniques Through Self-Efficacy**

#### **5.3.1 Mastery Experience**

Key to understanding the notion of mastery experience is acknowledging the critical elements of one's own experience. The majority of the participants indicated that a lack of personal experience was the number one factor limiting them from implementing

the *Outdoor Pursuits* module. These findings further suggest that little formal experience level coupled with a lack of informal background negatively affected the teachers' comfort level in relation to implementing the module. Bandura (1997) maintains that mastery experiences are the most influential source of efficacy. Simply put, success raises efficacy beliefs, which in turn increases the probability of teachers taking bold and challenging steps in the future. The opposite is also true where repeated failures lowers efficacy beliefs, especially if the failures occur early in the implementation process and do not reflect a lack of effort or adverse external conditions (Bandura, 1997).

Performance success or failures are forceful persuaders, but they do not necessarily raise or lower efficacy beliefs (Bandura, 1997). Perceived efficacy changes based on how one perceives one's capabilities rather than the performance per se. Therefore, the level of comfort contributes greatly to the feeling of mastery or incompetence. In cases such as John's where there was a low level of comfort, he described low preconceptions of capabilities and difficulties with tasks and attributed these to his low level of childhood experiences as well as a lack of personal interest. In contrast, other participants such as Dave expressed positive personal perceptions of success with various outdoor activities, which in part served as a catalyst to experiment with *Outdoor Pursuits*. Throughout Dave's experimentation, his performance with groups varied in terms of the "success" of the outings, meaning the level to which activities ran smoothly, students were happy, and leaders' performance varied. However his self-efficacy was enhanced based on his increased perception of his capabilities given it was predominantly external forces such as weather, lack of equipment, or social factors that hampered the activities.

### 5.3.2 Vicarious Experiences

Although mastery experiences were important to participants in both boards, key amongst the participants from the Strait Board and sought after by several members from the South Shore Board was the positive influence of members of the community and the school board in providing vicarious experiences. Vicarious experiences are extremely influential as they provide the opportunity to see other people manage tasks, model skills and perform activities successfully that they themselves may not yet be comfortable with (Bandura, 1997). Steve, along with others in the Strait Board, acknowledged that his confidence has increased over the last few years as a result of the close relationship working with Andrew Foran. Teachers in the Strait Board were offered opportunities to see colleagues, student teachers, the Active Healthy Living Consultant, or Foran manage outdoor activities in varying environments successfully. Comparisons can be made to outdoor education organizations that rely on new staff shadowing experienced staff through a mentoring process aimed at enhancing self-confidence and self-identity (Jeruchim & Shapiro, 1992). Nundy, Dillon and Dowd (2009) highlighted mentoring as a key element to developing teacher efficacy in the field of outdoor education.

The result of vicarious experiences, especially in cases when the observer closely identifies with the rationale behind the module, which is the case with teachers in the Strait Board, the efficacy of the observer is enhanced (Tschannen-Moran, Hoy, & Hoy, 1998). A great example in this study is Foran and the work he is doing with his university students in developing strong relationship with teachers in the Strait Board and advocating for outdoor education through passionately engaging teachers in the subject matter. Further enhancing teacher efficacy in the Strait Board is the Active Healthy

Living Consultant who has provided substantial and continuing professional development both in collaboration with Foran and through on site in-servicing (see Appendix E: SRSB Outdoor Education Training Opportunities). Other training certificates provided by the boards such as Wilderness First Responder, and skill-building in canoeing, GPS, and archery, to name a few, have provided a critical component to enhancing self-efficacy amongst teachers. These were acknowledged by all participants in the Strait Board as instrumental in their negotiation of constraints. Nundy, Dillon and Dowd's (2009) research on what they term the development of a collaborative group identity resonates with the experiences that have enabled some teachers to confidently engage with pedagogies that take students outside as a normal part of their learning.

For decades research has shown that mentors contribute positively to new teachers during the induction stage (Brennan, Thames & Roberts, 1999; Jenlink, Kinnucan-Welsch & Odell, 1996). Yost (2002), in particular, demonstrated the enhanced personal self-efficacy that mentor teachers experience while participating in a mentor program. The study found that successful performance as a mentor creates a mastery experience, which contributes to the learning of both teachers and students. Furthermore, the vicarious experience of the novice teacher observing, sharing and validating one's practice adds to perception of competence and importance. Examples of peer mentors in the Strait Board included teachers who exhibited a high sense of self-efficacy with outdoor activities leading trips in conjunction with another less experienced teacher and their students. Additionally, several teachers with a low sense of efficacy acknowledged that they felt other teachers in the board were willing to come in and assist if asked.

While participants in the South Shore Board valued a close relationship with peers, a majority still asserted a need for external support from the board or community or private entities in order to feel more comfortable in increasing their current *Outdoor Pursuits* repertoire. Bob recalled the benefits of having a mobile outdoor educator in the board during the years he taught in Halifax. Furthermore, he stressed the importance of having an outside expert available in order for him to feel comfortable advancing the *Outdoor Pursuits* module in his school. Without a clear mentor within the board effectively modeling various outdoor activities on a regular basis, the alteration of efficacy beliefs may not happen or efficacy potentially decreases if teachers are not achieving the level of attainment they desire (Bandura, 1997). Without seeing *Outdoor Pursuits* being successfully practiced within the board and encouraged through various means of communication, some of the participants in the South Shore Board believe it will remain marginal.

### **5.3.3 Verbal Persuasion**

In the Strait Board several participants highlighted social influence as a key catalyst to implementing *Outdoor Pursuits* in their schools. Steve mentioned several teachers in the Strait Board having modeled their own programs from other schools and through this process received practical recommendations and support from those teachers who had conducted certain activities with students. As such, social persuasion serves as another means of heightening one's perceived self-efficacy (Bandura, 1997). Additionally, Dave noted the general chatter amongst administrators, consultants and teachers regarding a successful camping trip with students could have a powerful

snowball effect. Bandura (1997) acknowledged that verbal persuasion alone may be limited in its ability to create enduring change in one's sense of efficacy, however it can serve as a influential force to bolster self-change and lead a person to initiate and attempt new pursuits within realistic boundaries.

#### 5.4 Summary of Teachers' Self-Efficacy

Bandura (1997) asserted, "the tasks of creating learning environments conducive to the development of cognitive competencies rests heavily on the talents and self-efficacy of teachers" (p. 240). Those teachers who exhibited higher efficacy regarding *Outdoor Pursuits*, such as Andy, Kyle, Dave, Steve and Bill, were more likely to try new activities outdoors and as a result engage students through their passion. Several participants described students pleading for them to emulate past outdoor experiences years later or to get outside even under harsh conditions. Teachers who displayed lower levels of efficacy not only implemented less of the *Outdoor Pursuits* module, but also expressed less confidence in student levels of maturity, interest, trustworthiness and ability. Again, research supports the notion that teachers with a strong sense of efficacy are more open to engaging in innovative pedagogic practices (Nundy et al., 2009; Tschannen-Moran, Hoy, & Hoy, 1998), have a positive impact on student success (Propst, 2002), exhibit greater enthusiasm for teaching (Allinder, 1994), and are more likely to stay in teaching (Nundy et al., 2009). Teachers with higher efficacy also exhibit greater levels of planning, organization and commitment to teaching (Allinder, 1994).

Key amongst the major influences (mastery experience, vicarious experience and verbal persuasion) in my study were having personal experiences, observing others'

accomplishments, and the specific feedback and peer discussion that stimulates excitement and builds confidence. Although the majority of the participants shared the rationale behind *Outdoor Pursuits*, that is having a potentially positive impact on lifelong learning through the engagement of students in new and challenging activities outdoors, their ability to implement the module still varied, with a clear divide amongst those who viewed the module as a breath of fresh air and those who were scared or nervous about implementation. A key distinction between the two boards, was the opportunity in the Strait Board to see others manage tasks successfully coupled with the peer persuasion that one has the capabilities and support to successfully negotiate constraints while implementing the *Outdoor Pursuits* module.

## **5.5 Further Negotiation Techniques**

### **5.5.1 Motivation**

Without the desire or willingness to do something (Fowler, Fowler, & Thompson 1995), in this case the drive to achieve the goal of implementing *Outdoor Pursuits*, the level of participation will inevitably remain low. We all know it takes a little bit “more” to get out the door on a cold winter day or put pen to paper day after day writing a thesis. The same can be true for teachers implementing a new module that lends itself more to a holistic, collaborative, and experiential teaching approach (Lugg, 2007; Simons, 1993). In this study, personal motivation emerged as a key factor influencing the negotiation process and in predicting the level of the implementation of the *Outdoor Pursuits* module.



Several participants mentioned that in order to get the module going in their school it took, or would take, extra initiative and drive to overcome the challenges or to use the lingo of this thesis, negotiate the constraints. In the cases where the level of implementation of *Outdoor Pursuits* was high, participants generally sought out training, outside support, administration approval, grants for equipment, opportunities around the school grounds to engage students in activities, and exhibited high levels of personal interest. In contrast, although all participants acknowledged the positive rationale for taking students outside, participants with lower participation levels tended to more often list constraints such as lack of personal interest, student maturity or interest, weather, logistics, liability, equipment and resources.

Loucks-Atkinson and Mannell (2007) found evidence suggesting that higher levels of motivation were connected with greater efforts to negotiate, which, in turn, were linked with increased participation. As was previously noted by Hubbard and Mannell (2001) and further supported by Loucks-Atkinson and Mannell (2007), motivation was also directly and positively linked to participation. White (2008) also showed that a predictor of participation and use of negotiation resources and strategies was motivation. Indeed, these studies continue to substantiate previous research that indicated that motivation is the most influential determinant of participation and a potential trigger for encouraging the constraint negotiation process (Loucks-Atkinson & Mannell, 2007; White, 2008). In my study, however, interpersonal factors such as mentors, outside support and peer involvement and the overall importance of comfort and professional and personal experience appears to trump motivation as the most influential factor. Perhaps because these teachers are not selecting pursuits for their personal fulfillment but as a part

of their employment, their priority is more on ensuring safety and delivering educational experiences rather than enjoying a leisure activity. This may also be understood as participants' extrinsic motivation being high as a result of the fact that it is part of their job, with their intrinsic motivation being less in many cases for the same reason. A more in-depth focus on motivation would be necessary to conclude empirically that motivation is not the most influential determinant of participation in this context; the exploratory data from this study certainly supports that it is not.

Motivation was certainly a trigger for these teachers to engage in the constraint negotiation process. Including innovative pedagogy was a breath of fresh air for some of the more experienced teachers as they diversified their practices and applied for outside funding and support. Encouraged by students' positive experiences following outdoor activities, they were also motivated to use testimonials to convince administrators, staff and parents of the overall benefits of *Outdoor Pursuits*. This type of extrinsic motivation was not for the sake of the activity itself, but to attain a desired outcome (Ryan & Deci, 2000), in this case an outdoor educational experience.

### **5.5.2 Negotiation-Efficacy**

The experience of teachers' facilitating *Outdoor Pursuits* and negotiating the constraints to participation is also an important factor influencing teachers' negotiation-efficacy (Loucks-Atkinson & Mannell, 2007). Loucks-Atkinson and Mannell (2007) define negotiation-efficacy as "people's confidence in their ability to successfully use negotiation strategies to overcome the constraints they encounter" (p. 22). Previous experience successfully teaching *Outdoor Pursuits* positively impacted teachers' comfort

level, which in turn had a positive relationship with motivation and teachers' negotiation-  
efficacy. For example, Richard clearly articulated that the more times he went through  
the safety precautions and planned a trip, the less apprehension he felt and the more  
comfortable he was. White (2008) found that negotiation-*efficacy* positively influenced  
motivation to participate and to negotiate constraints and minimized perceived  
constraints. Loucks-Atkinson and Mannell (2007) would argue that the more confident  
participants were in their ability to cope with constraints through the use of knowledge,  
skills and resources previously acquired in similar scenarios, the greater their effort to  
negotiate future scenarios. Thus it appears that not only do motivation and self-*efficacy*  
increase teachers' level of participation, but the greater the teachers' ability to negotiate  
constraints as a result of successful previous negotiation, the higher the probability they  
would participate in the future.

### 5.6 Use of Constraints Negotiation

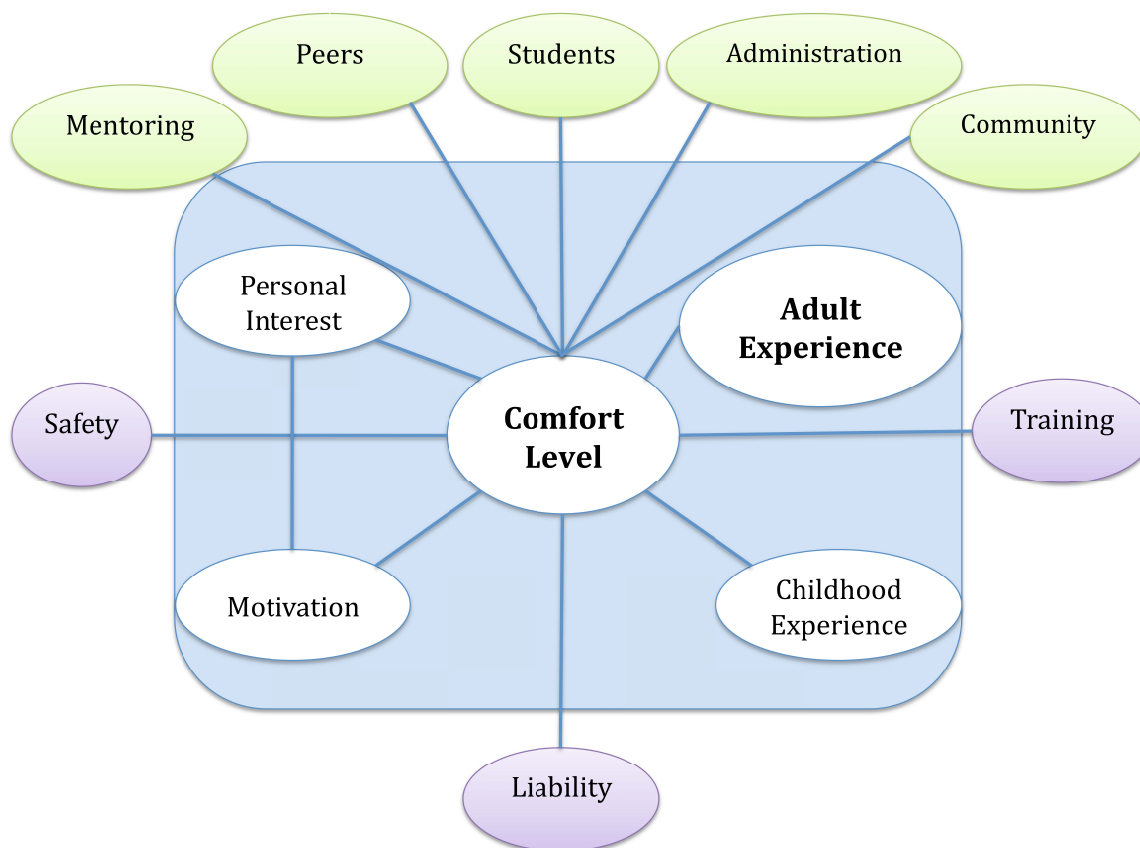


Figure 5: Intrapersonal (inside blue box), Interpersonal (green highlight), and Structural (mauve highlight) Variables Impacting Teachers' Perceived Comfort Levels.

At first glance, Figure 5, which demonstrates the key factors that impact these teachers' comfort level, does not resemble the hierarchical leisure constraints model (see Figure 1 on page 32) (Crawford, Jackson, & Godbey, 1991) nor its later expansion, the constraints negotiation theory (see Figure 2 on page 33) (Jackson, Crawford, & Godbey, 1993). Crawford, Jackson, and Godbey's (1991) model was the first to link constraints hierarchically with intrapersonal constraints as the most proximal and structural constraints the most distal. The hierarchical model was advanced with the suggestion that behaviour was dependant upon the successful negotiation of these constraints in a

sequential manner and that the process did not end in either someone participating or not, but rather in the level of participation (Jackson, Crawford, & Godbey, 1993). These models have led to questions about whether constraints can be viewed as distinct categories following a hierarchy or exist in intertwining relationships between the three dimensions (Auster, 2001; Henderson & Bialeschki, 1993; Hubbard & Mannell, 2001; Samdahl & Jekubovich, 1997).

Upon completion of my study, I have three key concerns about how the idea of constraints negotiating works in this context, namely how it can constrict the “big picture,” focus too heavily on the semantics of constraints, and imply that the onus is on the individual. The following section will seek to elaborate and address these concerns.

### **5.6.1 Constraints: The Big Picture**

As a result of the strict parameters imposed by having three distinct categories, Samdahl and Jekubovich (1997) raised a red flag on the pervasive use of the label “constraints negotiation” in leisure research because they argued it did not allow for other dynamic factors that shape and influence peoples choices. Furthermore, by labeling participants’ behaviour as constraints negotiation, they argued the concept does little for understanding those behaviours and even less for explaining the factors that motivate negotiation in peoples everyday lives. I agree with Samdahl and Jekuovich’s (1997) conclusion that if we want to understand more about the meanings behind behaviour in general, we need to step outside one limited perspective that requires data to be placed in predetermined distinct categories. Certainly, I found these distinct categories challenging at times given much of the data was so interconnected amongst the three categories.

Henderson and Bialeschki (1993) also found it difficult to distinguish between the three levels of constraints when studying the leisure preferences for women. For example, they found that many women referred to lack of time as a result of family responsibilities and obligations as affecting their leisure behaviours. The authors noted that lack of time could be interpreted as an intrapersonal constraint as many women displayed an internalized ethic of care for their family, or it could be interpreted as an interpersonal constraint given it referred to interactions with their families, or it could be seen as a structural constraint because of the physical time constraint. In my study, I found similar gray areas existed when trying to place themes into categories. For example, administrators' lack of enthusiasm about off-school activities and the perceived increased level of liability in some cases resulted from a lack of communication or general knowledge, whereas in other schools it was based on a particular policy in the school or board. Similarly, the ways in which participants often discussed their comfort level had personal, social and environmental elements. At times these distinctions were not always clear and required concepts to be placed into categories.

### **5.6.2 Semantics of Constraints Negotiation**

Mannell and Loucks-Atkinson (2005) warned about the general tendency in constraints negotiation to use terms too loosely, such that any factor that influences participation could be seen as a constraint. Godbey, Crawford, and Shen (2010) share this concern and offered an example that happens to apply to this study. They highlight “interest” or “lack of interest” as a frequently used label for intrapersonal constraints. When I set out to study the levels of participation in *Outdoor Pursuits*, I labeled those

participants who showed little interest as interpersonally constrained, when in most cases they were not disinterested, just more interested in other activities such as hockey or basketball.

It became apparent in this study, and makes common sense that a person can only have so many preferred leisure activities. According to Godbey, Crawford, and Shen (2010), when a person is interested in certain activities, they are by default less interested or disinterested in other activities. Similarly, “motivation” or “lack of motivation”, “childhood experience” or “lack of childhood experience” can all be critiqued as too either/or, too dualistic. One way I responded to this was to purposely not include the word “lack” in front of each theme and generally displaying the variables that impact participants’ comfort level, for example, as unidirectional based on external factors impacting it. Furthermore, in this study the participants were not engaging in leisure activities, but implementing a curriculum as a part of their professional responsibilities. As such, a certain level of participation in *Outdoor Pursuits* is to be expected.

### **5.6.3 Onus on the Individual**

According to Henderson (1997), a key problem with constraints negotiation is that the onus is almost always placed on the individual. Societal issues are often overlooked, especially in Western societies where we are socialized to be personally responsible for our own trajectories (Henderson, 1997). In this study, antecedent constraints, such as liability concerns, are difficult for one person to overcome or negotiate. Henderson (1997) argues that to consider constraints negotiation as only an individual’s problem is to miss an important aspect of society’s responsibilities to address some of the macro

antecedent constraints, such as the growing concern over liability. The presence of a board staff member, such as the Active Healthy Living Coordinator or the Sports Animator, served as an intermediary in some cases in order to understand and address some of the micro impacts of constraints, but their impact on some of the larger overarching constraints such as liability was limited.

Despite these concerns, the constraints negotiation frame was nonetheless useful in some ways. According to Henderson (1997), constraints negotiation is the most useful when trying to understand participation or non-participation in a specific activity. Even with the complex web of factors impacting teachers' level of implementation of *Outdoor Pursuits*, it was generally dependant on participants' comfort level or self-efficacy, which could be argued, was the most proximal both within intrapersonal constraints and in terms of the overall constraints. Nadirova and Jackson (2000) argued that a hierarchy could exist within each distinct category and to an extent this was apparent in this study, but the degree to which the themes within each category remained independent from one another was hard to discern. For example, comfort level was mentioned by all participants, but in many cases it was in relation to the impact of personal experiences, students, peers, training or liability to name a few factors. Having comfort level and personal experiences as the central factor suggests that interpersonal constraints were the most proximal to participation, but social factors such as mentoring and peer support also seemed to strongly influence negotiation to the point where the hierarchy for participation was not that clear cut.

Godbey, Crawford, and Shen (2010) in their reassessment of the hierarchy model reiterated that it should not be interpreted too literally. Furthermore, Godbey, Crawford,



and Shen (2010) stated, “the actual constraints faced by a given individual do not have to start with intrapersonal constraints” (p. 119). Rather, they argue that low to moderate internal consistencies should be expected as the constraints an individual faces varies based on their interests, attitudes, stage or level of participation, related knowledge and skills, social networking and so on. Additionally, the constraints will keep evolving as the above factors change.

Even though the participants were implementing the *Outdoors Pursuits* module for the first time, one could argue that they entered into it at different stages or levels of participation based on their previous experience, knowledge, skills, interest, and motivation. Furthermore, some of the constraints participants felt were not because they did not participate at all, but because they did not participate fully. In the South Shore Board where participation in general was lower, so to was peer persuasion. However, in the Strait Board where participation was generally higher, the social chattering and networking was more omnipresent, having both positive and negative effects depending on the participants’ comfort level. Undoubtedly, the constraints and negotiation techniques these teachers face will continue to evolve over time with the acquisition of new skills, experience negotiating different activities, and changes in students, administration and funding. As such, it would appear that cyclical or feedback loops (Dominguez, 2003; Gilbert & Hudson, 2000) would be more appropriate in depicting the constraints influencing the level of participation over time rather than a linear progression. Godbey, Crawford, and Shen (2010) do acknowledge that “the model is circular so that the starting point is where the individual or group is/are in their daily

lives” (p.122), but visually representing that in the constraints negotiation model is challenging.

All this said, I used the model in this study not to test hierarchy of constraints nor provide empirical evidence for it, but merely as a tool to cast light on the experience of a specific population of physical education teachers in Nova Scotia. This study did illustrate that interpersonal constraints were the most powerful because without establishing a higher comfort level or perceived self-efficacy, the desire to participate in *Outdoors Pursuits* will not be there or will diminish. This was exemplified in the realities of the teachers’ level of participation and the anticipatory effect of what might become of the module if participation levels are not increased, especially in the South Shore Board.

As such, in the words of Godbey, Crawford, and Shen (2010), the constraints negotiation theory can serve as a heuristic framework and a “good starting point for developing a comprehensive list of constraints while staying sensitive to the nature and characteristics of participants and their activities” (p. 115). Samdahl and Jekubovich (1997) also agree that good applications for constraints negotiation theory exist, especially when one is trying to understand reasons for non-participation or to understand efforts that eventually lead to participation for people who originally felt constrained, which in many instances applies to the participants in this study.

## **5.7 Rationale & Opportunities**

### **5.7.1 Lifelong Learning**

Many reasons were given to rationalize the creation and implementation of *Outdoors Pursuits*, from the revival of outdoor education in the public school system to a

shift away from a highly sports-centred curriculum. As Nova Scotia has the highest percentage of youth participating in organized sport (Report card, 2009), a move towards outdoor education in the school system is being encouraged (Thompson et al., 2005) to provide a safe and welcoming environment for adolescents to start new activities. Thompson et al. (2005) found that emphasizing sport specialization at a young age adversely affects diversification of physical activities given many people appear to have the mentality of having to start certain activities young and having to be physically talented to be involved. In these “new” environments outside of the school walls, teachers enjoyed seeing different positive traits emerge in students who did not necessarily excel in the typical classroom environment. The more holistic approach also allowed some teachers to develop student teamwork and leadership skills while simultaneously addressing issues such as sustainability and conservation. However, as many participants’ focus was on their need to enhance their technical skills in order to take students outside and engage in activities, this resulting preoccupation with the skills component of *Outdoor Pursuits* prevented teachers from including much of the other aspects of the module such as environmental awareness and nature connection. Many opportunities are outlined in the curriculum such as involving grandparents or community elders with past wilderness experience to deepen the value of the experience while taking every opportunity possible to teach the module in a natural environment.. Hopefully as teachers’ technical skills improve and comfort levels increase, they will turn more of their attention to these other important aspects of the curriculum.

*Outdoors Pursuits* was described as “smart education” by one participant given students interact with nature while creating different connections and relationships with

their peers and teachers. Dave claimed it “makes school easier” as teachers do not have to deal with the same discipline issues. The literature supports Dave’s claims that widely accessible natural environments can enhance all students’ attention, including those with Attention Deficit Hyperactivity Disorder (ADHD) (Taylor & Kuo, 2009; Zimmerman, Christakis & Meltzoff, 2007). Furthermore, the educational benefits associated with students being active in natural environments are well-documented and include a renewed enthusiasm for learning, higher levels of creativity, critical thinking, problem-solving and improved performance on standardized tests (Lieberman & Hoody, 1998; Rickinson, et al. 2004; Russell & Burton, 2000). Lieberman and Hoody (1998) also suggested outdoor environmental education fosters responsibility, collaboration, a sense of community and improves relations between students. Dave, along with other participants, recounted watching his students undergo changes that not only improved his relationship with them but positively transformed their relationships with each other and broadened their perspective of what physical education can be.

Promoting lifelong learning by educating students on what they can do in their backyard superseded all sentiments as the fundamental reason for implementing the *Outdoor Pursuits* module. Although the phrase sounds a bit cliché as it is obvious that people learn throughout their lives, the notion in this context is central to the development of the grade 10 *Active Healthy Living* curriculum designed to promote lifelong physical and health practices (Nova Scotia Department of Education, 2009). Penney and Jess (2004) acknowledge the need for a broadening of skills, knowledge and understanding for lifelong learning to go beyond the existing formal education structure.

The authors list outdoor activities such as camping, canoeing, and orienteering in their template of activities that encourage lifelong participation.

### 5.7.2 Recommended Opportunities to Improve *Outdoor Pursuits*

A main purpose of this study was to provide recommendations to improve the implementation of the *Outdoors Pursuits* module, through relaying the needs of teachers working on the ground. The recommendations focus on support networks, training, scheduling, and a general expansion of outdoor education in Nova Scotia.

#### **In regards to support networks:**

- *Support Personnel:* Ensure someone working at the board (such as the Active Healthy Living Consultant or a Sports Animator) or a professional outdoor educator or a member of a community organization is available to assist teachers delivering *Outdoor Pursuits* by serving as a mentor to increase their efficacy through participation. In particular, consider increasing the involvement of NSOLD, universities or other third party organizations in training and supporting teachers.
- *Peer Teacher Support:* Provide opportunities for teachers to get out and participate in outdoor pursuits with their peers to gain experience, fortify bonds and increase group understanding of *Outdoor Pursuits*. Encourage mentorship amongst teachers within the boards and the province.
- *Team Teaching:* Provide opportunities for integrated curriculum approaches or team teaching where more than one subject could be taught in the natural environment to encourage peer teacher support and to help students make connections between content areas.
- *Communication:* Provide advice to teachers on how to successfully negotiate parental concerns and to create support for the longevity of outdoor pursuits in the region.

#### **In regards to training:**

- *Educate the Educators:* Provide ongoing training opportunities throughout the school year (in-services as well as in the classroom through peer teaching) and intensive courses in the summer, given training has a positive impact on

perceived comfort levels well as increased opportunities for further advancement of current practices and expansion of activities.

- *Educate the Future Educators:* Encourage outdoor education in pre-service teacher training institutions. Have outdoor education as a prerequisite for all physical education degrees and encourage all pre-service teachers to take outdoor education electives.
- *Educate the Administrators:* Provide in-services, communications, and educational newsletter to heighten knowledge and awareness of the potential benefits, current practices and opportunities of *Outdoor Pursuits*.

**In regards to class time and schedule:**

- *Place-Based Learning:* Focus more on place-based learning and developing skills using adjacent areas rather than relying on traveling to other locations.
- *Schedule:* Adapt the scheduling system in such a way that extra time can be available for activities during the week such as longer time slots in the morning or afternoon. If activities must overlap, it should be credited to teachers as part of their teaching time.
- *Blanket Permissions:* Design blanket permission forms that enable spontaneous outings to occur to take advantage of favorable weather, availability of proper equipment, and a desire of all parties to get outside.
- *Extracurricular Activity:* In addition to the *Outdoor Pursuits* module, provide more extracurricular outdoor education to increase student engagement.

**In regards to expansion of outdoor education:**

- *Outdoor Education for All:* Place more emphasis on sequential programming with outdoor education starting in elementary school so that by the time students arrive at high school they are better prepared.
- *Student Mentorship:* Develop leadership programs where older students can facilitate the teaching of younger students.

## Chapter Six: Conclusion

### 6.1 Introduction

What the eventual cost to society will be if youth continue to be alienated from the natural world is unknown. Rising concerns about “nature-deficit disorder” (Louv, 2008), “videophilia” (Zaradic & Pergams, 2007), ADHD and obesity (Foster & Grant, 2008; Lowell, 2008) point to potential problems on the horizon. Acknowledging the critical role outdoor education can play in providing “experiential learning in the natural environment to foster a connection to local places, develop a greater understanding of ecosystems, and provide a unique context for learning” (Bondar et al., 2007 p. 17) is imperative. Research has found that schools can bridge the disconnect from the natural world (Bell & Russell, 1999; Breunig, 2005; Foster & Linney, 2007) and, encouragingly, all the teachers in this study believed in the importance of providing students with opportunities to get outside and engage in outdoor activities to develop a sense of connection to the natural world and be active.

That said, I still worry the provision of outdoor experiences that blend personal and social change with the fostering of healthy human/nature and human/human relationships (Bell & Russell, 1999; Foster & Linney, 2007; Russell, 1997) are still more of the exception in Nova Scotia. Further, the future is looking even darker with recent revelations from the province and school boards regarding funding and support. In this concluding section, I will contextualize my research by addressing the limitations of this study, highlighting the key findings, and expose some of the future constraints of the *Outdoor Pursuits* module, with the hope of stimulating thought and action.

## 6.2 Limitations

This study was limited in a number of ways. First, I relied on teachers' self-reports of participation and general approach towards *Outdoor Pursuits*. Clearly, what teachers said they valued and how they presented themselves to me may differ from their actual outlook and the level to which they implemented *Outdoor Pursuits*. According to research, self-reporting can be influenced by a desire to self-present well and be socially acceptable (Curhan, Elfenbein, & Xu, 2006); in this case, *Outdoor Pursuits* is now part of the curriculum and expected to be covered, so I would have been surprised if participants said they did not recognize the value of the module or did little by way of implementation. Future studies could include different methods of assessing realities on the ground, such as observations and an anonymous survey of all Nova Scotia grade 10 physical education teachers.

Second, there were a small number of female participants. The low rate of female participants in this study is indicative of the current realities in the two boards. To my knowledge, only one female teacher was teaching grade 10 Phys Ed in the South Shore Board and three in the Strait Board. Both female participants in my study expressed a low level of comfort with facilitating *Outdoor Pursuits*. They also described a need for more professional support and a desire to build a strong level of trust with students in order to increase their level of participation. Future studies that further probed gender differences with more participants would provide a broader perspective base.

Finally, as I mentioned earlier, the focus of this study was not to generalize the findings to a broader population, but instead to present the experiences of the participants in such a way that readers can make connections to their own experience, learn how the



participants' (and perhaps their own) experiences came to be, and deepen their understanding of the constraints they face. As the study was conducted in two rural school boards with limited female participants, the connections some readers make to the findings may be limited. Additionally, a key limitation with the sample population is that it is not representative of urban Nova Scotia, that is, the Halifax Regional Municipality, where approximately 40% of the population of Nova Scotia resides. Teachers were not studied in the Halifax area, and this could provide a different perspective, connect to other readers' experience and is thus a possibility for future research.

Upon reflection now, I can see more easily see the limitations and how the study could be improved. Central, however, to the credibility of this study is the recognition of my involvement in the entire process, especially how my tacit knowledge shaped this study and my determination to hold firm to keeping the stories of the teachers and the meaning they make of those experiences at the heart of this research. The interviews allowed me to gain insight into the realities of the participants through accounts of their direct experiences, which in and of itself adds credibility. In the words of Glesne and Peshkin (1992), "the proof of your coding scheme is, literally, in the pudding of your manuscript" (p. 134).

### **6.3 Key Findings**

As was previously stated, the purpose of this study was to increase understanding of outdoor education in the Nova Scotia public school system through analysis of teachers' experiences on the ground implementing the grade 10 *Outdoor Pursuits* module. In particular, I wished to understand the constraints teachers face implementing

and delivering the *Outdoor Pursuits* module and the relationship between physical education teachers' motivation and perceived self-efficacy, and how they negotiated the constraints they do face.

The findings illustrated that although a strong focus of the province and school boards has been on acquiring the physical supports needed, such as equipment and resources, developing self-efficacy of teachers and building social networks was more influential to participation levels. Teacher efficacy was not uniform and several teachers who judged themselves highly efficacious in the gym did not exhibit the same assurance level teaching outside. Key amongst the major influences in developing teachers' self-efficacy with *Outdoor Pursuits* were being comfortable with and exhibiting a mastery of activities, experiencing the pursuits under the guidance of someone else who could successfully model it, and receiving peer support, feedback and discussion to stimulate excitement and the acquisition of knowledge.

Obvious links were made between teachers with low formal experience (e.g., training, certifications, university courses) and a lack of informal experience with outdoor pursuits and lower levels of participation. As such, low personal competencies and experience with outdoor activities emerged as the most influential source of efficacy. However, the presence, or lack thereof, of a support network, particularly a mentor or an outside expert, played a significant role in the constraints negotiation process. Teachers who regularly had access to support through a mentor such as the Active and Healthy Living Consultant, a community member or an outside consultant displayed significantly higher levels of participation.

A distinct example of mentorship and the effect it has on negotiation is the work Andrew Foran is doing in the Strait Board to educate and train teachers working in the board and pre-service teachers at St. F. X. As a result of Foran advocating for outdoor education and making himself or his student teachers available to model proper practices has resulted in teachers being more comfortable and confident in teaching *Outdoor Pursuits*. The Active Healthy Living Consultant in the Strait Board has also been instrumental in developing teacher efficacy through professional development opportunities and professional learning communities. As a result of this mentorship and professional development, not only are teachers able to see other people manage tasks, model skills and perform activities successfully (Bandura, 1997), but these provided teachers with an opportunity to discuss realities they face and build support within the board. In contrast, without a clear mentor in the South Shore Board modeling outdoor activities, the alteration of efficacy beliefs remains relatively unaltered and the level of participation is comparably lower.

The majority of the teachers who exhibited a strong personal interest in outdoor activities put forth a greater effort to incorporate those activities into their course. Constraints negotiation research indicates that motivation is a key trigger encouraging the constraint negotiation process (Loucks-Atkinson & Mannell, 2007; White, 2008), but in this study the presence of interpersonal factors such as mentors, outside support and peer involvement and the overall high emphasis on comfort level and experiences appears to supersede motivation as the most influential factor to participation. Nonetheless, previous experience successfully participating in outdoor activities with students positively impacted teachers' comfort level, which in turn had a positive impact on motivation and

teachers' negotiation-efficacy. As such, the more teachers negotiated constraints relating to *Outdoor Pursuits*, the greater the likelihood of and effort towards negotiating future constraints and the higher the level of participation.

#### **6.4 Press Release: “Back to Balance” or “Back to Basics”**

In the 1990s in Ontario and British Columbia budget cuts and changing Ministry of Education priorities challenged outdoor education programs in those provinces. Alas, Nova Scotia may suffer the same fate before it has even truly established a culture of outdoor education in the school system. On February 8, 2011, as part of the “Back to Balance” movement, the New Democratic Party through the Nova Scotia Department of Education released its budget targets for school boards across the province (Murray & MacIntyre, 2011). Of significant interest to the findings of this study was the directive that boards need to make at least a 15 % reduction in administration costs in 2011/2012 and plan for a 50 % reduction in board consultants over the next three years. Not long after the province's announcement, on February 23, 2011, the South Shore Board announced the elimination of the Active Healthy Living Consultant and the Sports Animators along with several other consultants and support workers (The Advance, 2011). The Strait Board followed suit in May with the termination of the Active Healthy Living Consultant and the two Sports Animator positions. Although the province mandated the directive to cut consultants through the Department of Education, the Active Healthy Living programs and the positions of Active Healthy Living Consultant and Sports Animator is funded through the Department of Health and Wellness and at present the funding is still available through the Department of Health and Wellness to all

the boards.

These revelations indicate a giant leap backwards on the part of the school boards and province in regards to supporting Active Healthy Living in schools and in particular the services and support available to teachers implementing the *Outdoor Pursuits* module. Particularly in the Strait Board, the Active Healthy Living Consultant has served as a strong support for teachers in accessing equipment, resources and funding as well as developing, administering and facilitating professional development. The participants overwhelmingly acknowledged the positive contributions of the Active Healthy Living Consultant and the enthusiasm and experience he brought to the task, and my research makes clear that he has been instrumental in enhancing teacher efficacy and increasing the level of participation of Strait Board teachers in *Outdoor Pursuits*.

Given the South Shore Boards needs to eliminate \$300,000 in “professional development, travel, special events, co-curricular travel, supplies, material, and athletics” (SSRSB, 2011), the support needed for *Outdoor Pursuits* and Active Healthy Living will surely be lessened. While I would prefer retention of Active Healthy Living Consultants and Sports Animators, another alternative to continue supporting *Outdoor Pursuits* would be to increasing the level of involvement of the Nova Scotia Outdoor Leadership Development Program as a training and mentoring body or heighten the involvement of the Department of Health and Wellbeing’s Outdoor Recreation Consultant. Without continued support, the thousands of dollars already spent on resources for *Outdoor Pursuits* under the Conservative government of the day may remain unused in schools where teachers’ levels of comfort are low. More importantly, the mandate of rekindling the curiosity, and enthusiasm for activities in the natural world while promoting healthier

habits for life (Nova Scotia Department of Education, 2009) simply will not be met as well as it could be.

### **6.5 Final Thought**

The physical act of writing a thesis, like the physical act of participating in an outdoor activity, must come to an end at some point. The purpose of conducting outdoor activities in educational settings is not solely for the activity itself, but also to provoke reflection and make subsequent application of the skills, knowledge and realizations made to life afterwards. The same is hopefully true for this study. The intent of this research was to enable teachers to tell their stories and, hopefully, the proof of this is evident in the patchwork of this thesis. Although deepening our understanding of outdoor education in Nova Scotia is important, theoretically it is actions that can make change happen. Educational reform by administrators, board members and government employees who have a hand in improving the system is essential if we are to see the benefits of outdoor education to the wider society. However, of equal or greater importance is the role teachers, schools and local agencies have in planning, managing and implementing the module on the ground. I would argue that critical to increasing teachers', schools', and school boards levels of participation in the *Outdoor Pursuits* module and outdoor education in general is increasing teachers' perceived self-efficacy. The evidence from this study indicates that training, the provision of mentors to successfully model outdoor pursuits and promoting confidence, and creating a structure of peer support are vital to raising teachers' confidence, thereby enabling them to successfully negotiate future constraints. These are fundamental to the sustainability of the *Outdoor Pursuits* module in Nova Scotia.

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**Appendix A: Email to Potential Participants**

Dear Grade 10 PE Teachers,

I would like to invite you to participate in a study regarding the implementation of the Outdoor Pursuits module. Having grownup in the area, I am very familiar with the SRSB and would like to make this as easy as possible for you, especially seeing that the school year is just getting started and everyone is busy. I am available to come and meet you at the most convenient time and location (e.g. during a free period or after school) for an interview that in the past has taken approximately 40-60 minutes.

I am currently a Masters student in the School of Outdoor Recreation, Parks and Tourism at Lakehead University and have received permission through the SRSB to conduct this study. The research is independent of the board and is funded through a Canadian research grant (SSRHC). Please open and read the attached information letter for further information.

Thanks for your time and consideration. I will be stopping by some of the schools in the board to introduce myself personally and thanks to those who have already participated in this study. Feel free to contact me at [mastewar@lakeheadu.ca](mailto:mastewar@lakeheadu.ca) or by phone at (902) 735-2343 / (902) 872-0910. I look forward to hearing from you.

Sincerely,

Mark Stewart

## **Appendix B: Information Letter**

(On Lakehead University Letter Head)

Dear Potential Participant,

I am a Masters student in the School of Outdoor Recreation, Parks, and Tourism at Lakehead University. I would like to invite you to participate in a 50-70 minute interview I am conducting regarding the implementation of the Outdoor Pursuits module in Nova Scotia, specifically focusing on the perspective of the teachers who are implementing the module. The research project title is: "The Role of Self-Efficacy in Constraints Negotiation: Nova Scotia Physical Education Teachers' Ability to Implement Outdoor Education," and is being conducted under the direction of my supervisor, Dr. Connie Russell, Associate Professor and Chair, Graduate Studies and Research in Education. Please read the following information.

The intent of this research project is to explore the implementation of Outdoor Pursuits in the Nova Scotia school system. Of particular interest are the perspectives, experiences and meanings of the practices being employed by the teacher involved in implementing the module. This study is based on research that has been analyzed regarding outdoor education in general and personal experience that I have gained working in the field of outdoor education. The aim of this study is to gain more in-depth understanding of the practice of outdoor education in Nova Scotia and the limitation and opportunities with the current module.

You may benefit from participating in this research because you will have the opportunity to discuss current practices and, when the study is complete, hear about the stories of others in the research findings. This research will not only deepen our understanding of outdoor education in Nova Scotia, but hopefully address some of the limitations and opportunities. The research findings will be presented to the Ministry of Education, various school boards and at the 2011 Nova Scotia Outdoor Leadership Conference.

The interview process will require approximately 40-60 minutes of your time. Your name will not be identified in anyway in the final analysis or in any report produced from this study. Participation in the interview is voluntary and withdrawal can take place at any time. You may choose not to answer any question or you may choose to answer only some questions and not others. The interviews will be audio-recorded with your consent and transcripts will be sent back to you to clarify that the information is accurate. As per Lakehead University standard policy, I will then keep the transcripts for five years in a secure location at Lakehead University, and I will then destroy them. No one besides Dr. Russell and me will have access to these written transcripts. The data may be used for additional secondary analysis in the future, but only by me.

If you have any questions or concerns, please do not hesitate to contact the student researcher, Mark Stewart at [mastewar@lakeheadu.ca](mailto:mastewar@lakeheadu.ca) (902) 735-2343 or the supervisor Dr. Russell at [crussell@lakeheadu.ca](mailto:crussell@lakeheadu.ca). If you have any ethical concerns regarding this study, please contact the Research Ethics Board - Lakehead University  
Phone: 1.807.343.8283 (<http://research.lakeheadu.ca/>).

Thank you for your time and cooperation. This letter is yours to keep. If you wish to receive a copy of the research findings (likely March 2011) please send myself an email to indicate your interest ([mastewar@lakeheadu.ca](mailto:mastewar@lakeheadu.ca)). I look forward to hearing from you in the near future.

Sincerely,

Mark Stewart  
Master of Environmental Studies student  
School of Outdoor Recreation, Parks and Tourism  
Lakehead University

## Appendix C: Interview Guide

### *Interview Guide: Mark Stewart*

1. What brought you into the education field and how long have you been teaching?
  - Have you taught in many different locations?
2. What was your teacher-training like? Have you taken any outdoor education specific training?
  - Outdoor leadership training courses?
  - Remote or wilderness first aid training?
3. What's your opinion on the *Outdoor Pursuits* module?
  - What's the rationale for it?
4. What excites you about teaching outdoors through the *Outdoor Pursuits*? What worries you about teaching outdoors?
5. Are teachers prepared and willing to offer *Outdoor Pursuits*?
6. Tell me about a typical class where you implemented sections of the *Outdoor Pursuits* module?
  - Why do you do things that way?
  - How do the students respond?
7. How comfortable are you in teaching in an outdoor context?
  - Example: How comfortable would you be leading an overnight hike in a park?
8. You feel you are/aren't confident working with the *Outdoor Pursuits* module, tell me why or why you do not feel confident?
9. Are there other people in the school who teach outdoor education?
  - What is your relationship to them?
10. What, if any, are limitations to the *Outdoor Pursuits* module?
  - Please elaborate?
11. Do you feel the curriculum goals in *Outdoor Pursuits* are being achieved?
  - Why?
  - How?



12. How could this module be further advanced in your board?
13. What advice would you have for other teachers implementing *Outdoor Pursuits*?

### Scenarios

- i. A teacher is doing the *Outdoor Pursuits* module for the first time, he or she has little personal outdoor recreation experience and limited camping experience. What advice would you offer this teacher?
  - ii. A teacher is doing the *Outdoor Pursuits* module for the first time, he or she is receiving little support from other teachers in the school to take the students outside. How would you advise the teacher?
  - iii. A teacher is doing the *Outdoor Pursuits* module for the first time, he or she wants to take a class on an overnight camping trip into an adjacent wilderness area, but the school or students don't have enough camping equipment (tent, backpacks, stove, etc). What advice would you offer the teacher?
14. In your experience, which of the three scenarios is the most likely to occur?

**Appendix D: Consent Letter**

(On Lakehead university Letter Head)

Dear Potential Participant,

By signing this consent letter, you are indicating your willingness to participate in this study and that you understand and agree to the following conditions:

1. Your participation in this research is voluntary and that you are free to withdraw at any time.
2. You have the right to anonymity, and you acknowledge that no personal or identifying information is being gathered without your consent.
3. You have the right to choose not to answer any question in this survey.
4. The data generated from this research will be kept at Lakehead University for 5 years, as per Lakehead University's research ethics policy.
5. You can receive copies of publications that result from this research, if requested.
6. You consent to the interview being audio-recorded.

I have read the information provided, and hereby declare to freely consent to this interview.

\_\_\_\_\_  
Signature

If you would like a copy of the research summary or publications, please provide your email address here: \_\_\_\_\_

## **Appendix E: SRSB Outdoor Education Training Opportunities**

### **Outdoor Education Training Opportunities 2008 – 2011**

- Spring 2008 Implementation of the PE 10 program - DoE  
Wilderness Remote First Aid Training – SRSB/STFX  
Flatwater Canoeing Training – SRSB/STFX  
Outdoor Education Inservice P-12 (Cooperative games/Orienteering/Geocaching) SRSB
- Fall 2008 NASP Archery Training/Mountain Biking –SRSB Regional Inservice
- Winter 2008 Snowshoeing/Geocaching – SRSB Inservice
- Fall 2009 Outdoor Living Skills/Core Camping skills - SRSB Regional Inservice  
NASP Archery Instructor Training (2 teacher trainers were trained)  
Flatwater Canoeing Training – TAPHE/STFX
- Spring 2010 Wilderness Remote First Aid Training- SRSB/STFX  
Flatwater Canoeing Instructor Training (Tandem & Solo) SRSB/STFX
- Fall 2010 Professional Learning Community – Risk management in Out Ed discussions
- Winter 2010 Professional Learning Community – Risk management in Out Ed discussions  
P-9 Inservice for Outdoor Ed – Lead up activities for PE 10 –SRSB/STFX  
WRFA Training & Instructor Training Completed (1 teacher in board trained to teach WRFA) SRSB/STFX
- Spring 2011 Canoe Tripping Training for 2 teachers –SRSB/STFX

