

HIDING IN PLAIN SIGHT

Sustainable Physical Activity Program Development and Evaluation for Youth with
Special Needs: An Evaluative Case Study

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Submitted for the completion of the requirements for the degree of
Master of Arts in Applied Health Science
(Health & Physical Education)

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Acknowledgements

I am grateful to so many people who have continually supported me throughout this journey. Thank you to my fellow peers in the graduate program for always being a great support system (especially you sister turtle angels). To those who participated in this study, thank you for being so inclined and willing to do so. Your honest feedback greatly contributed to my research, as we are always aiming to make great strides in the understanding and progression of adapted physical activity. As research continues, I am hopeful that the information you provided will be used as exemplary references across our discipline and perhaps beyond.

Janet Westbury, thank you for agreeing to be part of this process. Your advice, encouraging words and unremitting positive outlook has meant so much to me.

Thank you to my committee members: Dr. Jae Patterson and Dr. James Mandigo. Jae, I was first exposed to the field of disability in your Foundations in Adapted Physical Education and Disability Studies course as an undergraduate student. Your passion for the content and for teaching was contagious. I looked forward to attending every lecture and the experiential learning piece that accompanied the course allowed me to put theory into action and make what we were learning meaningful. Thank you for sparking a passion for adapted physical education in me. Jamie, the first day I sat in your undergraduate lecture in second year, you asked the class how many of us had positive experiences in physical education. Unsurprisingly, everyone's hands went up, and you then announced to the class that we were the minority and the exception because we had positive experiences and valued physical education as a result. I was taken aback by this statement and it has had a lasting effect. Thank you for being an exemplar of what is

possible with determination and creativity; your development, implementation, and sustainability of international programs is inspiring.

To Dr. Maureen Connolly (a.k.a Mother Turtle), it has been an honour to work under your supervision and I am privileged to call you my mentor. What you have taught me over the years is invaluable both personally and professionally. Your trust and confidence in my abilities has allowed me to gain confidence in my competencies by exploring beyond my own comforts (with the reassuring awareness that you were holding the safety net). I am grateful for your honesty, support, persistence, and humour. Thank you for always leading by example and teaching me the importance of being both critical and reflective. I will always cherish the Sunday-FunDay-Chicken dinners we all shared (may the tradition live long and prosper) LYMI.

To my family, thank you for providing me countless opportunities to explore and discover, for always being encouraging, and reminding me to “look at the big picture”. I am convinced that this motto is what motivated me to undertake this particular project that I am very proud of.

Abstract

The purpose of my research was to contribute to the improvement and sustainability of the Special Needs Activity Program, and develop program implementation strategies that had practical outcomes. I conducted an evaluative case study of S.N.A.P in order to determine what a quality adapted physical activity (APA) program is, why S.N.A.P is considered a quality APA program, and what institutional policies and practices exist to support it. Data was collected via interviews, questionnaires, and observations. Data analysis involved inductive and deductive methods, and a SWOTAR evaluation. Results indicate that quality APA programs include: 'people', 'environment', and 'expectations'; there are benefits of experiential learning; activity stations that promote creativity are valuable; several stakeholders do not know the details about S.N.A.P but recognize its value; the institution values what S.N.A.P provides, yet, there is nothing being done to sustain it. Future research should investigate the feasibility of implementing S.N.A.P in various contexts.

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Chapter I- INTRODUCTION

Background

Almost 20 percent of the world's population lives with some form of disability (World Health Organization, 2011). Due to motor development delays or deficiencies, the majority of this population is deterred from physical activity participation, which causes them to be less active than other peers (Frey, Stanish, & Temple, 2008; Anderson, 2010; World Health Organization, 2011; Horvat & Franklin, 2001; Hutzler, 2007). Further, the lack of available programs and qualified personnel, also contributes to low participation levels (Taub & Greer, 2000; World Health Organization, 2011). The benefits of physical activity among all individuals have been widely reported and it has been established that increased benefits are reaped by the special needs population in particular (Frey et al., 2008; Kodish, Hodges Kulinna, Martin, Pangrazi, & Darst, 2006; Anderson, 2010; Giacobbi Jr. et al., 2008; Rimmer & Rowland, 2008). Physical activity habits develop at an early age and these habits will foreshadow those adopted in adulthood (Kodish et al., 2006; Rimmer & Rowland, 2008). Ironically, the World Health Organization (2011) and Obrusnikova & Miccinello (2012) found that the number of barriers increased as children with disabilities aged. This reinforces the importance of adapted physical activity environments as a means for youth to receive high quality movement opportunities, since tasks are adapted to be developmentally appropriate (Doctoroff, 2001; Anderson, 2010).

Youth with special needs are not achieving the recommended amount of daily physical activity and therefore are commonly more obese than their non-disabled counterparts (Todd & Reid, 2006). Rimmer and Roland (2008) state that physical activity

has a significant impact on overall growth and development and go on to list several benefits including but not limited to: better management of body weight, minimization or elimination of secondary health conditions (ie: obesity, weakness, fatigue, feelings of depression and social isolation), lower risk of high blood pressure (or other chronic diseases) in adulthood, and reduce the need for personal assistance in performing basic activities of daily living. In addition, Taub and Greer (2000), Todd and Reid (2006) and Gaskin, Andersen, Morris (2009) agree that as a result of increasing their daily activity and interacting with others, this population possesses the potential to: reduce stereotypic behaviours (i.e., hand flapping, body rocking, continual spinning or flipping of objects), as well as develop their physical repertoires and social skills which increases self-esteem and perceptions of confidence. Personal barriers, such as low expectations of self and physical limitations, are reported by youth with disabilities, but environmental barriers are viewed as the greatest roadblocks to a successful transition [into adulthood] (Stewart, Law, Rosenbaum & Willms, 2001).

Research that establishes instructional methods and institutes programming guidelines to enhance physical activity programs not only benefits the special needs population, but those implementing physical activity as well. In order for an initiative to be effective, observation and solving movement problems with the individual's personal feelings about self-confidence in mind is essential. SWOT (strengths, weaknesses, opportunities, threats) analysis is the most commonly used tool for strategic planning, as it formulates strategies for administrators that increase opportunities and reduce threats by maximizing strengths and minimizing weaknesses (Hutzler, 2007). SOAR (strengths, opportunities, aspirations, results) is a strategic planning tool that builds on strengths and

seeks to understand the whole system by including the viewpoints of relevant stakeholders (Stavros & Hinricha, 2009; Reed, 2007). SOAR integrates Appreciative Inquiry; Appreciative Inquiry investigates what is working within an organization and discovers how to do more of it instead of attempting to fix what does not work (Stavros & Hinricha, 2009). Both Todd and Reid (2006) and Rimmer and Roland (2008) explain that research which establishes instructional methods and institutes programming guidelines to enhance physical activity programs is necessary because benefits have been reaped by the special needs population who engage in physical activity.

Significance of Research and Context

Gordon (2009) asserts that teaching should promote experiences that require students to become active, scholarly participators in the learning process, and such experiences should include problem-based learning, and inquiry activities. The Special Needs Activity Program (S.N.A.P) encompasses this perspective entirely because both participants and volunteers are active participants in their learning due to the problem-based learning environment that the program provides. S.N.A.P is a community service learning initiative that includes movement education based, embedded curriculum offered to children and youth with disabilities. S.N.A.P is an exceptional and valuable program because it provides a developmentally appropriate physical education experience in an unrestrictive environment that allows participants to utilize and expand their gross motor skills, fine motor skills, as well as their fitness and conditioning levels. This program also allows Brock University students to engage in 1:1 activity facilitation with individuals from a population who are under resourced. This exposure allows the student volunteers

to increase their awareness of and learn about various disabilities while providing participants with opportunities to develop their physical repertoires.

S.N.A.P began as an independent study project of graduate student Jason Candy during the 1994-95 academic year under the supervision of Dr. Maureen Connolly. The program runs from October-April every Thursday morning from 9-12pm in Ian D. Beddis gymnasium at Brock University. The gymnasium is divided into four sections and each section focuses on a specific movement theme. One section focuses on fine motor skills and cooperative play, another on gross motor skills using educational gymnastics, while the other two focus on fitness and cooperative games that include target activities. There is also a sensory room available to participants if the gymnasium becomes too stimulating. This dark room is equipped with lava lamps, pillows, blankets, visual projectors, and various objects that stimulate the tactile senses in order to aid in creating a relaxing environment. In a separate room, dubbed “The Multi-media Room”, assisted technology is available to participants in the form of Wii target games and Guitar Hero. This type of technology has proven to build confidence due to the clear recognition of roles and thus, results in less pressure, immediate feedback, and anxiety mediation.

Since the 1994/95 academic year, the Special Needs Activity Program has grown in the number of students who coordinate and volunteer as well as in the number of participants it caters to. During the 2011/12 academic year, the S.N.A.P outreach hosted over 1,600 participants. The program involves student volunteers who facilitate one on one movement based activities for youth and teenagers with special needs from the Niagara region. Coordinators are responsible for organizing and implementing the program. Coordinators are made up of approximately 15 undergraduate students from

various departments at Brock University. The coordinating experience coupled with a written academic component allows coordinators of the program to acquire an undergraduate thesis credit or independent study credit. Coordinating S.N.A.P allows Brock students to apply the theoretical knowledge taught in lecture halls in a practical way. Having this type of practical experience develops skills including but not limited to: community programming for youth with special needs, leading a large group of same age peers, and quick problem solving in the moment.

Not only is S.N.A.P a meaningful service learning opportunity but it is a needed service within the community for a variety of reasons. Firstly, the excursion nature of S.N.A.P is unique for youth and teenagers who participate in the program. The excursion experience begins at the students' respective schools. Students must prepare to leave the school (dress appropriately for the outdoors) and practice doing so as independently as possible. Students must then wait their turn to board the bus that will be transporting them to the program, they learn how to board the bus (walk up the stairs if capable to do so), find a seat and stay seated until the bus has arrived at Brock University and has come to a complete stop. If they are taking public transit, they have the opportunity to learn and practice: where to wait for the bus (ie: what the bus stop sign looks like), how to wait for the bus, finding a seat on the bus, pulling the chord on the bus and knowing that it signals the bus will stop at the next bus stop. Once instructed to do so by their educational assistants/teachers, students exit the bus (walk down the stairs if capable of doing so) and enter the building where the program is being held. Once students arrive, they must find baskets located under their respective school sign that will hold their backpacks, jackets, sweaters etc. Once their things are put away in the appropriate place, participants wait

until their names are called, are paired up with a student volunteer from Brock University and begin participating in activities at S.N.A.P. The Special Needs Activity Program not only has on-site benefits for participants but it is also beneficial for youth who attend because it allows them to practice basic activities of daily living (ie: preparing for an outing and experiencing different forms of transportation as well as appropriate practices that go along with each). By participating in the activities at S.N.A.P, participants have the opportunity to work on fitness and conditioning. So, not only are they receiving daily physical activity, but being physically active and then returning to school often improves focus as they do not have built up excess energy. Participating in physical activity also increases fatigue which results in participants sleeping through the night. Children with special needs rarely sleep through the night which results in a lack of focus and negative behaviours during the day (additionally, well rested children means well rested and grateful parents/caregivers). Physical activity has proven academic benefits as well, including increased blood circulation throughout the body and blood flow to the brain, which in turn increases endorphins. Taras (2005) suggests that this has the potential to reduce stress and create a calming effect that assists in enhanced concentration/focus and improved academic achievement.

While there are noticeable benefits of the Special Needs Activity Program, there is minimal literature on the evaluation of adapted physical activity programs. My hopes for my research are twofold: firstly, that my research will aid in filling the gaps in literature in this area and secondly, that an evaluation of the Special Needs Activity Program will serve as a practical guideline for increasing the implementation of similar programs in the future.

Michael Quinn Patton offers a definition of Evaluation as defined in the Encyclopedia of Evaluation:

An applied inquiry process for collecting and synthesizing evidence that culminates in conclusions about the state of affairs, value, merit, worth, significance, or quality of a program, product, person, policy, proposal, or plan. Conclusions made in evaluations encompass both an empirical aspect (judgement about the value of something). It is the value feature that distinguishes evaluation from other types of inquiry, such as basic science research, clinical epidemiology, investigative journalism, or public polling (p. 4).

He defines program evaluation as the collection of information about a program in order to improve upon or develop its effectiveness (Patton, 2008). Patton (2008) also coins the term “utilization-focused program evaluation” and defines it as: evaluation done for and with specific intended primary users for specific, intended uses (focus is on intended use by intended users) (Patton, 2008). Patton (2008) goes on to state that this type of evaluation does not require the researcher to ask specific evaluation questions, but rather, recognize that it is a process for determining what questions will be meaningful and what answers will be useful given the program’s context. My evaluation of the S.N.A.P outreach will be based on Patton’s utilization-focused program evaluation because I anticipate that the results will be practical and useful for all stakeholders.

Research Questions

“We can learn a lot about a professional field by studying the sorts of questions it asks and the problems it considers important” (Fernandez-Balboa, 1997, p. 107).

My past experiences and review of literature has evoked the following questions that will be the focus of my research: 1.) A. What is a quality adapted physical activity program? B. Why is the Special Needs Activity Program considered a quality adapted physical activity program? 2. What institutional policies and practices exist that support the Special Needs Activity Program? Therefore, the purpose of my research is to evaluate the Special Needs Activity Program in order to develop program implementation strategies that have practical outcomes. A review of literature pertaining to such issues will reveal current ideologies and future directions.

Chapter II- REVIEW OF LITERATURE

Disability

It is inevitable that almost all individuals will be temporarily or permanently disabled at one point in their life, and therefore, it is an issue that affects all people (World Health Organization, 2011). A 2010 estimation by the World Health Organization revealed that more than 1 billion people live with some form of impairment (World Health Organization, 2011). This is more prevalent since the population is growing older and difficulties in functioning will increase in advanced age (World Health Organization, 2011). McDermott & Turk, (2011) assert that there are medical, functional, and social perspectives when considering disability. Most researchers rely on one of these perspectives to guide their research or program development but McDermott and Turk (2011), suggest combining these models for a more comprehensive outlook. The medical model categorizes disability according to the number of deficits and prevalence of diagnoses a person acquires. The functional model approach identifies disability according to limits of function and/or use of an assistive device. The social model considers disability to be socially constructed as limits of functionality are believed to be environmental, economic, and political (McDermott & Turk, 2011). In 2010, the World Health Organization defined disability as “any restriction or lack of ability (resulting from an impairment) to perform an activity in a manner or within the range considered normal for a human being” (McDermott & Turk, 2011). Due to the broad nature of this definition, researchers find it difficult to analyze in order to address issues related to: prevalence of health conditions, activity barriers, prevention strategies, etc. (McDermott & Turk, 2011). According to Grenier (2011) and Grenier (2007), individuals have defined disability as “the disadvantage caused by social organizations, which tend to limit

their experience thus, excluding them from mainstream practices” (p. 99). When an individual is placed in an environment that inhibits individual performance, they are considered disabled (Grenier, 2011). Therefore, if the community assumes responsibility, then all environments should use a universal design when they are constructed. This would allow all people to navigate physical spaces more effortlessly and independently. Furthermore, In many physical education textbooks (especially in the United States), an individual with a disability is often portrayed as “different” than their non-disabled peers as well as someone who requires separate activities, isolated settings, and specialist intervention (Jobling, 2007; Obrusnikova & Dillon, 2011).

Motor Development

Barela (2007) suggests that seemingly involuntary and reflexive movements performed by infants are the same movements that are the foundation of their movement repertoires, and are developed throughout the lifespan into motor manifestations and sensory integration. Through repetitious actions, and interacting with their environment, the infant’s motor repertoire begins to expand. In order to perform a task, motivation is critical. For instance, a toy which is across a room may motivate an infant to take their first steps in order to retrieve it. Motivation also promotes exploration which is essential for an infant because it is how they acquire an abundance of perceptual and motor experiences that enhance their ability to functionally interact with the environment. Though the developmental sequence of those with and without disabilities are often the same, persons with a disability display delayed acquirement of motor skills. The interaction with their environment is minimal often due to a lack of motivation to explore, so, motor milestones are often missed or not developed (Barela, 2007).

Jobling (2007) categorizes individuals who have impairments that effect their motor development into four groups: persons with a physical impairment, persons with sensory impairments, persons with cognitive impairments, persons described as clumsy, or as having developmental coordination disorder. Jobling (2007) also notes that individuals diagnosed with an autistic spectrum disorder display a range of impairments in motor environments that are across the groups mentioned above. Physical educators are faced with the challenge of accommodating for the student's motor delays since these delays often affect the development of: fundamental motor patters, physical fitness, and the learning of complex motor skills (Block, 1991). For instance, it has been established that while children with Down Syndrome (DS) may show signs of a typical, yet delayed course of motor development, the child may possess unique motor challenges (Block, 1991). Individuals with DS are considered to have a chromosomal abnormality, and among other characteristics, generally have "floppy" muscle tone (hypotonia) (Sherrill, 1998). Jobling (2007) believes that effectively engaging in physical activity requires practice. It is possible for children with DS to significantly improve their motor performance through "smartly designed" practice (Jobling, 2007; Kodish et al., 2006). "Smartly designed" practice is referred to as practice that is: pertinent, purposeful, progressive, paced, participatory, and pleasurable (Jobling, 2007).

Alternatively, fine and gross motor deficiencies are prevalent in children with autism spectrum disorder (ASD) (Obrusnikova & Dillon, 2011). Autism Spectrum Disorder is considered an umbrella term that describes neurodevelopmental conditions that are characterized by deficits in communication and social skills as well as the exhibition of rituals and stereotypes (Obrusnikova & Miccinello, 2012). Motor behaviour

researchers have found that random practice is more effective than blocked practice when developing the acquisition of motor skills in children with autism (Jobling, 2007).

Knowing what to move (body awareness), where to move (space awareness), and how to move (the speed, the flow, and the weight of the movement) assists the development of motor skills and competence in children who have developmental delays.

Movement is an essential aspect of everyday life that most individuals take for granted and fundamental movement abilities are what enable the performance of numerous daily activities (Jobling, 2007). Jobling (2007) lists activities such as: walking, climbing stairs, washing dishes and dressing oneself, as well as throwing and catching, bike riding and manipulating pens, pencils, and scissors. However, there are many individuals who have difficulty carrying out such tasks on a daily basis and require programming that increases their confidence and competence to do so (Jobling, 2007). Once learning a novel motor skill is achieved, different modes of locomotion are achieved as a result, and thus, confidence in themselves and their life is increased (Hutzler, 2007; Rimmer & Rowland, 2008).

Physical Activity

Health agencies are becoming economically strained due to the decline of physical activity in the “Western” world (Hutzler, 2007; Vail, 2007). It is recommended that children acquire at least 30-60 minutes of developmentally appropriate physical activity on a daily basis and adolescents should be engaging in at least 20 minutes of moderate to vigorous activity three times per week (Frey et al., 2008; Rimmer & Rowland, 2008). Studies conducted on physical activity among youth with autism and physical disabilities has indicated that they are less active than other peers due to the lack

of activity opportunities (Frey et al., 2008; Hutzler, 2007; Anderson, 2010; Rimmer & Rowland, 2008; Fitzgerald, Jobling, & Kirk, 2003; World Health Organization, 2011). Children with cognitive delays are provided with limited opportunities to participate in physical activity and therefore, are typically less fit than children without disabilities (Horvat & Franklin, 2001; Hutzler, 2007). In 1996, a national study was conducted in Canada comparing health risk behaviours between youth aged 11-16 years with and without disabilities (Rimmer & Rowland, 2008). Rimmer and Rowland (2008) reference this study, and report that youth with disabilities had a rate of physical inactivity that was 4.5 times higher than their non-disabled peers. Consequently, those with physical disabilities acquire health risks such as: cardiovascular disease, diabetes, depression, anxiety etc. due to low physical activity levels (Giacobbi Jr., Stancil, Hardin, & Bryant, 2008; Rimmer & Rowland, 2008). Lower cardiovascular fitness levels and muscular strength, along with higher obesity rates are prevalent among individuals with intellectual delays (and other disabilities) compared to individuals without intellectual delays (Frey et al., 2008; Rimmer & Rowland, 2008; World Health Organization, 2011). It has been determined that physical activity benefits individuals with a variety of disabilities including: physical, mental, and developmental (Frey et al., 2008; Kodish et al., 2006; Fitzgerald et al., 2003; Anderson, 2010; Rimmer & Rowland, 2008). Further, diverse forms of physical activity result in considerable increases in strength and overall function among this population (Giacobbi Jr. et al., 2008; Rimmer & Rowland, 2008). Rimmer and Rowland (2008) explain that participation in physical activity reduces the risk of chronic disease in adulthood and minimizes or eliminates secondary conditions, which reduces the necessity for personal assistance in performing activities of daily living.

In a study conducted by Longmuir and Bar-Or (2000) and supported by Anderson (2010), youths with varying disabilities reported that their respective conditions limited their participation and perceived competence, which significantly reduced their physical activity levels as a result. The World Health Organization (2011) and Obrusnikova and Miccinello (2012) found that the number of barriers increased as children with disabilities aged. Minimal resources, costly physical activity initiatives, and physical barriers are the key causes for the deterrence of physical activity participation among the ASD population (Obrusnikova & Miccinello, 2012; Wilhite, Devine & Goldenberg, 1999; Kodish et al., 2006; Kirk, Macdonald & O'Sullivan, 2006; World Health Organization, 2011). When individuals have positive attitudes toward physical activity, they are more likely to participate long term, however, lack of time, motivation, and energy are often cited as additional barriers (Grenier, 2011; Hutzler, 2007). Youth aged 8-14 with autism were asked to list the obstacles and facilitators of participation in physical activity (Obrusnikova & Miccinello, 2012). Obstacles included: stationary activities, lack of transportation, and minimal peer support, while facilitators were comprised of: availability of appropriate equipment, peers are supportive/physically active, and physical activity programs are accessible (Obrusnikova & Miccinello, 2012; Hutzler, 2007; World Health Organization, 2011). Pan and Frey (2005) and Rimmer and Rowland (2008), found that factors that affected youth's physical activity most significantly were age and sedentary pastimes. However, the authors note that the increased time spent pursuing activities that are sedentary in nature is a result of the limited opportunities to be active. Longmuir and Bar-Or (2000) support this by stating that youth with cerebral palsy, muscular dystrophy, and visual impairments are most sedentary because they believe they

are not afforded enough opportunities for participation in physical activity (Wilhite et al., 1999; Kodish et al., 2006; Kirk et al., 2006). Many children with autism become inactive as they reach adolescence, however, if parents are physically active, they are more likely to encourage their children (with ASD) to participate and as a result, their child's competence, confidence, and participation will increase (Obrusnikova & Miccinello, 2012).

Due to the social and behavioural characteristics associated with Autism Spectrum Disorders, as well as reduced school-based physical activity opportunities, the risk of physical inactivity increases (Pan & Frey, 2005; Hutzler, 2007). However, Taub and Greer (2000); Spencer-Cavaliere and Watkinson (2010); Anderson (2010) found that through physical activity, children are able to "legitimize" their social identity as children and improve social interaction with peers. Further, according to parents of children with autism, the establishment of routines and schedules that include physical activity will generate predictability as well as choice in a physical activity setting which in turn increases their sense of control and participation (Obrusnikova & Miccinello, 2012). Physical activity habits develop at an early age and these habits will foreshadow those adopted in adulthood (Kodish et al., 2006; Rimmer & Rowland, 2008). So, it is imperative that caregivers make a conscious effort to make physical activity part of children's daily routines.

Adapted Physical Activity (APA)

"Why is it that the student has to accommodate the game rather than the game accommodating the student?" (Kirk et al., 2006, p. 755). Historically, individuals with special needs have been treated as second class citizens and not equal to their non-

disabled counterparts, and it is for this reason that Adapted Physical Activity (APA) strives to empower those who have less power and fewer resources than others (Sherrill, 2007; Riddle, 2012; World Health Organization, 2011). Hutzler and Sherrill (2007) state that APA has been defined as the following: “the body of knowledge that enables the creation of active living opportunities, a set of attitudes and behaviours that leads to the participation of people with a disability in sport and physical activity, and apart from the practice of adaptation, APA is a profession, a scholarly discipline, a service delivery system, and sometimes a program” (p. 8). “Activities”, “programs”, and “services” are consistent terms mentioned within the APA literature according to Hutzler and Sherrill (2007). So, the focus of APA should not be adapting physical activities, but rather, adapting the processes involved in ensuring the possibility of appropriate services and empowerment (i.e., planning, assessment, pedagogy, evaluation, etc.) (Hutzler & Sherrill, 2007; World Health Organization, 2011). Hutzler (2007) parallels this by defining APA as an enterprise that includes physical activities performed by individuals with disabilities, whereby participation ensured by service delivery systems, and practitioners recognize their professional responsibility. Moreover, adapted physical activity promotes interaction with the environment which expands motor and sensory experiences in the hopes of filling gaps in an individual’s motor repertoire (Barela, 2007). “If activity is worth doing, it is worth doing well” (Jobling, 2007, p.37).

Physical Education professionals are responsible for the environment they create, and this atmosphere will either benefit or be harmful to the development of students in their class (Fernandez-Balboa, 1997) (i.e., appropriate pairings at S.N.A.P, environment coordinators create, when leaders facilitate movement appropriately in a developmentally

appropriate environment, participants are adequately challenged, experience success and are more likely to continue).

Jobling (2007) supports this by stating that adaptation by the teacher that caters to the students' unique needs and context in which the activity is taking place is imperative.

Emes, Longmuir, and Downs (2002) suggest that the instructor facilitating APA should focus on providing a variety of activity options along with appropriate modifications.

Movement experiences among individuals with disabilities should not be regarded as a therapeutic means, but rather, an opportunity for enjoyment (Rodrigues, 2007). A

growing number of students with disabilities are being integrated into general education classes with their non-disabled peers (Lytle & Hutchinson, 2004; Block & Conatser,

1999). Thus, Obrusnikova, Block, and Dillon (2010) recommend that instructors create a learning environment that: addresses any apprehension among students without

disabilities, fosters success through inclusive pedagogy, and allows students to suggest

modifications. When games are modified, it results in increased activity time and greater rates of success among all students (with and without special needs) (Block &

Obrusnikova, 2007). However Block and Obrusnikova (2007) also caution that if

modifications change the nature of the game too severely then students without

disabilities may begin to not only resent the activity but also their peers with disabilities.

Block and Obrusnikova (2007) recognize that the main argument against inclusion is that

the adaptations made for children with special needs may lessen the learning

opportunities for children without disabilities. However, there are studies that have

examined this trepidation and have concluded that inclusion does not support that claim.

In fact, Kodish et al. (2006) found that academic and social benefits have been shown in

both inclusive general physical education classes and physical education settings among non-disabled students. Further, Kodish et al. (2006) assert that their study indicated that total activity levels were no different in classes that had students with autism included in them and those classes that did not. Inclusion of students with disabilities does not affect students without disabilities negatively in terms of: motor skill learning, on-task behaviour, and social acceptance (Kodish et al., 2006).

When developing a student's movement repertoire, Adapted Physical Education (APE) teachers need to promote confidence in the student's ability, not disability (Jobling, 2007; Emes et al., 2002). Further, according to Rodrigues (2007), the adaptation of motor tasks or activities is the identification and modification of making them more complex or simple in order to make it developmentally appropriate for the student so they are suitably challenged. In order for children to receive high quality activity, the play environment must be developmentally appropriate and may require adaptations in order to accommodate children with disabilities (Doctoroff, 2001; Anderson, 2010; Goodwin & Watkinson, 2000). Emes et al., (2002) add that making adaptations is good teaching practice. Therefore, instructors must be aware of the varying disabilities in their classrooms as well as the specific characteristics that accompany them. For instance, Doctoroff (2001) provides some helpful strategies for adapting the physical space to accommodate the needs of a child with cerebral palsy. Doctoroff (2001) suggests gluing knobs to puzzle pieces or placing Velcro straps on a child's hand to allow effortless retrieval of an object since their ability to grasp objects is affected. Doctoroff (2001) also notes that children with cerebral palsy experience uncontrolled, spastic movements which often results in unintentional movement of objects so, creating boundaries for materials is

helpful. Inclusive environments should cater to a diversity of learners and this should be considered when selecting appropriate play equipment (i.e., there should be balls available that come in a variety of weights, textures, and sizes) (Doctoroff, 2001; Spencer-Cavaliere & Watkinson, 2010). Doctoroff (2001) asserts that clearly defined spaces that are separated by evident boundaries are most beneficial, and pathways in the environment should be free of any physical obstruction as well as be wide enough to accommodate wheelchairs, walkers, and the like. Since children with special needs often lack social competence, these opportunities for play are also opportunities to develop their social skills (Doctoroff, 2001; Anderson, 2010). Choosing appropriate equipment is also important for this reason since several items may invite the use of more than one child (duplicates of an object, puppets, wagons, scooter boards) (Doctoroff, 2001). Unexpected changes in the environment may be difficult for a child with special needs to cope with, so, in order to prevent anxiety or behavioural outbursts, preparing the child ahead of time or allowing the child to participate in making the changes may be a helpful strategy (Doctoroff, 2001; Houston-Wilson & Lieberman, 2003). APA increases participation and improves overall quality of life (Hutzler, 2011).

Embedded Curriculum

“The gymnasium looks deceptively regular – an inviting activity space for young children – yet it is a strategic space with a deliberate pedagogy specifically arranged for the developmental needs of the children who will dwell there for the duration of the planned activity or program” (Connolly, 2008, p.248).

Over 10 years of observation and research, Connolly (2008) found that one of the most common under-developed motor milestones among this population is midline

crossing. Most infants with autism skip motor milestones that are the foundational movements for more complex ones later on in life. Midline crossing is one of the most commonly skipped or underdeveloped milestones among the special needs population. Midline crossing is the act of bringing the arms/hands and/or legs/feet across the middle of one's body. Typically developing children begin midline crossing as infants and continue to do so, repetitively as they grow. If this milestone is underdeveloped or avoided, it is possible to develop it later in life. However, is not practical for an instructor to presume, that the student can make up for the loss of repetitions from infancy on demand; nevertheless, the curriculum can be embedded in the environment in such a way that midline crossing happens regardless of the activity that is scheduled. For instance, having the student pull a rope with two hands, pushing with two hands on a stick, or deliberately crossing the body to reach for objects makes midline crossing unavoidable; in this way midline crossing is embedded and does not have to be requested.

Least restrictive environments that contain an embedded curriculum provide individuals with ASD an opportunity to develop their movement repertoires. Connolly (2008) observed that dominances in the movement repertoire include: fine, sudden movement, limbs kept near the body, flexed spine, same side or no arm action; toe walking, uneven gait, balance and balance regain issues, pathway drifting; uneven skill development. Absences in the movement repertoire include: midline crossing, firm movement; extension of spin and hip; running gait, landings with control; gradual deceleration; contralateral arm-leg movement; weight transfer variety; contrast. In order for the embedded curriculum to be effective, the instructor must make note of their respective student's "dominances" and "absences". Once the strengths and weaknesses in

the student's developmental repertoire are identified, strengths should be improved and weaknesses addressed "in ways which make it possible for the person to interact in meaningful ways with developmentally and/or age compatible peer groups". The instructor should continue to refine the program so that continuous development occurs respective of the student's profile.

Further, the embedded curriculum in Dr. Connolly's movement programs is made up of environmental, content, process and instructional components. Connolly (2008) explains that the environment should contain low levels of stimulation to allow students full potential for success. For example, thick, absorptive surfaces promote dorsi flexion at the foot (to reduce toe-walking), as well as firm weight qualities in the large muscles; Unstable surfaces (i.e., inclines and declines so tactile and kinesthetic systems are stimulated simultaneously) and obstacles are advantageous because they improve balance loss and regain, controlled and cushioned falls, vestibular and kinesthetic adjustments which decreases potential injury from falls; Dim lighting, muted walls and floors, free of patterns to reduce diversions from additional visual stimuli; Heavy objects that do not bounce enlist large muscle groups when lifting, and reduce noise (noise can be frightening or overwhelming); There are a variety of possible entry and exit points at each activity which encourages problem solving, as well as parallel and interactive play.

Typical equipment includes thick and heavy mats, heavy props, medicine balls, non-bounce balls and other manipulables, trampolines (large and small), blankets, towels, ropes, scooters, games equipment, fine motor props and toys, containers for toys, equipment set ups that can be gotten inside of, parachutes, mattresses, cushions, ladders, trestles and benches, stacking boxes (Connolly, 2008, p. 247).

The focus of content and process should be structured and predictable programming (i.e., visual schedules, social stories, scripting and re-directing). Time based activities are helpful because they are comprised of distinct tactile and visual markers that clearly distinguish beginnings, middles, and endings.

Typical activities include body awareness work on core-distal relationships, spinal flexion and extension and assisted flexibility; pushing, pulling, dragging, lifting, carrying; mid-line crossing via gripping, climbing, and various forms of reaching across the body to the opposite side; activities which compel intense gross motor activity and result in muscle fatigue; landings from a variety of heights; weight transfers and weight bearing on various combinations of body parts (other than hands and feet) (Connolly, 2008, p. 247).

Connolly (2008) explains that instructional strategies also contribute significantly to the success of embedded curriculum facilitation. Since individuals with ASD have difficulty with social read and transitions, it is imperative that facilitation is: continuous, thorough, done so in a calm manner, with flat affect, and low voice volume.

The physical programming expectations at Dr. Connolly's youth programs involve "intense and vigorous gross motor activity". Not only is the gross motor activity developmentally appropriate, it improves fitness and conditioning, the neuromuscular involvement is quite concentrated thus, fatiguing the child, and allowing them to sleep through the night. "Parents continually remark on the improved sleep patterns following these physical programs, and the ripple effects, including parental sleep, child is more

alert and attentive in morning, exhibits less unmanageable behaviour at night, and is at ease in learning tasks, to name a few” (Connolly, 2008, p.249).

Observed outcomes in the movement program participants by Dr. Connolly include: real fatigue and real sleep; improvements in fitness and strength and expansion in the movement repertoire, hence improvements in self-sufficiency and activities of daily life; improvements in motor milestones; reduction in “stimming” behaviours; improvements in redirection and self-selection of preferred modes of relaxation; some improvements in social read, activity initiation, parallel and partner play (Connolly, 2008).

Meaningful movement programs such as the embedded curriculum described in the paper also have incalculable professional development, policy development, pedagogic and scholarly benefits, including: continued provision of a necessary service based in physical activity; opportunities to study and increase understanding of persons with ASD; opportunity for inter-agency liaison; heightened profile of ASD in the community; expanded movement and social skills repertoires in program participants; movement profiles are portable to schools and specialized programs as benchmarks for evaluation of progress; increased exposure to ASD for young professionals in training; increased potential for transdisciplinary work (especially across disciplines using markedly differing methodologies, i.e., semiotic phenomenology and neurophysiology); appreciation for scholarship and pedagogy with a basis in narrative, lived experience and robust observation (Connolly, 2008).

Inclusion

Since many subjects are taught in segregated environments (including physical education), it makes it more difficult for non-disabled peers to accept students with disabilities (Wilhite et al., 1999). Exclusion of children with special needs leads to limited opportunities for the development of their physical and social skills (Taub & Greer, 2000; Grenier, 2007; Anderson, 2010). Spencer-Cavaliere and Watkinson (2010) and Goodwin and Watkinson (2000) found that the actions of others are what determined whether children felt more, or less included in physical activity environments. Correspondingly, Wilhite et al. (1999) and Spencer-Cavaliere and Watkinson, (2010) concede that the degree of interaction between children with and without disabilities influenced the level of acceptance experienced in an environment. Mainstreaming students with disabilities into environments with typically developing peers and having them perform at similar skill levels used to be the goal of special education (Kauffman, McGee, and Brigham, 2004). Kauffman et al., (2004) explain that currently, educators have taken accommodation and inclusion to the extreme, and as a result, special education is facing unfortunate consequences. Rather than promoting independence and competence, the philosophy seems to have shifted to creating the illusion of independence without the expectation of competence (Kauffman, et al., 2004). It is imperative that teachers and administrators ensure the accommodations made for students with special needs are in their best interests long term (Kauffman, et al., 2004). In other words, accommodations should not encourage the student's disability but rather, encourage independence. Kauffman, et al., (2004) mention that special education used to be considered a beneficial and useful way of responding to atypical needs of students

with disabilities. Currently however, the belief seems to be that special education is a positive thing as long as it is identical to or parallels general education (Kauffman, et al., 2004). That is, education should accommodate the needs and abilities without having to single out students by giving them separate lessons. However, not openly discussing disability increases its stigma. When students are all placed in the same class, it gives the illusion that they are all performing at the expected level, when that is not the reality and adaptations are necessary (Kauffman, et al., 2004). Acting as if the disability does not exist does not benefit the student; it perpetuates the disability and sets them up for failure. Further, since special education is often seen as an exemption of expectations, it hinders the student through the promotion of perpetual infantilization.

A study conducted by Wilhite et al., (1999) and supported by Spencer-Cavaliere and Watkinson (2010), found that physical activity settings should be cooperative versus competitive as this promotes interactions between disabled and non-disabled peers that are equitable and equal. Social expectations have a strong influence on the probability of students without disabilities to willingly include a student with disabilities in general physical education class (Block & Obrusnikova, 2007). Therefore, when training teachers on how to modify their physical education class to make it more inclusive, they should also be taught how to educate students who are not disabled about how to interact appropriately with their peers (Block & Obrusnikova, 2007; World Health Organization, 2011; Fitzgerald, 2005). It has become more common for students with special needs to be integrated into inclusive, educational settings rather than being segregated from their non-disabled peers (Lytle & Collier, 2002; Lytle & Hutchinson, 2004; Block & Conatser, 1999). So, inclusive physical education emulates real world situations outside of school

wherein students with special needs are integrated with students without special needs (Kodish et al., 2006).

Service providers have been challenged by the task of creating inclusive environments and since they are often not trained appropriately (if at all), their best intentions fall short and inclusive experiences may not be positive as a result (Wilhite et al., 1999; DePauw & Doll-Tepper, 2000; Kirk et al., 2006; Cook, 2002; Emes et al., 2002; Ammah & Hodge, 2006). For instance, Wilhite et al. (1999) explain that if students need to ask for assistance, they may feel as though they are burdening others, or are not competent which leads to embarrassment. “Bad days” described by students with disabilities included days when their competence was questioned, while “good days” included opportunities for active participation, and a sense of acceptance. Inclusion is understood by children with special needs as: “acceptance”, “belonging”, and “value” (Spencer-Cavaliere & Watkinson, 2010; Goodwin & Watkinson, 2000). In a report by Spencer-Cavaliere and Watkinson (2010), feelings of exclusion by students with special needs led to beliefs that they were seen as “objects of curiosity”. In order for a child to be motivated to learn, they must feel a sense of belonging; therefore, exclusion from a setting such as a physical education class will cause the student to feel that belonging is not a basic human right, but rather something that needs to be earned (Tripp, Rizzo & Webbert, 2007). When students feel that they belong and are accepted in a physical education/activity environment, they will equate that experience with positive feelings which will increase the probability of continuing an active lifestyle outside of school (Tripp et al., 2007; Anderson, 2010; Fitzgerald et al., 2003; Goodwin & Watkinson, 2000). Participation in physical activity is reduced among this population due to the lack

of available programs and qualified personnel (Taub & Greer, 2000; World Health Organization, 2011). For instance, Adapted Physical Education specialists reported that they did not receive formal training in consultation (Lytle & Collier, 2002; Ammah & Hodge, 2006). Wilkinson (1984), refers to this as being “doubly ‘handicapped’” by both the physical disability and lack of accessible situations. It seems as though individuals in positions of responsibility sometimes confuse making life better for students with making things easier for them (Kauffman, et al., 2004). Kauffman, et al., (2004) explain that not giving students an opportunity to try things on their own in order to “protect” them from failing, only hinders their development and denies them the opportunity to succeed as well. This notion parallels the philosophy surrounding physical activity; if caregivers do not allow students to have physical opportunities and/or experiences for fear that they may injure themselves or fail, they are also denying them the opportunity to develop fundamental motor skills which will enable them to transfer those movements into daily living and thus become more independent. Kauffman, et al., (2004) add that it is imperative that modifications made for students are appropriate; they should be challenging yet realistic. Accommodations that act as compensations for possessing a disability, and exempt individuals from responsibility are doing an injustice to both the individual and education system as a whole (Kauffman, et al., 2004). It is not acceptable to presume that students with special needs possess competencies that they do not or pretend that what is believed to be important for their peers is not important for them as well (Kauffman, et al., 2004).

It is important that children with special needs be provided with the appropriate resources to thrive in a variety of environments and diminish or eliminate any constraint

that would prevent them from doing so (Barela, 2007; Anderson, 2010; McDermott & Turk, 2011). Since physical education teachers are often intimidated or not interested in teaching students with physical disabilities, these students given the role of spectator rather than participant within the class (World Health Organization, 2011; Taub & Greer, 2000). Tripp et al., (2007) describes this as “functional exclusion”; the student “participates” in physical education class but the participation is not meaningful (Tripp et al., 2007). In other words, the student is denied the opportunity to learn and be physically active (Kodish et al., 2006). Cook (2002) suggests that in order to increase instructor preparedness and competence, special education courses should be offered to pre-service teachers. However, Cook (2002) also recognizes that separating special education from generalized education, contributes to the pre-existing notion that special education and general education are disjointed. It would be most beneficial to combine special education content and practical experience into required courses in general education (Cook, 2002; DePauw & Doll-Tepper, 2000). Correspondingly, Ammah and Hodge (2006) researched two high school physical education teachers who believed that they were not sufficiently prepared to successfully teach students with special needs. Neither teacher felt adequately prepared to appropriately modify their lesson plans to include students with disabilities in their class activities, which affected their confidence as a result (Ammah & Hodge, 2006). These teachers would have benefited from exposure to teaching strategies for working with students with mild to severe disabilities through course work and practicum experiences (Ammah & Hodge, 2006). In fact, they stated that learning to adapt and modify class activities would have enhanced their self-confidence when teaching students with special needs (Ammah & Hodge, 2006). Change

is intimidating for some physical educators so it is resisted at all costs as to not disturb the current status quo (Tripp et al., 2007). However, Kodish et al. (2006) calls on teachers and researchers to provide evidence that supports positive inclusion implementation through the Least Restrictive Environment (LRE) setting. Individuals with Disabilities Education Act (IDEA) is a United States federal law that was enacted in 1990 (Katsiyannis, Yell, & Bradley, 2001). It ensures that all individuals regardless of ability receive free and appropriate education (Katsiyannis et al., 2001 and Sherrill, 1998). As a result of this Act, the term “least restrictive environment” was developed. Sherrill (1998) explains that an environment is considered least restrictive when: students’ abilities are matched to a specific environment, individual abilities are matched with appropriate services, and individual freedom is preserved to the greatest extent possible. Collier (2005) explains that Sherrill (1998) emphasized that adapted physical education, as pedagogy, was not limited to separate or special education (segregated) settings. The LRE should be dense with occasions for authentic problem solving, activities that allow for personal choice and self direction, as well as a diversity of goals and ways to achieve the respective goals (Rueda, Gallego, & Moll, 2000). Inclusion is an educational philosophy that encourages instructors to provide opportunities for successful outcomes (Grenier, 2007; Emes et al., 2002). Inclusive environments have proven beneficial for both individuals with and without disabilities (Wilhite et al., 1999; Anderson, 2010; Emes et al., 2002). Adjusting to fit the status quo has often been the measure of success, however, an inclusive school is one which encourages diversity, where instructors have high expectations for all their students, and programming is developed to meet students’ needs (Grenier, 2007; Goodwin & Watkinson, 2000; Kirk et al., 2006). Inclusion is about

diversity within the class, not disability exclusively (Tripp et al., 2007; Grenier, 2007). Using strategies in the classroom such as poster boards to accommodate the visual learner or close-ended questions to accommodate students with autism and/or attention deficit (hyperactivity) disorder can be easily implemented (Grenier, 2011). Visible storage and labels may help facilitate clean up and assist in orienting the children to where materials belong (Doctoroff, 2001; Houston-Wilson & Lieberman, 2003). Doctoroff (2001) also notes that tactile cues can be implemented for children with visual impairments by gluing the actual object to the storage unit or using glue to create raised drawings. If physical education environments are inclusive, and barrier-free, differences among ability are diminished (Obrusnikova et al., 2010)

In order to determine what constitutes a successful inclusive environment, more focus should be placed on the participants' perspective, as this may result in more appropriate developments to existing initiatives that will lead to improved experiences (Wilhite et al., 1999; Fitzgerald et al., 2003; Goodwin & Watkinson, 2000; Fitzgerald, 2005; DePauw & Doll-Tepper, 2000). Fitzgerald et al., (2003) argue that most research that includes young individuals with a disability, assumes that the population is passive and dependent. These assumptions are what silences the voices of those whose opinions would be the most insightful and useful (Fitzgerald et al., 2003; Goodwin & Watkinson, 2000; Fitzgerald, 2005). If feedback is limited to the opinions of others, our understanding of what inclusion is, along with what constitutes meaningful experiences in such environments is also limited (Spencer-Cavaliere & Watkinson, 2010; Fitzgerald et al., 2003; Fitzgerald, 2005). Inclusion is a subjective experience constructed by the individual, therefore, their thoughts and feelings are integral in order to improve

strategies that will facilitate inclusion in a variety of physical activity contexts (Spencer-Cavaliere & Watkinson, 2010; Fitzgerald et al., 2003; Goodwin & Watkinson, 2000; Fitzgerald, 2005). Examination of perceptions established that inclusion improved self-perceptions (Wilhite et al., 1999; Anderson, 2010). Wilhite et al. (1999) state that participation in inclusive leisure activities can only happen if environments are structured in a way that is conducive to developing a positive self-image.

Quality of Life

Subjective evaluations are valid determinants of an individual's quality of life in the realm of some professions, while other professions analyze behaviour, mobility, physical activity, and social factors in order to make a seemingly accurate judgement (Giacobbi Jr. et al., 2008). Medically, quality of life depends on the presence or absence of disease (Giacobbi Jr. et al., 2008). Conversely, according to Rodrigues (2007) and Anderson, (2010), an individual's quality of life is affected by their level of social, emotional, motor, professional, and intellectual activities. Giacobbi Jr. et al. (2008) believes that an individual's ability to provide themselves with basic care, perform daily living tasks independently, and experience few ailments should determine how they rate their quality of life. The World Health Organization (2011) explains, that individuals with disabilities require more health care than individuals without disabilities, and the health care needs they seek are often unmet. As a result, people with disabilities are: typically more vulnerable to secondary health conditions, more prone to health risk behaviours, and experience higher rates of pre-mature death (World Health Organization, 2011). Ironically, as the population who makes use of the health care system the most, they are

rarely the target for health promotion and prevention activities (World Health Organization, 2011).

The World Health Organization (2011) suggests that disability education be incorporated into undergraduate courses in health related fields. They also advise that individuals within the community be trained in order to facilitate preventative health care services. Thus, by improving an individual's quality of physical activity and health, adapted physical activity professionals are able to improve the individual's quality of life as well, regardless of unequal opportunities and insufficient resources (Sherrill, 2007; Anderson, 2010). Rimmer and Rowland (2008) conclude that youth with disabilities are able to safely participate in community-based physical activity programs when there is appropriate supervision and knowledgeable staff. Further, when barriers are removed from inaccessible environments, independence is increased (Grenier, 2011, Rimmer & Rowland, 2008). Participants (active wheelchair users) in a study conducted by Giacobbi Jr. et al. (2008) reported psychological, physical, emotional, and social benefits when they were engaged in physical activity, which resulted in increased quality of life. They were able to better manage their rage, stay focused, and gain a sense of independence. Further, the participants' involvement in physical activity was associated with increased self-competence to perform various movement skills and participate in activity settings, as well as manage their health.

Adapted Physical Education Consultants

As mentioned previously, teachers feel responsible yet, inadequately prepared to adapt their physical education environment to include students with disabilities (Block & Obrusnikova, 2007; Kodish et al., 2006; Spencer-Cavaliere & Watkinson, 2010;

Houston-Wilson & Lieberman, 2003; Hutzler, 2007; Kirk et al., 2006; Wilhite et al., 1999; DePauw & Doll-Tepper, 2000; Cook, 2002; Emes et al., 2002). However, a consultant has the potential to assist the general physical education teacher by developing their knowledge about how to implement a lesson to children with disabilities (Jobling, 2007). An Adapted Physical Education (APE) consultant can be most helpful by assisting the general physical education teacher with preparing the student to transfer skills they are learning in physical education class to their own lives (Huettig & Roth, 2002). Therefore, general physical education teachers should be informed about how to most appropriately maximize the support they receive from APE consultants (Huettig & Roth, 2002).

Formerly, the positions of adapted physical educator and consultant were synonymous, they transferred their knowledge to the general education teacher who worked as the mediator while the student received instruction (Lytle & Hutchinson, 2004). Service implementation to children with disabilities in physical education has changed drastically over the years (Lytle & Hutchinson, 2004). Currently, a more collaborative consultation process is preferred among educators (Lytle & Hutchinson, 2004). This process includes discussion among: adapted physical educators, parents, teachers, educational assistants, and other professionals to ensure students are meeting their respective Individualized Education Plan (IEP) objective(s) (Lytle & Hutchinson, 2004). The ability of a student with special needs to successfully reach the goals set out for them in their IEP determines the effectiveness of consultation (Lytle & Collier, 2002). Furthermore, as a result of the consultation process, teachers experience increased self-confidence in their abilities to provide appropriate instruction/services and meet the

objectives in their student's IEP (Block & Conatser, 1999; Huettig & Roth, 2002). Block and Conatser (1999) describe this as a problem solving process whereby the consultant assists other experts (consultees) in working more successfully with a third party. Block and Conatser, (1999) also notes that all members who participate in the meeting will contribute their own knowledge and expertise, and thus, everyone's input should be valued in order for the process to be successful.

Having trained peer tutors in the general physical education classroom has improved the motor performance of students with disabilities considerably (Block & Obrusnikova, 2007; Spencer-Cavaliere & Watkinson, 2010). Peer tutors in a study conducted by Block & Obrusnikova (2007) were trained in: specific disabilities, appropriate cueing and modeling, as well as effective feedback techniques. There are various roles that are comprised to form the overall role of the adapted physical education consultant, which includes: advocate, trainer/educator, fact finder, and process specialist. The "advocate" should strive to change structural or instructional barriers that prevent the student from achieving success. The "trainer/educator" provides information about specific disabilities, how to accommodate for disabilities in the classroom, what instructional strategies are most beneficial etc. The "fact finder" role involves delivering information to others about equipment or resource materials that they would find helpful. The "process specialist" does not determine what curriculum is being implemented but how it is being implemented by the instructor in order to create an environment that promotes successful accomplishment (Lytle & Hutchinson, 2004; Block & Conatser, 1999). In a study conducted by Lytle & Hutchinson (2004), two roles emerged in addition to the ones mentioned above: supporter/helper and resource coordinator. The

“supporter/helper” role entails providing positive feedback to teachers as well as assisting them with all students in their classrooms (not just restricted to helping students in the classroom with disabilities). The “resource coordinator” seeks out programs and/or services that parents can enrol their children in within their respective communities. Recognizing the significance of these roles demonstrates the requirement of consultation training APA pre-service programs. Lytle and Collier (2002) identified six benefits of consultation: students are immersed and able to learn in the same setting as same age peers, the adapted physical education specialist can enhance the quality of physical education curriculum implementation, students with disabilities are able to receive benefits beyond on-site intervention, scheduling is more flexible, gives parents and teachers peace of mind, and students receive higher quality instruction. Emes et al., (2002) place emphasis on learning by doing and suggest that facilitators be members of the group and thus, become partners in a learning situation. In this instance, all participants are responsible for discovering the most appropriate means to support the needs of youth with disabilities in a movement based environment (Emes et al., 2002).

Program Evaluation/ Strategic Planning

The World Health Organization (2011) recommends that assessment and treatment guidelines offered by professionals should be evidence-based. Strategic planning helps determine the direction an organization is headed over a specific period of time (Hutzler, 2007). Reed (2007) explains that Appreciative Inquiry improves benefits of participating in program and improves the quality of experience for stakeholders. Migliore, Stevens, Loudon, & Williamson (1995) recommend that strategic planning occur every 3-5 years. In addition, planning allows the organization to realize

opportunities created by change, create solutions to issues, and make responsibilities explicit and clear (Migliore, et al., 1995). In addition, strategies and programs implemented should be specific to the child and depend on the following: age, medical history, and abilities (Block, 1991). Similarly, Jobling (2007) asserts that in order for a program to be effective, observation and solving movement problems with the individual's personal feelings about self-confidence in mind is essential. Important environmental factors (external) to consider: economic trends, demographic trends, community issues, changes in services offered to community members, trends in competition, volunteer recruitment trends, changes in client needs (Migliore et al., 1995). Migliore et al., (1995) as well as Whitney and Trosten-Bloom, (2010) assert that this develops a foundation that leads to member commitment and loyalty therefore, strategic planning is a process that should involve multiple stakeholders. Sampling in Appreciative Inquiry is purposeful as the researcher strategically chooses who should take part in the study (Reed, 2007). This is beneficial because when people contribute, they are more motivated to support because their respective contributions are recognized and respected (Vail, 2007; Whitney & Trosten-Bloom, 2010). Strategic planning generates decisions and actions that guide what an organization is, what it does, and why it does it. SWOT (strengths, weaknesses, opportunities, threats) analysis is the most widely used tool for strategic planning, as it is the most efficient way to formulate strategies for administrators that increases opportunities and reduces threats by maximizing strengths and minimizing weaknesses. Strengths and weaknesses are determined by internal factors while opportunities and threats are determined by external factors. SOAR (strengths, opportunities, aspirations, results) is a strategic planning tool that builds on strengths and

seeks to understand the whole system by including the viewpoints of relevant stakeholders (Stavros & Hinricha, 2009). SOAR integrates Appreciative Inquiry; Appreciative Inquiry investigates what is working within an organization and discovers how to do more of it instead of attempting to fix what does not (Stavros & Hinricha, 2009). Historically, Appreciative Inquiry was used as an organizational development tool because it uncovers what people value in order to promote change (i.e., how work could be enhanced and how ideas could be applied) (Reed, 2007). Whitney & Trosten-Bloom (2010) explain that encouraging multiple viewpoints of individuals from various positions within an organization is “depth and breadth thinking”. This type of thinking does not aim to change, but rather, uncover existing strengths (Whitney & Trosten-Bloom, 2010). Reed (2007) discovered that asking positive questions seems to be most productive in order to explore novel information and bringing parts of the past into the future makes moving forward toward the unknown more comfortable (individuals are more willing to try new things when they are able to build on the things that are working instead of starting from “scratch”).

Conclusions and Future Directions

An important critical question directed toward our profession: how do we promote an educational environment that allows individuals to develop skills that contribute to a meaningful life? (Fernandez-Balboa, 1997). Teaching is a moral activity as instructors have an obligation to nurture and protect the well being of their students, this includes modifying their teaching environments to accommodate all students (Fernandez-Balboa, 1997). Therefore, every organization should have a mission statement that outlines its: history, unique competencies, needs, and environment

(Migliore et al., 1995). Whitney & Trosten-Bloom, (2010) state that an ideal organization considers the best of the past and incorporates the most hoped for future.

Results of a study conducted by Longmuir & Bar-Or (2000) and supported by the World Health Organization (2011) indicated that more interventions are required in order to provide effective programming for youth with varying disabilities. Such interventions should be expanded from physical education contexts, to other relevant physical activity contexts for youth with special needs (Spencer-Cavaliere & Watkinson, 2010; DePauw & Doll-Tepper, 2000). In addition, parents in the study conducted by Obrusnikova & Miccinello (2012) emphasized the importance of disability awareness training and the necessity for more physical activity programs that cater to youth with autism. Existing services for individuals with special needs are not sufficiently funded which affects the accessibility and availability of the interventions (World Health Organization, 2011). Longmuir and Bar-Or (2000) and the World Health Organization (2011) express similar sentiments respectively that there are not enough programs that cater to youth with muscular dystrophy, or variety among the ones that do and there is a necessity for more services and programs for individuals with special needs, especially transition age youth (between child and adult). Most research studies focus on exercise behaviours rather than investigating what activities children are participating in (Horvat & Franklin, 2001). Thus, Horvat & Franklin (2001) assert that physical activity should be assessed in authentic environments through observation in order to obtain accurate results. Lastly, Obrusnikova & Miccinello (2012) express the need for such studies to investigate the environmental characteristics that support participation of children with autism in physical activity as well. DePauw and Doll-Tepper (2000) not only recognize the

importance of transition from school-based programming to community settings, but they also state that adapted physical activity has shifted from program and placement to service and process. Since this shift, research and programming has not adequately addressed transition concerns and collaboration among school, community, and family.

Chapter III- PHILOSOPHY AND PROCESS OF RESEARCH METHODS

Paradigmatic Perspectives

Willis (2007) outlines three epistemological and ontological belief systems that guide research practice in a field: postpositivism, critical theory (emancipatory), and interpretivism. Postpositivists believe that reality exists separate/outside the individual and that knowledge is out there for the individual to stumble upon and discover (Willis, 2007). Critical theorists also believe that there is an external reality, however, the methods they use to discover the reality are subjective; they recognize that the researcher's values and beliefs are what drive the research (Willis, 2007). An interpretivist believes that an individual's understanding of a phenomenon is based on cultural and personal prejudices (Willis, 2007). Therefore, their reality is socially and contextually constructed. In order to understand an experience/situation, an interpretivist recognizes that they must acquire that understanding through multiple perspectives on the topic (Willis, 2007). Since I plan to gather multiple viewpoints about the Special Needs Activity Program, I will be conducting my research using an interpretive world view. "Social reality is constructed through interaction, development of shared meaning, and communication...that is, the reality is dynamic and responsive to the fluctuations of human interaction, perception and creation of meaning" (Willis, 2007 p. 193). Correspondingly, Kay (2009) believes this information is beneficial because there is potential to capture an individual's point of view on an experience within the routine of everyday life, which leads to valuable insights, and has the potential to inform future directions, and represent local knowledge. S.N.A.P will be a common component in all the realities of the individuals I gather data from, so it is imperative that I understand all

perspectives in order to appropriately evaluate the program. I also recognize that though I will be using an interpretive world view, this research has the potential to be emancipatory as well. Since the end goal is to develop program implementation strategies that have practical outcomes, I hope to create an easily accessible document that stakeholders including but not limited to S.N.A.P coordinators and educational assistants are able to use in their own contexts.

Theoretical Perspectives

Critical Disability Theory

The standard of living in Canada is generally considered excellent, yet not all Canadians experience the same level of high-quality living since individuals with disabilities are among those who face recurring coercion, marginalization, and social exclusion (Pothier & Devlin, 2006). According to Pothier and Devlin (2006), traditional responses to the needs of persons with disabilities vary between charity and “welfarism”. Though both responses are usually well-intentioned, they have failed to adequately respond to the needs of persons with disabilities thereby increasing the potential of complicating the problems experienced by this population as a result (Pothier & Devlin, 2006). Individuals with special needs are commonly infantilized throughout their lives. Most times, this unnecessary assistance is offered with the best intentions; however, it deprives the individual of the opportunity for skill development and the chance to increase their autonomy (which in turn would increase self-esteem and self-confidence). Pothier and Devlin (2006) propose that a system of deep structural economic, social, political, legal, and cultural inequality in which persons with disabilities experience unequal citizenship is created as a result. “Our central arguments are that disability is not

fundamentally a question of medicine or health, nor is it just an issue of sensitivity and compassion; rather, it is a question of politics and power (lessness), power over, and power to” (Pothier & Devlin, 2006). The goal of critical disability theory is to challenge assumptions and presumptions so that persons with disabilities can more fully participate in contemporary society (Pothier & Devlin, 2006). Pothier and Devlin (2006) note that if disability is understood as a socially created barrier, then, responsibility and accountability shifts to the larger community. The S.N.A.P outreach parallels this notion since the physical environment is set-up in way that minimizes barriers that these individuals would encounter in their daily lives. Further, Pothier and Devlin (2006) proclaim that disability is a question of politics and power (power over and power to) and that this power struggle underscores the special needs community as “lesser” second-class citizens. Their view is emancipatory in nature because they are recognizing power struggles and exploring solutions to combat them. Exposing persons with disabilities to adapted physical activity programs increases the possibility for individuals of this population to continue implementing physical activity into their daily routine, increasing their physical repertoires, as well as increasing their level of perceived competence. Though, as Pothier and Devlin mentioned, responsibility and accountability shifts to the larger community in order to ensure that these opportunities are available to individuals with special needs.

Constructive and Pragmatic Theory

Pragmatism emphasizes that the human being is an embodied creature, rooted in the complexities of our natural situation, and that human consciousness and self-consciousness serve us as means to understand and control our natural situation

(Campbell, 2007). Campbell (2007) asserts that Pragmatism is concerned with a number of values including: our place within nature, and our role as experimenters who are attempting to understand the limits and possibilities of our natural situation; experience as our criterion of belief and action, as the means of directing ourselves to a better future; emphasis on community as the source of our well-being and the focus of our efforts to enact long-term improvements. Analogous to Critical Disability Theory, Pragmatism focuses on directing ourselves to a better future and relying on community to endorse positive change. Parallel to Pragmatic Theory, Constructive Theory asserts that knowledge about the world does not simply exist out there, waiting to be discovered, but is rather constructed by human beings in their interaction with the world (Gordon, 2009). Constructivists believe that what is deemed knowledge is always informed by a particular perspective and shaped by various implicit value judgments. Gordon (2009) explains that Philosopher and Psychologist, John Dewey believed that genuine knowledge comes neither by thinking about something abstractly nor by acting uncritically, but rather by integrating thinking and doing, by getting the mind to reflect on the act.

The abovementioned theories parallel and complement one another, and thus, will inform my research and methods. Since S.N.A.P is a common component in all the realities of the individuals I gather data from, it is imperative that I understand all perspectives in order to appropriately evaluate the program. Further, if disability is understood as a socially created barrier, then, responsibility and accountability shifts to the larger community. Therefore, I plan to gather data from those directly and indirectly affected by the success of the program.

Methodology

In order to answer the aforementioned research questions, I explored the following: determining what stakeholders consider a quality adapted physical activity program, recognizing quality pedagogy and program development, incentives for participation, and threats to sustainability. The analysis strategies used were inductive and deductive methods involving: close reading, key words, revelatory phrases and confirming or disconfirming patterns. In order to explore these components within my research, I believed a case study design would be the most appropriate approach. Olsen (in Merriam, 1988) offers three statements that reflect the case study's particularistic nature: it can suggest to the reader what to do or what not to do in a similar situation, it can examine a specific instance but illuminate a general problem, it may or may not be influenced by the author's bias. Merriam (1988) states: "A case study is an examination of a specific phenomenon such as a program, an event, a person, a process, an institution, or a social group" (p.9). I used the Special Needs Activity Program at Brock University to conduct an evaluative case study in order to develop program implementation strategies that have practical outcomes. "Case study concentrates on many, if not all the variables present in a single unit" (Merriam, 1998, p. 7). An evaluative case study involves description, explanation, and judgement as well as illuminates meanings and communicates implicit knowledge to the reader (Merriam, 1988). Further, it is considered the "common language approach to evaluation" because jargon-free language is used so that the results of research are able to be communicated more easily to non-researchers (Merriam, 1988). The major strength of using a case study approach is that the researcher has the opportunity to use multiple methods of data collection in order to achieve

“methodological triangulation” (Merriam, 1988). Triangulating data is beneficial according to Merriam (1988) because the observer is able to achieve the best of each method while overcoming their respective deficiencies.

Method

In order to answer my first research question, I conducted interviews, distributed qualitative questionnaires, and carried out unobtrusive observations. Reflections of practitioners and stories of individuals with relevant experiences are invaluable sources of knowledge and understanding (Willis, 2007). Merriam (1988) states that gathering and interpreting data requires instruments that are sensitive to underlying meaning and make use of “human sensibilities” such as: interviewing, observing, and analyzing. Therefore, semi-structured interviews were conducted with individuals both affiliated (youth) and not affiliated (service learning expert and two senior administrators) with the program. Merriam (1988) quotes Patton (1980) in order to reiterate why interviews are such an advantageous facet of case study research: “we interview people to find out from them those things we cannot directly observe... we cannot observe feelings, thoughts, and intentions...we cannot observe situations that preclude the presence of an observer...the purpose of interviewing, then, is to allow us to enter into the other person’s perspective” (pg. 72). For that reason, I asked interviewees what they believed the strengths and weaknesses of the program were and their feedback also contributed to summative evaluation of the program whereby interviewees judged the merit and worth of S.N.A.P. Patton (1994) also explains that formative evaluations assist programs prepare for summative evaluations since formative evaluation provides feedback about the strengths and weaknesses that effect goal attainment while summative evaluation judges the merit

and worth of the respective program. Since participants came out of a constituency, letters of invitation were distributed (requesting their participation by means of questionnaire) to: 3 educational assistants, 15 coordinators, 5 volunteers, and 5 parents of participants.

Further, ethnographic observations and unobtrusive investigations were also conducted as Merriam (1988) believes that observations allow the observer to notice things that have become routine in an environment, and see things directly which allows them to use their own knowledge and expertise in interpreting what is observed. Through this method I acquired results inductively as patterns emerged from regular immersion in the field. Merriam (1988) suggests that just as interviews have a range of structure, so do observations and she recommends a checklist of elements that an observer can use as a resource while in the field (Appendix A). I used this checklist as a guide for my own research because it appeared to be applicable and easily adaptable. The amount of time spent observing is contextual and dependant on the purpose of the study and the practical constraints (Merriam, 1988). Since I am familiar with the program and its consistent components (i.e., timeline, location, physical set-up etc), I believe field observations on a weekly basis, conducted over a span of 8 months was sufficient in order to gather significant data. Finally, S.W.O.T (strengths, weaknesses, opportunities, threats) and S.O.A.R (strengths, opportunities, aspirations, results) analysis was conducted in order to focus and contribute to triangulation of the data.

In order to answer my second research question, I examined existing and accessible institutional policy documents including: Brock University's Strategic Plan (December 2010), and Brock University's Integrated Strategic Plan: Priorities to Actions

(August 2011). Examining these documents enabled me to decipher whether the Special Needs Activity Program paralleled the institution's vision. If it did not, I planned to explore the reasons through further interviews and if it did, I intended to investigate whether the policies were being put into practice in order to ensure the sustainability of the program. Warchal and Ruiz (2004) state "the personal, social, and educational outcomes of service-learning validate the mission statements of most colleges with a tradition of service".

According to Brock University's Integrated Strategic Plan: Priorities to Actions (August 2011), the institution envisions itself as: Making a difference in the lives of individuals in our Brock community, the Niagara region, Canada, and the world; Demonstrating leadership and innovation in teaching and learning across disciplines; Extending knowledge through excellence in research, scholarship and creativity. Further, its academic mission is:

"...to nurture and support our faculty and students in the discovery of knowledge through exemplary scholarship, teaching and learning. We provide undergraduate and professional education of the highest quality, while continuing to expand graduate programs that are integrated into Brock's growing reputation for excellence in research and innovation. **We provide a transformative experience for our students inside and outside the classroom by helping to develop their full potential as creative, educated citizens in a global community.** Brock University works to enhance the economic, social, cultural and intellectual lives of the communities around us — Niagara, Ontario, Canada, and beyond — and to demonstrate the vital ways in which we contribute to the betterment of society in

the 21st century” (Brock University’s Integrated Strategic Plan: Priorities to Actions, 2011, p. 2).

The bolded text is what I considered to be most encompassing of how S.N.A.P would be a contributing aspect to this mission statement. A more in-depth investigation of what values and strategic priorities were included in the Strategic Plans also allowed me to discover additional instances where S.N.A.P would satisfy ongoing objectives (i.e., engagement in Community Outreach, locally and more broadly, is a growing and vital aspect of our identity; Maximize student civic engagement, including community and service learning placements; Expand service learning and Co-op opportunities; Fulfill Brock’s brand promise- a University that develops “both sides of the brain”).

Participants

Purposive sampling assumes that the researcher’s goal is to discover, understand, and gain insight by selecting a sample from which they are able to learn the most (Merriam, 1988). Correspondingly, Whitney and Trosten-Bloom (2010) assert that the people most significantly impacted should be considered the most informative group. It is for this reason that I believe purposive sampling was the most advantageous technique for acquiring an appropriate sample. An evaluator should not be acting as a judge whereby they highlight their own judgements, but rather a facilitator of judgements about merit and worth by intended users (Patton, 1994). I believe the most effective avenue for acquiring an individual’s opinions about the Special Needs Activity Program specifically is to ask them in person through an interview process. I identified the following individuals and institution as intended users and stakeholders of the S.N.A.P outreach who I believe I will “learn the most” from: youth that attend, parents of youth who attend,

educational assistants, coordinators, volunteers, and Brock University. Patton (1994) states that, “this approach recognizes that no evaluation can be value-free, therefore the values that inform the evaluation should be those of primary intended users”. While Brock University is not a direct user of the program, the Special Needs Activity Program uses the University’s physical space. Further, the effectiveness of the program has direct and indirect effects on the University because of the civil relationship that exists. Interviewing senior administrators at Brock University would be beneficial because it would serve multiple purposes including but not limited to: exploring opportunities for program expansion and funding opportunities in order to ensure the sustainability of S.N.A.P, discovering whether there are policies in place that support the S.N.A.P outreach, and promoting the program in order to increase knowledge and awareness.

Consent and Procedure

Ethical clearance for this research was granted by Brock University Research Ethics Board (File # 11-180 Please see Appendix B for Certificate of Ethical Clearance) prior to data collection. Since I identified several intended users and recognized that my research was time-sensitive, I conducted interviews as well as distributed questionnaires, therefore, methods of recruitment varied according to participant.

Educational Assistants, parents of participants, volunteers, and coordinators were contacted via email and post by a disinterested third party and were sent letters of invitation (Appendix H). Participants who wished to participate were instructed to inform the third party via email. A third party’s contact information was provided to participants on the consent form (Appendix G). If participants wished to withdraw at any point, they were instructed to contact the third party and had the option of having their questionnaire

either destroyed or returned back to them. Once the third party received confirmation of their decision to participate, participants were sent a consent form, questionnaire and pre-stamped envelope. Questionnaires were sent to: 3 educational assistants (Appendix I), 15 coordinators (Appendix J), 5 volunteers (Appendix K), and 5 parents of participants (Appendix L). I believed 3 educational assistants was a manageable and realistic number considering the number that accompany participating youth on a weekly basis. The average team of coordinators consists of 10-15 undergraduate students and since they fill different roles within the group, their experiences were unique (Appendix M). The third party invited 5 volunteers who attend S.N.A.P on a regular basis (are not absent for more than 2 sessions within a semester) to fill out the questionnaire since they had a better overview of what they believe were effective and ineffective aspects of the program. Additionally, this number was easily manageable and allowed me to monitor outstanding questionnaires. Parents of participants who attend the Special Needs Activity Program provide verbal feedback quite frequently but generally have hectic schedules. Therefore, asking them to fill out a questionnaire at their earliest convenience allowed for more flexibility and proved more advantageous since attempting to schedule a time to sit down and conduct an interview could prove difficult. Asking these parties to fill out questionnaires instead of interviewing them personally also increased the probability that they would answer questions more candidly and be less affected by my presence. Completed questionnaires were placed in the pre-stamped envelope addressed to the disinterested third party and sent back. Once the disinterested third party received the questionnaires, she coded them, which decreased the possibility of identifying who the informant was. Thirteen participants completed the questionnaire and sent it back to the

third party informant via post: 3 educational assistants, 4 coordinators, 3 volunteers, and 3 parents of participants.

The interviews were conducted with: 3 youth who participate in the program (Appendix P), 1 service learning expert (Appendix N), 1 Faculty Senior Administrator from Brock University (Appendix O), and 1 University Senior Administrator from Brock University (Appendix O). I contacted the service learning professional, Faculty Senior Administrator, and University Senior Administrator via email to inquire about their potential participation in my study and attached an electronic copy of the letter of invitation (Appendix C) along with the consent form (Appendix D) in order to provide further information. Once the professionals agreed to participate, separate interviews were set up on a mutually agreed upon day and time. In the case of children who attended the S.N.A.P that I interviewed who were minors or not able to give consent themselves, parents or guardians were presented with the consent form (Appendix E) and provided consent on behalf of their child. I also asked the child verbally if they would like to participate (Appendix F) a week prior in order to prepare them for the alteration in their respective schedules. Children were eligible for the interview if: parents had given consent, they were able to express themselves verbally, and had attended the Special Needs Activity Program on a regular basis. Parents had the option to be present during the interview with their child. All interviewees were shown the interview questions beforehand and all interviews were recorded using an audio device and transcribed verbatim.

The semi-structured approach to the interviews was advantageous because it allowed for flexibility in regards to follow up questions as well as opportunities for the

interviewees to ask questions. A personal interview with a service learning expert was most valuable as their insight was both extensive and in depth. A semi-structured interview with a University Senior Administrator (responsible for supervision and oversight of curricular, instructional, and research enterprises at the university level) at Brock University was favourable because their response to a specific inquiry prompted questions that led me to believe that an interview with a Faculty Senior Administrator (same responsibilities as the University Senior Administrator, but at the faculty level) would better gauge and focus on the sustainability piece of my project. Interviewing the University and Faculty Senior Administrators were crucial because Reed (2007) explains that policy makers are imperative to determining what happens and where it happens.

I believe interviewing 3 youth that participated in the program was realistic since the interview was conducted outside the S.N.A.P session. Interviewing them after the session had ended proved beneficial since they had just participated in the program, therefore, recall seemed to be less demanding. Interviews also allowed me to communicate with youth who were not able to read or write or express themselves effectively using that medium. Once interviews were conducted and transcribed, participants had the option of reading the interview transcript. The interviewees were assured that there would be no consequences for withdrawal and should they choose to do so, their interview would be destroyed.

The questions on the interview guides and questionnaires were informed by Strategic Planning literature. SWOT evaluations are typically focused on identifying weaknesses and threats in order to develop prevention strategies (Stavros & Hinrichs, 2009). However, SOAR evaluations focus on strengths and opportunities by continuing

to build on what the organization currently does well (Stavros & Hinrichs, 2009). Instead of choosing to use one evaluation tool over the other, I decided to combine both because I viewed program evaluation as a progressive process. SWOT evaluation is analysis oriented which I believe is an important foundation for SOAR evaluation since it is action oriented. Using both evaluation tools has the potential to allow organizations to implement the most appropriate strategies by recognizing strengths in order to combat threats and maximize opportunities. Therefore, each question posed to participants in my study had the potential to be categorized under one of the following categories: Strengths, weaknesses, opportunities, threats, aspirations, and/or results. Using these categories as a guideline allowed for a more comprehensive and balanced evaluation.

Participant's names, addresses, organizational names and titles were collected. Personal identifiers were secured as participants were given the option of using a pseudonym. Only the Principal Student Investigator and Principal Investigator knew the identities of the interviewees. The third party who coded the questionnaire data was the only individual who knew the identities of the participants who completed questionnaires. Data will be destroyed using a shredder once data collection was complete, data were analyzed, and thesis was defended.

Ethical Issues

Potential Risks

Since the research is evaluative and the methods are ethnographic in nature, what individuals believe they are doing, say they are doing, appear to be doing, and what in fact they are doing may create discrepancies and revealing these discrepancies increases the risk of creating personal and political conflict (Merriam, 1988). Problems of the

researcher becoming involved in the issues, events, or situations under study, problems over confidentiality of data, problems arising from the audience being unable to distinguish between data and the researcher's interpretation, and problems concerning publication such as the need to preserve the anonymity of subjects are all potential issues (Merriam, 1988). In addition, the emergent nature of case study research makes it difficult to assess the potential risk factors for participants (Merriam, 1988). If unanticipated discoveries resulted from my research, I consulted with my advisor and/or committee members about the most appropriate way to address the discoveries.

I recognized that my involvement/affiliation with the Special Needs Activity Program may have influenced both the motivation to participate and/or the answers I received from respondents. Further, given that I was Maureen Connolly's graduate student and required participants of the Special Needs Activity Program to participate, along with their parents, parents may have felt obliged to participate. They may have believed that if they chose not to take part in the study, their child's opportunity to attend the Special Needs Activity Program would have been compromised. Similarly, coordinators of the program may have felt obligated to participate for fear that it may influence their Undergraduate Thesis mark given by Dr. Connolly. I planned to combat these potential risk factors in two ways: firstly, I stressed to the participants that my intention was to evaluate S.N.A.P, and involvement in the program (i.e., participation, grades, etc.) would be in no way impacted; and this was ensured through the use of a third party. Secondly, these respondents answered questions via questionnaires which they returned to a third party in a sealed envelope which was then coded and returned to me so that I did not know whose questionnaire I was reading and the participant's

identity was thus protected. Further, there was an option on the questionnaire for the participant to withdraw from the study and only the third party who coded the data was privy to this and withdrew the respective individual from the study if necessary. The third party functions included: intercepting requests from individuals who were interested in participating in the study, recruiting participants via email (long time participants of the movement program), sending out questionnaires to individuals who expressed an interest in participating, coding completed questionnaires that had been sent back to the third party so that anonymity was ensured (coding also ensured that the faculty supervisor did not know who was participating), informed Student Principal Investigator if participants chose to withdraw from the study, and informed participants when summary of findings was be available for viewing as well as where to access these findings.

Since I essentially evaluated a program developed and run by my thesis advisor and a program that I have actively participated in and am passionate about, there was a risk that my evaluation of the program would only shed a positive light and not be a balanced and true representation. It was important that someone not affiliated with the program read over my work (committee member). This allowed the individual to ensure that my evaluation was balanced and accurate by exploring my document for sections that may have seemed one-sided or unclear.

Potential Benefits

As mentioned previously, I hope that an evaluation of the Special Needs Activity Program will serve as a practical guideline for increasing the implementation of similar programs in the future. Further, I hope that the evaluation will contribute to the overall improvement and sustainability of the Special Needs Activity Program. Since participants

involved in the study were directly or indirectly affiliated with the Special Needs Activity Program, they may have reaped either direct or indirect benefits. By conducting this study, I contributed a useful resource for those who wish to develop adapted physical activity programs in their own contexts. This is important because increased opportunities for this population to increase their physical repertoires and social skills will lead to decreased health risks and increased independence. This would not only effect the participants, their families, and individuals who work with them on a daily basis, but health care and society as well. By creating programs that provide opportunities for movement and sustaining programs such as S.N.A.P, skills are developed that assist in developing autonomous and contributing members of society.

I respected participants' autonomy by clearly outlining that their participation should be voluntary (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2010). Patton (2008) mentions that the evaluator may develop close relationships with stakeholders and so the evaluator's independence may be questioned. In addition, since the evaluator plays multiple roles, they could potentially confuse the evaluation role when they are involved in program development and thus, the evaluator could be accused of bias or conflict of interest by those who do not agree with the findings (Patton, 2008, p. 548). Having a third party (i.e., committee member) read my document and questionnaires will allow them to recognize any threats to appropriate means of data collection or evaluation. Furthermore, Patton (2008) offers general ethical guidelines that are specific to the researchers as evaluator: rights of human subjects should be protected, evaluators should respect human dignity, assessments should be

complete and fair, findings should be openly and fully disclosed, conflicts of interest should be dealt with openly and honestly. These guidelines are helpful because the researcher is able to take them into consideration at the beginning of the study and develop ways of addressing them.

Confidentiality and Anonymity

Participant's names, addresses, organizational names and titles were collected. Personal identifiers were secured as participants were given the option of using a pseudonym. Only the third party that coded the data knew the identities of the participants. Data was destroyed using a shredder once data collection was complete, data was analyzed, and thesis was defended. I (Principal Student Investigator) was the only individual who had access to the raw data. Therefore, while I could not guarantee anonymity, I ensured confidentiality. I did not use direct quotes in my research that were easily traceable back to the participant. However, participants also had the option to wave confidentiality if they chose and preferred direct quotes used. Since I utilized purposive sampling, it was clearly stated in the consent form that anonymity was not guaranteed. Conducting interviews also made anonymity impossible. Written records, audio tapes, and questionnaires were secured in a locker at Brock University that only I (the Principal Student Investigator) had the combination to. Once interviews were transcribed, they were saved on a portable USB device and placed in the aforementioned locker. Once data were collected and analyzed, and my thesis was defended, all records would be destroyed. Written records, questionnaires, and interview transcripts would be shredded. Interviews recorded on the audio device were erased, and transcribed interviews which were originally saved on the portable USB device would be deleted.

Data Analysis

When conducting case studies, data collection, analysis, and the write-up are all integrated (Willis, 2007, Taylor & Bogdan, 1998, Merriam, 1988, and Creswell, 2003). During and following the interview and observation period, I recorded notes, comments, and queries in order to assist in the coding of units and emergence of themes. A voice recorder was used when conducting interviews and following the interview, I transcribed them verbatim. Taylor and Bogdan (1998) assert that transcribing interviews verbatim will reduce the chances of the researcher being accused of only including the sections that seem relevant or interesting to them. Once transcribing was complete, paragraphs were numbered so that units of text used in analysis could be easily traced back to the original transcript (Taylor & Bogdan, 1998). I read through the interview transcripts and questionnaires multiple times in order to acquire a general sense of the ideas and tone of those ideas (Creswell, 2003). Once this process was complete, Creswell (2003) and Taylor and Bogdan (1998) suggest organizing information into segments to be “coded” and labelled so that meaning can be attached once the interviews have been transcribed. A master copy of coding categories was kept that lists major themes (Taylor & Bogdan, 1998); categories and themes were colour coded accordingly in order to assist in organization, making them easily discernible which increased the accuracy of analysis as a result. Taylor and Bogdan (1998) suggest comparing observations along with themes created from interview and questionnaire analysis in order to establish where there are commonalities. This assisted in determining how people viewed and what values were placed on the Special Needs Activity Program. Further, I anticipated that these commonalities would translate into patterns that emerged from the data and become the

initial themes. Once I identified the list of codes that informed respective themes, I re-read transcripts, questionnaires, and observation notes to ensure that I did not miss any references that could have been relevant (Taylor & Bogdan, 1998). In order to aid in the effortless location of specific data during intensive analysis, Merriam (1998) suggested developing a case record. A case record includes all significant information that will be used in the analysis and case study, and organizes the vast amounts of data into a primary resource package (Merriam, 1988). I believed creating a case record was beneficial for my research because it made the data collected via interviews, observations, and questionnaires more manageable. S.W.O.T (strengths, weaknesses, opportunities, threats) and S.O.A.R (strengths, opportunities, aspirations, results) analysis were used as evaluation tools. Once data collection and analysis was complete, I organized the information topically and in a way that corresponded to the respective categories: strengths, opportunities, weaknesses, threats, aspirations, results. Note: data collection and analysis ceased once findings became saturated (Dick, 2006).

Trustworthiness

Criteria for judging the quality of qualitative work was drawn from Patton's standards based on a constructivist perspective as devised by Lincoln and Guba (1986). Trustworthiness was comprised of four categories and each one needed to be satisfied in order to deem research trustworthy (Patton, 2002). The four categories consist of the following: credibility, dependability, confirmability, and transferability.

Credibility*Prolonged engagement and Persistent observation*

Since I have been and continue to be immersed in the S.N.A.P environment, I believe I have developed a deep understanding of the specific case. Continual observations were conducted and recorded in order to identify emergent patterns within the copious amounts of data collected. Due to my continual presence during the program, those affiliated with the program (i.e., individuals who completed questionnaires and participated in interviews) were accustomed to seeing me in the field because I was there on a regular basis. As a result, I am optimistic that the things I observed in the field were not affected/were minimally affected by my presence.

Triangulation

Patton (2002) affirms that the goal of triangulation is to capture and report multiple perspectives rather than pursue a singular truth. I strived to triangulate my data in several ways. Firstly, a case study design permitted me to use multiple methods including: interviews, observations, questionnaires, and document analysis. Using multiple methods was beneficial because one method's strength was compensated for another's weakness and vice versa. Secondly, I compared data collected via different methods in order to identify significant themes and/or patterns that illuminated the topic under study. Third, I used two assessment tools (S.W.O.T and S.O.A.R) in order to evaluate the Special Needs Activity Program. Using both as opposed to one allowed for a more comprehensive and balanced evaluation of the program. Fourth, Patton (2002) asserts that "Theory Triangulation" involves examining the data from the viewpoints of various stakeholders. Therefore, by attaining the perspectives of several stakeholders

(coordinators, participants, parents of participants, educational assistants, volunteers, University faculty and administration) it contributed to the credibility of my research.

Negative case analysis

In order to ensure that my evaluation of the Special Needs Activity Program was not one-sided, I decided to use S.W.O.T and S.O.A.R analysis. Using these tools not only highlighted the strengths of the program but the: weaknesses, opportunities, and threats as well. So, the “negative cases” proved just as essential as the positive cases for an appropriate evaluation of the program.

Dependability

Multiple methods

Multiple methods contribute to methodological rigor (Patton, 2002). Using multiple methods allowed me to validate and cross-check findings (Patton, 2002). For instance, Patton (2002), states that observations have the potential to confirm what is said in the interview, whereas interviews permit the researcher to investigate beyond external behaviour. Similarly, while documents may be helpful regarding what goes on “behind the scenes” of a program, they may be incomplete or vague (Patton, 2002). Therefore, interviewing an affiliate of the institution who created the document was helpful in regards to filling in gaps within the document which assist in further clarification.

Confirmability

Reflexivity

“All research is ultimately autobiographical, in that researchers are an essential part of a study” (Reed, 2007, p.5). During the 2009/2010 academic year at Brock University, I fulfilled my undergraduate honours thesis as a Coordinator of the Special Needs Activity

Program (S.N.A.P) community outreach. I also helped develop the "Saturday S.N.A.P" pilot program along with 14 other students during the 2010/2011 academic year. This pilot program was designed for youth with disabilities that uses S.N.A.P as a template. It provides participants with an opportunity to engage in meaningful movement and the expectation is to make "Saturday S.N.A.P" a sustainable program. I also assisted in a "Programming for Youth with Autism" workshop held at the Autism Society of Ontario in St. Catharines. During the workshop, I assisted students and professionals who are active in the autism community develop movement stations using various pieces of equipment that they could recreate for the youth they work with in their own contexts. In addition, I was employed by the Autism Society of Ontario in St. Catharines as a camp staff during the summer of 2012. Further, I assisted in the facilitation of the Autism Spectrum Disorder Movement Camp at Brock University during the same summer by taking on an administrative role. The camp is station-based and parallels the objectives of the Special Needs Activity Program. Most recently, I had the opportunity to be part of a sabbatical project creating a station-based pedagogy resource that focused on movement for youth with special needs. Participating in this project allowed me to further enhance my professional development skills by presenting sections of the resource to parents in the Niagara Region as well as Educational Assistants in the Hamilton-Wentworth District School Board. Being involved with the programming of three service-based initiatives has allowed me to apply a variety of approaches to service provision in physical activity programming for persons with disabilities and/or under resourced groups. Through these experiences, I realized that there was a deficit in the availability of similar programs for youth with special needs. My personal attachment to the Special Needs Activity Program

and determination to help preserve it has motivated me to pursue further research in this area. Exploring what makes physical activity programs sustainable, will provide guidelines for developing similar programs to S.N.A.P and offer more meaningful movement opportunities for these individuals as a result.

Transferability

Thick description

Good description takes the reader into the setting being described; this is imperative because rich description is the foundation of qualitative analysis and reporting (Patton, 2002). The goal of thick description is to transport the reader into the phenomenon being studied so that they are able to make their own interpretations about meaning and significance (Patton, 2002). In the context of my own study, I was conscious and cautious of taking certain things for granted. Since I have spent much time in the S.N.A.P atmosphere, I ran the risk of overlooking details which could have been detrimental to my research. I combated this by remaining aware of this risk as well as ensuring that a third party read my observation notes.

Chapter IV- FINDINGS

Levels of Data Analysis

I will organize the following chapter according to the four level process that I employed to analyze the data. *Level 1* involved viewing each individual case as a whole entity. I coded each interview transcription and questionnaire to discover key words and revelatory phrases after the first initial reading. *Level 2* involved the sorting of stakeholders into cohorts. I then compared interviews and questionnaires by question in order to uncover patterns which were translated into themes. *Level 3* involved the classification of all questionnaire items into the following: Strengths, Weaknesses, Opportunities, Threats, Aspirations, or Results. Similar to the second level of analysis, I thematized respondent feedback from their viewpoint as understood by me and placed into the corresponding categories. I also placed relevant responses from interviews under the respective and appropriate categories. *Level 4* involved the utilization of my retrospective field notes in order to reveal any notable non occurrences from the various aforementioned categories. Findings were determined using inductive and deductive methods guided by the research questions: 1.) A. What is a quality adapted physical activity program? B. Why is the Special Needs Activity Program considered a quality adapted physical activity program? 2. What institutional policies and practices exist that support the Special Needs Activity Program?

Level 1- Within Case, Within Cohort Content Analysis

Reading through each interview and questionnaire entirely was important in order to attain a thorough and holistic interpretation of the data. Due to the extensiveness of the interviews conducted with the professionals, I put each interview through the

“Wordle” program online which enabled me to clearly see what words were used most often by each party (Appendix Q, R, S). This ensured that I had not overlooked any key words. Once I coded each interview and questionnaire for key words and revelatory phrases, I summarized the information into charts by cohort in order to condense the data to a manageable size. The chart below summarizes how I organized the academic professionals interview data into a chart in Table 1 below.

Table 1

Professional	Key Words	Revelatory Phrases
Service Learning Expert	<ul style="list-style-type: none"> -baseline knowledge -rare opportunity (for children) -direct experience - leadership/leadership incubator -source of permanent income -champion -advocacy -community partners -academic contribution -service learning -sustainability -valuable program -significant -longevity -program -think -know -learning -volunteers 	<ul style="list-style-type: none"> - “I would say that I am somewhat familiar with S.N.A.P” - “I understand that the demand for what S.N.A.P offers is barely being met...that there is an incredible need” - “must have touched hundreds and hundreds of people” - “I’m so impressed with the structure of S.N.A.P” - “I think it could happen given the importance of S.N.A.P and its longevity and the significance to our academic program and our community service” - “so maybe the obstacle is in having that position created, having it created permanently, having it be well remunerated and located in a way that legitimizes it, the position as I would think, as a, as a service learning position” - “you’re going to be talking to one of the associate deans? Ya? Good...it will be key to hear what they think” - “I think it would be really valuable to raise the profile of S.N.A.P across the university” - “[service learning] does phenomenal work for students pedagogically, and for community members in meeting real community needs” - “...given how mature S.N.A.P is, and the importance that it has for Brock students, and for the institution as a whole, and for the school boards, the root of professionalization through hiring a paid coordinator seems to me to be the ...the...the way to sustainability”
University Senior Administrator	<ul style="list-style-type: none"> -valuable -citizenship -broaden (horizons) -practical -money -funding 	<ul style="list-style-type: none"> - “I know broadly about the objectives of the program, I don’t know very much about the details” - “I’m not as familiar as I should be” - “It’s valuable at many levels” - “I suspect that it’s something they look forward to, enjoy”

	<ul style="list-style-type: none"> -sociology -Dean -institutionalize -community -service learning -experiential learning -Strategic Plan -program -think -know -abstract -students 	<ul style="list-style-type: none"> - “It seems to me activities like this, and uh, I haven’t seen an evaluation of the program and I haven’t interviewed Brock students who have been involved in it, so I’m speculating as an administrator ...I’ve been around the university system for a long time, and, and so based on that, I can only assume, and I would be prepared to argue this without having seen studies of this program, that what it does to students who are involved, that it expands their horizons as opposed to sitting in the library” - “...interaction in the real world [...] builds a sense of community and citizenship and belonging to something bigger” - “...my guess is that university students involved are enhancing their skills, so if you wanted to be really instrumental, they’re going to be able to, when they leave Brock, they’re going to have a credential that’s different than the student who spent her whole career in the library” - “I think it’s important for the participants you’re helping, the program is helping them in a variety of ways, physically, psychologically, spiritually and so on, so it’s important for our students who are involved, academically, and in the broader sense of dare I say, both sides of the brain, of their broader self” - “Brock does occasionally strayed away from that community roots, but we’re trying to bring it back to that...this isn’t just an ivory tower up on the escarpment, what we have here are people who are active in making their community a better place by working with these participants” - “it’s important for you as a student, it’s important for the participants, it’s important for their families, it’s important for their friends, uh, it’s important across the piece” - “an interesting part of your study will be, to ask, and I don’t know if you’re doing this, to ask someone in the Dean’s office, or to ask someone at the level of the Dean’s office in this case, in Applied Health Sciences I’m assuming, are there plans in place, to uh, I have no idea but, if it has a budget, if it’s entirely run volunteer, is it built somewhere as a budget line, and I’m sounding like a bureaucrat, but that’s how things get supported” - “the sustainability piece is an interesting question...when we start something up and it proves to be successful, and it’s meeting a need, obviously, you know, there would be uh, I would guess that there’s significant community support for this program” - “the Dean established his or her priority, presumably through a consulted process involving others, uh, those priorities then actually make their way back into budget
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		<p>requests...many of which we are not able to meet because we have a limited budget...basically, we have no capacity to fund”</p> <p>- “Thank you, I’m glad, I’m thrilled to learn more about the program, sounds like a good program”</p>
<p>Faculty Senior Administrator</p>	<p>-funding -money -valuable -Strategic Plan -community -concrete -program -learning -think -know</p>	<p>- “Of course I think it’s a valuable program...not just at Brock, I think these kinds of programs are valuable anywhere”</p> <p>- “This is the kind of thing that I value very highly...so I think it’s a very important program”</p> <p>- “some people like Maureen and myself get it and then you have a hard time with other administrators and faculty members who are discipline oriented maybe, subject oriented, understanding why this is important, and maybe why it should get some funding”</p> <p>- “Universities like to claim these sorts of programs as part of their world...they don’t necessarily like to fund them”</p> <p>- “[it’s not a Brock University program] it is when they want it to be”</p> <p>- “...nearly two years now as Dean, this program has never once been mentioned to me by anybody higher up in the food chain...so neither the President or any of the Vice Presidents or other Deans have ever mentioned this program, so may be well known in the community, it may be well known within our Faculty, and among our students, but I’m not sure it’s on the radar, per say of the higher up people”</p> <p>- “so far, I haven’t seen anything concrete...to come out from the administration, higher administration to support any of this...not just this program, but any other type of program”</p> <p>- “I think these kinds of programs are wonderful and I think the university would like to fund a lot of them, but you only fund those kinds of things in good times...when times are bad you have to shrink back to your core function, which is education of students”</p> <p>- “the experiential piece which I think is really important, is...gravy in a sense...um, we’re trying to embed it, as much as possible, particularly in this Faculty I’m encouraging it to be embedded as part of our way of doing business, but it’s costly”</p> <p>- “I’m in support of it and uh, I think it’s great...glad you’re doing your thesis on it”</p> <p>- “...at the end of the day, the institution has to value those things”</p> <p>- “it would be a tragedy to let it go”</p>

Charts were created and organized in the same way for the participant (youth) interviews as well as the questionnaires. At this level, it was evident that certain revelatory phrases contained similarities, and I began to develop themes as a result. An example of this is demonstrated via participant (youth) interview data in Table 2 below.

Table 2

Participant	Key Words	Revelatory Phrases
Y1	-Shapes -Making houses	-“mmm...like making a house”
Y2	-Jumping -Shapes -Hula hoops -Brother	-“...I played with the hula hoops over there...and I played with my brother by doing the choo-choo train and he was the chief, and I was in the middle, and I got was always being squished, but I didn’t care about that”
Y3	-Shapes -Brothers	-“I like to build things” -“...I like playing ‘Mario Kart’[on the scooters]”

The information I summarized within Table 2 reveals that the shapes station at S.N.A.P is preferred activity for all participants interviewed. The revelatory phrases reflect this and give an indication as to why this is so. In all cases, the participants expressed enjoyment while participating in activities that promoted creativity, imagination, and role playing. This was an important finding because it parallels research conducted on the multi-media room regarding the benefits of undertaking and performing specific roles. It has been concluded that when youth with special needs role play, there is a decrease in their anxiety as well as stress levels, and an increase in their confidence. This is the result of reducing the unknown for the individual and pressure associated with deciphering what is socially acceptable.

Level 2- Cross Case, Within Cohort (by question)

The objective of the second level of analysis was to capture natural units from interviews and questionnaires in order to thematize them into central themes. I created charts for the respective cohorts that listed questions posed to them along with their individual answers to each. Arranging the data using this method allowed me to compare answers and recognize patterns more conveniently.

Participant (youth) Interviews

Theme: Stations that promote creativity and imagination are valuable

Arranging the data by question allowed me to clearly see patterns via answers given by the participants in their interviews. The emerging patterns at this stage also confirmed the findings that began to appear in level 1. All participants expressed that their favourite activities at the Special Needs Activity Program were stations that gave them the opportunity to be creative and role play. Further, none of the favourite activities mentioned were traditional (games, implements, or objects) that could only be used a certain way. For example, shapes and scooters were reported by participants as the most favourable activities to participate in at S.N.A.P. Both of these activities can be easily adapted to fit the child's interest and skill level instead of requiring the child to adapt to the activity in order to be successful. On the contrary, the activities the participants enjoyed least, were: the medicine balls, hockey, and the mini trampolines. While these activities are purposeful because they have motor developmental benefits for participants, they are not as meaningful as it is more difficult to be creative at these particular stations. They also presuppose a certain skill-set and skill level that may not be developmentally appropriate for all participants.

Academic Professionals Interviews

The questions posed to the academic professionals focused on their familiarity with the Special Needs Activity Program and whether they believed it was a valuable program. The topics specific to the service learning professional, included questions surrounding service learning and sustainability. Alternatively, questions posed to the University Senior Administrator and Faculty Senior Administrator focused on policy implementation that would assist in the program’s sustainability.

Theme: Don’t know the details but recognize its value

All interviewees were familiar with the Special Needs Activity Program, admitted that they were unfamiliar with the details, yet, realized its importance and value.

Table 3

	What do you know of S.N.A.P/How familiar are you?	Do you believe it is a valuable program?
Service Learning Professional	-somewhat familiar with S.N.A.P but not form of service learning they’ve practiced -“I’ll tell you my baseline knowledge, and then you can fill in the gaps” -“I understand that the demand for what S.N.A.P offers is barely being met...that there is an incredible need” -“it must have touched hundreds and hundreds of people”	-rare opportunity because schools don’t typically have the resources, equipment, space, supervision, one on one assistance that S.N.A.P provides -gives EAs a break -there is a community need that S.N.A.P satisfies -provides direct experience for Brock students (with the population working one on one, training, learning that comes from working in a group, administering a program, mentorship skills, leadership) -draws on volunteers but allows volunteers to progress in their skills

<p>University Senior Administrator</p>	<p>-“I know broadly about the objectives of the program, I don’t know very much about the details” -“it might be useful for you to clue me in a bit, um, just at the beginning” -“I’m not as familiar as I should be” -“I would guess that there’s significant community support for this program”</p>	<p>-“absolutely, it’s valuable at many levels” -“I suspect it’s something they [participants] look forward to, enjoy...taking activities and being able to translate them into the kinds of activities that they’re going to need as they make their way through life” -expands student horizons -real world interaction -“builds a sense of community and citizenship” -increases credentials especially when students leave university and apply for jobs -practical -valuable to the development of the whole individual (physical, psychological, spiritual) -community service level -“it’s meeting a need”</p>
<p>Faculty Senior Administrator</p>	<p>-“yes, I am familiar with it, I’ve toured it with Dr. Connolly” -“where is the money coming from? Who’s funding it? Is it self funded?” -“the children that come in, just to clarify for me, are they sent with because of contacts with the schools?” -“and the teachers take part as well? Or do they just watch you guys do all the magic?” -familiarity with the self-generated funding model due to significant background in community programming, community service, and research</p>	<p>-“of course I think it’s a valuable program” -“these kinds of programs are valuable anywhere” -“this is the kind of thing I value very highly...I think it’s a very important program” -other people may not understand why it’s important or why it should get funding -“I think these kinds of programs are wonderful”</p>

Once the professionals were given more information about the program and I asked if they believed it was a valuable program, they unanimously agreed and added that it was valuable at many levels (for community, undergraduate students, and participants). Further, the increased awareness yielded the following statements by the end of the interview: “Thank you, I’m glad, I’m thrilled to learn more about the program, sounds like a good program” (University Senior Administrator) and “Glad you’re doing your thesis on it...it would be a tragedy to let it go” (Faculty Senior Administrator).

Theme: "Hands Tied"

It was evident after speaking to the professionals that each one was restricted in some way by their position within the university. The service learning professional who did not have control over implementing policies or programs to parallel the strategic plan was helpful in brainstorming strategies that might be useful. Strategies for ensuring the sustainability of the program included: professionalizing by hiring a coordinator, finding a source of permanent income (i.e., embedded within departments that are supported by Deans), a champion to advocate for the continuity of the position, linkages to other courses (tie course curriculum to student activities), partnerships with other departments/faculties, partnerships with community partners, increase publicity, and taking note comparable programs. The administrators who I believed had control over the implementation of policies that would assist in the sustainability of S.N.A.P seemed to be restricted by their respective positions.

“At my level I don’t do the microfunding, you know, there is a sense in the university, totally wrong, that somehow, the senior administration on the 13th floor of the tower have got money...I actually have no money in my budget...it flows out, it comes in, and we send it out to the Deans, we send it out to facilities management, we send it out to residence, we send it out to recruitment for them to do, for them to run the university... I don’t do budgets at the Dean’s level, I’m very careful not to micromanage... that’s why we have Deans at the local level” (University Senior Administrator).

Although the interviewee is a university senior administrator and co-authored Brock University’s Strategic Plan (December 2010), and Brock University’s Integrated Strategic

Plan: Priorities to Actions (August 2011) they explained that enforcing or sustaining programs that parallel the institute's vision is "micromanaging" or outside the capacity of their responsibilities and it is the responsibility of the Deans to do so instead. Though the Faculty Senior Administrator has the ability to sustain S.N.A.P via avenues mentioned above by the Service Learning Professional, there is no money in the budget to do so.

Theme: Accommodating Contradictions

The academic professionals interviewed were limited in some way by their role within the university, yet, they recognized the benefits of S.N.A.P as an experiential learning site for all stakeholders and participants. This juxtaposition created an interesting tension that exposed various contradictory statements. Below are the contradictions I noticed as being prominent.

Necessary Luxury

Creating a permanent paid position for the implementation and facilitation of S.N.A.P should be a priority since it is a significant program within the community and academic institution which has exceptional pedagogical benefits HOWEVER when there is a financial deficit, money goes to undergraduate education first, and though experiential learning is considered important it is also considered an accession:

SLP: "I wonder what kind of advocacy at the university would be needed to have such a paid position created, I'm not sure how that might work but I think it could happen given the importance of S.N.A.P and its longevity and the significance to our academic program and our community service...so maybe the obstacle is in having that position created, having it created permanently, having it be well remunerated and located in a

way that legitimizes it, the position as I would think, as a, as a service learning position...[service learning] does phenomenal work for students pedagogically”

FSA: “I think if the university was going to target its money, it would be undergraduate education first...you only fund those kinds of things in good times...when times are bad you have to shrink back to your core function, which is education of students...the experiential piece which I think is really important, is...gravy in a sense...[rebuttal to my statement about experiential learning in my undergrad being the most beneficial type of learning in my experience, perhaps it should be embedded into the curriculum] well as soon as you put it into the curriculum, you would be putting money into it that would be going somewhere else ...right? because once it becomes part of the curriculum you need an instructor, who gets workload credit for it?, you need teaching assistants and helpers who would get teaching assistant stipend money so it does cost money, mind you, having said that I would think that’s a pretty smart discussion to have within the department of kinesiology...to see whether they think this should be embedded as part of the curriculum”

Found Missing

Brock was established because of a community need, thus, community connections are important to the institution HOWEVER there is a need that S.N.A.P is meeting within the community yet, there are no policies being put in place to sustain it:

SLP: “I understand that the demand for what S.N.A.P offers is barely being met, that, that there’s an incredible need”

USA: “Brock came about, in large part, because of community activity, because of community activism... there was a demand in this community to have a university...to be

sure, Brock does occasionally strayed away from that community roots, but we're trying to bring it back to that, so, the sense of um, the moms and dads and caretakers of participants, having a sense that 'hey, this isn't just an ivory tower up on the escarpment', what we have here are people who are active in making their community a better place by working with these participants... it's a way that this place and those who are going to benefit from this place students, and so on, can give some service back to that community"

FSA: "this is the kind of thing that I value very highly ...so I think it's a very important program...at the end of the day the institution has to value those things"

Negative Income

The program is important enough to receive funding and requires funding in order to be sustainable; yet, there is no money to fund it HOWEVER there are means to fund other ventures:

SLP: "...given how mature S.N.A.P is, and the importance that it has for Brock students, and for the institution as a whole, and for the school boards, the root of professionalization through hiring a paid coordinator seems to me to be the way to sustainability"

USA: "ask someone at the level of the Dean's office in this case, in Applied Health Sciences I'm assuming, are there plans in place, to uh, I have no idea but, if it has a budget, if it's entirely run volunteer, is it built somewhere as a budget line, and I'm sounding like a bureaucrat, but that's how things get supported" → "we have a limited budget...basically, we have no capacity to fund"

FSA: “you have a hard time with other administrators and faculty members who are discipline oriented maybe, subject oriented, understanding why this is important, and maybe why it should get some funding” → “it’s tough times for Brock, we’re in the red ...big time...we have a big debt...operating debt...so getting extra money right now is, we’ve had five years of base budget cuts in a row, you know, like 15-20% cuts over the last five years” → “I’ve just authorized nearly \$200,000 in renovations to create another area for spinal cord injury research and rehab”

Clearly Misunderstood

The university senior administrator and service learning professional believe that the faculty senior administrator will be able to provide a concrete solution to the sustainability issue HOWEVER the faculty senior administrator believes that the concrete solution should come from the university senior administrator:

SLP: “you’re going to be talking to one of the associate deans? Ya? Good...it will be key to hear what they think”

USA: “an interesting part of your study will be, to ask, and I don’t know if you’re doing this, to ask someone in the Dean’s office, or to ask someone at the level of the Dean’s office in this case... [the] expectation is that each Dean will develop his or her own lower level strategic plan...will take those grandiose, abstract, and worthy ideals and say this is what they mean...what we expect the Deans to do is, we’ve said we want Brock to be a preferred place to work and study, we’ve articulated certain values in a university wide plan and we expect the Dean to translate those in the lower level”

FSA: so far I haven't seen anything concrete...to come out from the administration, higher administration to support any of this...not just this program, but any other type of program”

Theme: Benefits of Experiential Learning

It was apparent after speaking with the interviewees (participants and academic professionals) that experiential learning is beneficial at many levels. “It’s important for you as a student, it’s important for the participants, it’s important for their families, it’s important for their friends, it’s important across the piece” (University Senior Administrator). Experiential learning benefits the participants because they are able to attend an activity program that is developmentally appropriate. Physically, it allows them to expand movements in their repertoire that are missing or underdeveloped in an inclusive setting. Socially, they have the opportunity to engage with same age peers. Having the opportunity to play cooperatively (or in the same space) with one another increases the likelihood that participants will be more comfortable with similar social contexts in the future. Emotionally, volunteers are expected to create a safe and positive atmosphere by taking an interest in the child and ensuring that they are continually supervised throughout the session. Participants have the opportunity to develop cognitively because the station-based environment at S.N.A.P lends itself to problem solving situations.

“I think it’s important for the participants you’re helping, the program is helping them in a variety of ways, physically, psychologically, spiritually and so on, so it’s important for our students who are involved, academically, and in the broader

sense of dare I say, both sides of the brain, of their broader self” (University Senior Administrator).

Undergraduate students who volunteer at the Special Needs Activity Program acquire knowledge through a practical avenue and the advantages are recognized by the academic professionals at the institution.

“It’s valuable at many levels...it seems to me activities like this, and, I haven’t seen an evaluation of the program and I haven’t interviewed Brock students who have been involved in it, so I’m speculating as an administrator ...I’ve been around the university system for a long time, and so based on that, I can only assume, and I would be prepared to argue this without having seen studies of this program, that what it does to students who are involved, that it expands their horizons as opposed to sitting in the library...interaction in the real world builds a sense of community and citizenship and belonging to something bigger ...my guess is that university students involved are enhancing their skills, so if you wanted to be really instrumental, they’re going to be able to, when they leave Brock, they’re going to have a credential that’s different than the student who spent her whole career in the library” (University Senior Administrator).

“wow... I’m so impressed with the structure of S.N.A.P that draws on volunteers but allows volunteers also to progress in their skills and leadership, it seems to me that it’s, like a leadership incubator for Brock students ... for students at Brock, there’s the training, there’s the learning that comes from working in a group to administer a large program...there are those students who are working as mentors

for the Brock students who are doing the direct one on one work with children, and then are the Brock students who are working in teams to coordinate all aspects of the program from coordinating with the teachers, schools, to ensuring that every part of the day goes smoothly, that there's equipment in the right place, that everyone's safe, and that everyone's receiving appropriate kinds of attention for their needs so that's huge, and I understand that S.N.A.P engages dozens of university students and is open to volunteers across the university campus, not just in kinesiology, and that students might be involved in S.N.A.P through course work, undergraduate and graduate level course work, but also as volunteers” (Service Learning Professional).

It is evident that there are many benefits to experiential learning. At the surface, it is advantageous because it builds an individual's resume, and it gives students the opportunity to learn in a practical way by putting theory into practice which makes it personally relevant to them. Beyond this, the experiential learning environment teaches students an implicit curriculum, a curriculum that is transferable outside the walls of the institution. The lessons learned from experiential contexts are arguably more valuable than the content because these lessons assist in the personal and professional development of students involved. Being involved with the Special Needs Activity Program specifically, has the potential to develop the following skills: interpersonal, leadership, time management, communication, teamwork, problem-solving, multi-tasking, reflection, critical thinking, and appropriate decision making.

Questionnaires

I organized the questionnaires into four cohorts based on who the respondents were: coordinators, volunteers, parents, and educational assistants. Questionnaires were analyzed by comparing questionnaires within each cohort by question. I noted the differences in responses and translated the similarities in feedback into patterns. Below is an example of how I organized responses to questionnaire items to lend the data more conveniently to comparison and analysis.

Table 4

	Parents		
	P1	P2	P3
How long has your child been attending the Special Needs Activity Program?	- 1 year	- 10 years (initially through summer camp program)	- Grades 1-4 (1-2 times a year) and Grade 5 (on a weekly basis)
What do you believe are the characteristics of a quality adapted physical activity program?	- Flexible, well trained staff - Adequate staff to student ratio - Multiple activities - Smooth flow and transitions	- Flexibility in physical opportunities throughout program - Keeping it interesting for the participants - Opportunity for activity depending on child's tolerance for social interaction and degree of coordination - Potential for program to change (opportunity for kids to participate as they get older with their peers)= program can be adaptable	- Well supervised to ensure safety - Variety of gross motor activities that are geared towards child's ability - Enthusiastic and energetic staff - Affordable
Have you noticed a change in your child since they have attended S.N.A.P that you would attribute to the program?	- Child is more hyper after S.N.A.P	- Immediate change= calmness in his demeanor because of the physical activity - Has gradually become more accepting of the social interaction that he gets with S.N.A.P partners	- Yes, very much so - Always has a great afternoon at school after S.N.A.P- more focus and less behaviours
What do you believe is the	-Great training for Brock students	- Providing a chance for physical activity in a non-	- Maureen: she is an amazing advocate for

greatest strength of the Special Needs Activity Program? Why?	(real-life experience)	traditional setting/sport	our kids and has such a great understanding of what they need - Accessibility: S.N.A.P is an opportunity for kids with a variety of abilities and needs to participate
What do you believe the weaknesses of the program are? Why?	-Bottleneck at check in /leaving (too many people arriving and leaving together)	- Have been instances where there is a mismatch between the child and S.N.A.P partner or lack of confidence of S.N.A.P partner	- It is difficult for my child when S.N.A.P is over
If you could make any changes to the program what would they be?	-Kiss and fly for every weekers (drop off and leave without need for parking meter)	- I cannot think of any	
What are the most significant barriers your child faces regarding physical activity opportunities?	-N/A	- Now that son is a teenager, physical activities are basically team sports or specialized individual sports. He is not able to keep up socially and a lot of the required skills were not developed when he was younger	- Lack of programs in the area for children with autism - Programs don't offer enough support and it's not always possible to pay for a worker and program fees
Additional Comments	-Great job, see you in January!	- I really do appreciate the time and effort that has been put into this program. It has been great to see the program go through its changes and accommodate the kids as they are getting older. It's great that students from S.N.A.P are also able to work with my son in his high school and put together a workout routine for him. It adds variety and value to his school day. Thanks so much for letting me participate!	

Level 3- Cross Case, Across Cohorts (SWOTAR)

I labelled each questionnaire item as pertaining to one of the following categories: strengths, weaknesses, opportunities, threats, aspirations, or results. I then compared the data within each cohort and filled in the responses under the respective categories. Items categorized under “strengths” were questions that elicited responses pertaining to what the organization can build on; items under “weaknesses” related to resources and services that hindered or distracted from the program’s pursuit of its mission; items under “opportunities” pertained to what stakeholders required; items categorized as “threats” corresponded to events or patterns that compromised the pursuit of the program’s mission by negatively effecting services to the community; items in the “aspirations” category were associated with what stakeholders valued; and items categorized under “results” pertained to how the program was succeeding. I employed the same procedure with the interview questions by placing the interview items and/or responses under the most appropriate categories.

Next, I compiled the responses and created a chart (Table 5). Once this was complete, I analyzed the responses in their respective categories and noticed that some could be further broken down into subcategories. These sub-categories were important because they became patterns that resulted in themes that facilitated the answer to my first research question. For instance, “strengths” were arranged under “people”, “environment”, or “outcomes”; responses in the “weaknesses” category were grouped under “people” or “environment”; responses classified under the “threats” category were identified as “internal” or “external”; and the responses in the “aspirations” category were grouped under “people”, “environment”, or “expectations”. Interestingly, through

deductive analysis, inductive findings emerged. “People” and “environment” were significant categories because they appeared multiple times.

Level 4- Notable Nonoccurrences

According to Patton (2002), a researcher’s knowledge and experience of a case allows them to recognize absences of particular factors and “fill in the gaps”; this process is called “commenting on notable nonoccurrences”. These factors are noteworthy and should be considered important contributions because they provide stakeholders with information they may not have thought to request (Patton, 2002). Therefore, once the Strengths, Weaknesses, Opportunities, Threats, Aspirations, and Results (SWOTAR) chart was complete, I reviewed my retrospective field notes. My reasoning for this was two-fold; firstly, to address omissions in the chart and secondly, to determine whether any patterns emerged to support the patterns uncovered in previous levels of analysis. Examining and reflecting on my retrospective field notes allowed me to recognize that my observations paralleled my findings. Further, my affiliation with the program and undertaking several roles over the years (volunteer, coordinator, mentor, and administrator) allowed me to observe with a critical lens. This was beneficial because I was aware of the limitations and barriers facing: undergraduate coordinators, volunteers, and the director, in regards to program implementation and facilitation. As a result, when I observed challenges and/or incidents, I was able to generate possible solutions that were feasible for the future. Correspondingly, I was able to formulate ideas that would build upon what the program was currently doing well.

When the chart was complete, it allowed me to clearly see what stakeholders believed what a valuable program was and was not. Stakeholders valued specific

characteristics of individuals working at the program, as well as the program environment. They believed volunteers and coordinators should be: educated, well trained, dedicated, enthusiastic, and energetic. The environment should be: least restrictive, inclusive, safe, welcoming, developmentally appropriate, accessible, adaptable, include a variety of activities, and contain an embedded curriculum. In addition, stakeholders had expectations regarding the outcomes that a quality adapted physical activity program would provide. Expectations included: benefits the whole child (physically, cognitively, socially), appropriate student to participant ratios, affordable, changes and grows with the community, increases quality of life by promoting a healthy lifestyle, structure and consistency, offers a variety of activities, satisfies a community need, promotes skill development (personal and professional), experiential and service learning opportunity, builds a sense of community and citizenship, and has pedagogical benefits. The chart that follows is a complete SWOTAR evaluation of the Special Needs Activity Program that describes but is not limited to the aforementioned findings. The chart is four landscape pages. Columns are continuous and correspond to the capitalized titles on the first page. The shaded script in the chart represents responses given by two or more participants. I have also distinguished my notable nonoccurrences from interviewee and questionnaire respondents' data by italicizing the font.

Table 5

STRENGTHS (What can be built on?)	WEAKNESSES (Resources/services that hinder or distract from program's pursuit of their mission)	OPPORTUNITIES (What stakeholders require)	THREATS (Negatively effects services to community/events or patterns that compromise the pursuit of the organization's mission)	ASPIRATIONS (What stakeholders value)	RESULTS (How organization is succeeding)
<p>People -Welcoming atmosphere (enthusiastic undergraduates) -Dedicated volunteers -Attentive leaders -Knowledgeable advocate/champion (Maureen)</p> <p>Environment -Least restrictive environment -Inclusive -Embedded curriculum -Accessible -Variety of activities -Adaptable -Station-based</p>	<p>People -Lack of commitment from volunteers -Too many participants some weeks (including participants who do not benefit from the environment) -Some coordinators not knowledgeable enough about special needs -Not enough training for undergraduate students -Partnering is not always appropriate (student: participant)</p>	<p>-Cap on number of participants weekly -Incentive to ensure volunteer commitment -More resources for volunteers -More stringent policies surrounding profiles (no "N/A") -Parking pass for every week parents ("kiss and fly") -More training -Better incentives for volunteering -Increase materials in sensory room -More volunteers -Program is transferable to elementary or high</p>	<p>Internal -Volunteer inconsistency= safety concern= <i>potential to reap maximal benefits from program is jeopardized for participants</i> -Not enough focus on team building (<i>could be added to responsibilities of Communication & Fundraising portfolio</i>) -Visiting professionals accompanying participants acting outside the scope of their practice (i.e.,</p>	<p>People -Enthusiastic and energetic staff/positive energy -Dedicated volunteers and leaders -Well trained staff (knowledgeable) -Educated volunteers</p> <p>Environment -Least restrictive environment -Inclusive -Safe -Welcoming environment -Developmentally appropriate -Embedded Curriculum -Accessible</p>	<p>-Increased promotion of program will not solve the volunteer issue -Most skilled volunteers are those who attend every week -personal growth and development of students -professional growth and development of students -Theoretical content made meaningful because students have opportunity to put learning into practice -Immediate change in participant demeanor after S.N.A.P session due to their participation in physical activity -Novel experience that offers potential career</p>

<p>-Safe -Developmentally appropriate Outcomes -Whole child benefits -Experiential learning (practical application) -Service learning -Opportunity for collaborative learning -Emotional and social benefits for students -Provides participants with a rare opportunity -Opportunity for skill development -Increased self-reflection</p>	<p>Environment -Space at entrance -Not all participants can handle the sensory experience (sound, sight, touch) -Doesn't run long enough during the year</p>	<p>school setting (on a smaller scale)</p>	<p>taking advantage of the system or acting against policies) External -Lack of programs in the community -Lack of support in community -Other programs are not accessible or developmentally appropriate</p>	<p>-Variety of activities -Adaptable Expectations -Whole child benefits (physically, cognitively, socially) -Appropriate student: participant ratios -Affordable -Changes and grows with the community -Increase quality of life by promoting healthy lifestyle -Structure and consistency</p>	<p>path -Learn how to adapt and modify -Recognize importance of PA</p>
<p>- Activities that promote imagination, creativity, and role playing (shapes)</p>	<p>- activities that make it difficult to engage in imaginative play</p>			<p>- variety of activities offered</p>	<p>- Shapes station is beneficial because: they are adaptable (participants can build different things), they're big (fitness), allows participants to be creative, place where parallel play can lead to cooperative play.</p>

					<p>Allowing them to use their creativity and giving them the opportunity to be imaginative increases their confidence, as well as decreases their anxiety and stress through role playing</p>
<ul style="list-style-type: none"> - Champion that can advocate for the continuity of the position - Community partners (that help support program) - Publicity/outreach (team that tells the S.N.A.P story) 	<ul style="list-style-type: none"> - Not embedded in the University curriculum (partnerships with other departments within the University, linkages to other courses) - Not a course offered in undergraduate calendar or part of faculty workload - No source of permanent income that is required to professionalize the coordinating position 	<ul style="list-style-type: none"> - Increased funding 	<ul style="list-style-type: none"> - Senior administration and faculty know broadly about the program and recognize it's value regardless of their unfamiliarity with the details - Program parallels the abstract ideals and values described in university wide plan, yet, there are no concrete implementation strategies being put in place to sustain it due to lack of resources - expectations at senior administration level are not clear ...VPA expects Dean to make the abstract concrete, Dean expects concrete from 	<ul style="list-style-type: none"> - satisfies a community need - skill development (personal and professional) - experiential learning - service learning - building a sense of community and citizenship - development of whole individual [students] - pedagogical benefits 	<ul style="list-style-type: none"> - benefits students pedagogically, benefits community members

			VPA (contradictive tension)		
<i>-communication (between coordinators, between coordinators and volunteers, between coordinators and EAs/parents)</i>		<i>- find out what participants are interested in. Relate activities at S.N.A.P to their interest to make the experience and their participation more meaningful and motivating</i>			<i>- does not require money from the institution</i>

Chapter V- DISCUSSION

Major Findings

The findings that emerged as a result of the four level analysis that I employed in the previous chapter, captured valuable insights, has the potential to inform future directions, and represents local knowledge. This will be discussed further along with recommendations for future studies.

What is a quality adapted physical activity program?

According to the stakeholders that participated in my study, factors that contributed to a quality adapted physical activity program included: ‘people’, ‘environment’, and ‘expectations’. Stakeholders believed ‘People’ involved in the program should be: Enthusiastic and energetic (contributing to an overall positive energy), dedicated, well-trained/knowledgeable, and educated. The ‘environment’ according to stakeholders should be: Least Restrictive, adaptable, inclusive, safe, accessible, welcoming, developmentally appropriate, include an embedded curriculum, and include a variety of activities. Finally, stakeholders had ‘expectations’ of program outcomes for participants, community members, and undergraduate students. Expected outcomes pertaining to participants include: Whole child benefits (physically, cognitively, socially), appropriate student to participant ratios, increasing quality of life by promoting a healthy lifestyle, structure and consistency, and variety of activities offered. Community outcomes include: satisfy a community need, change and grow with the community, and should be affordable. Expected outcomes pertaining to undergraduate students include: promote skill development (personal and professional),

experiential learning, service learning, build a sense of community and citizenship, develop whole individual, and have pedagogical benefits.

Benefits of Experiential Learning

“I hear and I forget, I see and I remember, I do and I understand” (Confucius);
“One must learn by doing the thing, for though you think you know it-you have no certainty, until you try.” (Sophocles, 400 B.C.)

A common premise throughout the interview and questionnaire responses was the pedagogical, professional, and personal benefits of experiential learning. All stakeholders agreed that it teaches an individual lessons that cannot be taught in a classroom. This is quite compelling because the main criticism of university education is that what is taught in the classroom cannot be practically applied outside of the institution (Fernandez-Balboa, 1997). Through experiential learning, students have the opportunity to learn in a practical way by putting what they read in textbooks into practice which makes it personally relevant to them. Beyond this, the experiential learning environment endorses a skill-set that is transferable outside the walls of the institution. The lessons learned from experiential contexts are arguably more valuable than the content because these lessons assist in the personal and professional development of students involved.

Kolb (1984) asserts that concrete experience allows the individual to experiment with and test abstract concepts which makes the experience personally meaningful. Direct contact with the learning environment also provides the learner with direct feedback. Direct and immediate feedback is advantageous in order to problem solve and reflect which results in “higher order purposeful action” in the future. Purposeful action is achieved though the integration of experiences and concepts as well as observation and

action. Ideas and concepts are given life via experience while observations give direction to action. There should be a balance between each dichotomy in order to learn. For instance, concepts are given meaning when paired with realistic experience, but the experience risks being meaningless for the learner if they are not aware of the concepts. Similarly, the appropriate actions should be decided based on observation; suitable action cannot occur without observation and observation cannot occur without action. Kolb (1984) believes that learning is a natural tension and learners should possess four different types of competencies: concrete experience abilities, reflective observation abilities, abstract conceptualization abilities, and active experimentation abilities. These competencies have the opportunity to be achieved by the learner when they are immersed into a relevant “hands-on” situation because they are able to practice and experiment through trial and error. When experiential learning is viewed as holistic, it has the potential to reveal a clear connection between relevant situations outside the institutional walls and promote life-long learning as a result. Unfortunately, education has moved toward a psychological focused approach to scholarship whereby the learning process is personal and internal, limited by the environment of books, instructor, and institution. As mentioned previously in the “motor development” section, infants begin to learn by exploring their physical environment, yet, education has moved away from this basic instinct to learn by interacting.

Service-learning is defined as “a teaching and learning strategy that attempts to integrate community service with an academic curriculum” (Celio, Durlak, & Dymnicki, 2011, p.165). Research on course-based service-learning reveals that those involved in service experiences report enhanced interpersonal skills, self-efficacy, and feelings of

social responsibility (Astin, Vogelgesang, Misa, Anderson, Denson, Jayakumar, Saenz, Yamamura, 2006; Warchal & Ruiz, 2004). Further, significant improvements in: attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic performance was also noted (Celio et al., 2011). Astin et al., (2006) mention that Eyler and Giles (1999) also found, that critical thinking and the comprehension of complex problems is also improved (depending on quantity and quality of experience). In regard to quality of experience, Gentry (1990) mentions Wolfe and Byrne's (1975) proposal that the overall experiential learning task structure contain four phases. These phases are: design, conduct, evaluation, and feedback. The design phase involves the selection of activities and environment for students to participate in by the instructor (the environment should be one that can be closely monitored by the instructor). The conduct phase requires the instructor to control the design by structuring the environment. Evaluation allows the student to reflect on their experiences and articulate what they have learned. The feedback phase should be continuous, students should be provided with both summative and formative evaluations. In response to quantity, Astin et al., (2006) cites a large-scale study conducted in the United States which found that students who volunteered more than 20 hours per week, applied course content and theory to their service experiences, and discussed them in class experienced the largest improvement in academic and life-skill outcomes. Similarly, Celio et al., (2011) suggests that based on empirical evidence, linking to curriculum, voice, community involvement, and reflection are recommended as they will yield better outcomes.

In response to Fernandez-Balboa's (1997) argument, content taught in the classroom can be practically applied outside of the institution when a service-learning

approach is utilized. Bushouse (2005) provides a framework developed by Enos and Morton (2003) for the development of campus-community partnerships. Specifically, this framework focuses on the depth and complexity of the relationship over time. One-time events and projects are described as the lowest level interaction, followed by short-term student placements, ongoing placements, core partnerships, and joint creation of work and knowledge. Eventually, when placement is continuous, the relationship advances from independence to mutual dependence, and finally, from interdependence to transformation. When the partnership becomes transformative, the university and community partners recognize that their collaborative efforts have the potential to “transform” them both. In order for the relationship to reach the final stage, Bushouse (2005) emphasizes that it is imperative that students who participate in experiential learning are knowledgeable, and thus, trained appropriately. When service-learning is implemented well, the students, university, and community partners all benefit (Bushouse, 2005).

In addition, experiential learning allows students the opportunity become more knowledgeable and realistic about careers. Warchal and Ruiz (2004) confirm that service-learning experiences are an important deciding factor in the employment preferences of students after graduation since it is common for these students to receive an offer of employment related to the experience.

Why is the Special Needs Activity Program considered a quality adapted physical activity program?

Stations that promote creativity and imagination are valuable

This finding was a new and important addition to APA literature. Vail (2007) expresses the importance of establishing common needs between the organization and

community partners as well as shared resources (communication and collaboration among community partners is imperative). Had I not spoken to participants of the program, I would not have discovered how valuable stations that promote creativity and imagination truly are. As I mentioned in the previous chapter, when youth with special needs role play, there is a decrease in their anxiety as well as stress levels, and an increase in their confidence. This is the result of reducing the unknown for the individual and pressure associated with deciphering what is socially acceptable. Realizing the diverse benefits of these types of stations allows future facilitators an opportunity to maximize existing stations and create novel ones as well. This also emphasizes the belief that ongoing implementation and evaluation of activities is crucial (Vail, 2007).

Don't know the details but recognize its value

The consensus among all interviewees and questionnaire respondents was the acknowledgement that the Special Needs Activity Program was valuable (regardless of their previous knowledge of the program). The benefits and advantages were made explicit by all stakeholders so the question of sustainability was important. The Service Learning Professional believed that the way to sustainability was legitimizing the program through a paid director position. In order to do so, Kearns (1996) believes it is important to explore compensation policies whereby positions are remunerated based on positions of comparable organizations. However, as I learned via my interviews with the Faculty and University Senior Administrators, there is no money in the budget to fund such a position. So, the answer to the sustainability concern according to the Faculty Senior Administrator is that the institution has to value it. Though this seems like a clear and simple response, it is also quite ambiguous.

The institution has devised Strategic Plans that outline what should be implemented in the future in order to improve and become a preferred place to work and study. What is stated in the Strategic Plans reflects the institution's values (specifically, expand service learning and maximize student civic engagement). Brock University is unique because it was established as a result of a community need. The Allanburg Women's Institute began a movement in 1957 when they asked the Ontario government to place a university in the Niagara Peninsula because their children were leaving the region to attend university. The Niagara Region community wanted their children to be educated and remain in the area. In addition, having their children be educated elsewhere was economically expensive (especially since most money for university education went toward board). In 1964 Brock University officially opened its doors thanks to the dedication of The Allanburg Women's Institute and the Niagara Region community members. The University Senior Administrator best exemplified the importance of community service when he stated:

“Brock University exists in large part because of community activity, because of community activism...those [undergraduate] students are part of an institution who needs to keep reminding itself, that community service, that serving the community, is important...it's Joe and Josie tax payer out there who make this place possible it's a way that this place and those who are going to benefit from this place students, and so on, can give some service back to that community”

The Special Needs Activity Program is the largest and longest running service learning site in the Niagara Region (hosts an average of 1600 school age children and youth each year; an average of 200 undergraduate student volunteers participate per semester) and since it uses the institution's space, it appears to the community and government that it is run

by the institution. It is not made explicit that one person is running the program and the program relies on that one person. As a result, the government assumes the institution is meeting the established criteria because S.N.A.P parallels goals of strategic plan. If the institution is willing to accept the accolades it receives, it should also be willing to support the program by ensuring it's sustainability in some way.

What institutional policies and practices exist that support the Special Needs Activity Program?

“Hands Tied”

Ironically, the Special Needs Activity Program is succeeding because it does not require money from the institution. It is for the same reason that several of the items in the “weaknesses” and “opportunities” columns of Table 5 cannot be resolved. For instance, it was expressed by several stakeholders that an incentive to ensure volunteer commitment is required. Further, numerous stakeholders stated that there was a lack of commitment and knowledge among undergraduate volunteers and coordinators. It is evident that volunteers are the program's greatest strength and weakness. They are S.N.A.P's greatest strength because the program relies on them but they are a weakness because of their inconsistency. If a course was added to the curriculum, it would remedy this challenge because there would be scheduled class time to teach content and offer ongoing training of students. Additionally, it adds an incentive for students to attend every session and ensure there are a sufficient number of volunteers to work with the participants attending each session. This is also conducive to creating a safe environment where participants can maximize the benefits of being involved in physical activity.

In the same way that the program does not cost the institution money to run, adding a course as part of a faculty's workload does not either. In accordance with

section 21.3 (Approval of New Undergraduate Programs: Required

Documentation/Information for All New Programs) in the “Faculty Handbook”, it meets the following requirements: it is financially viable, it would meet student demand based on the number of students involved each year, there is a societal need as the probability of availability of positions upon graduation in the field is high (based on number of students who were involved with the program and are currently working in the field), there are adequate library resources available to offer the program, content is delivered in a way that graduates may demonstrate achievement in ways that parallel the values and ambitions of the institution, learning expectations (UDLEs) are consistent with the institution's mission and the academic plans of the Faculty and the Department (as both a teaching and research site), and finally, there are a variety of evaluation avenues to assess student progress.

The Special Needs Activity Program is not expensive to implement and it parallels the institution’s vision. It is imperative that policies be put in place to sustain it because it not only benefits the students in the school community, but it benefits community members outside the institution as well. It is stated in the Strategic Plan that the institution values what the Special Needs Activity Program provides, yet, there is nothing being done to sustain it. Perhaps there is nothing being done because the program is not in crisis and the institution is not being faced with the consequences of its vacancy. Currently, the program is being voluntarily employed by one individual with no faculty support. Should this individual retire or leave the institution, the program will stop running because it is not part of an established faculty workload and fellow staff members are not knowledgeable about the organization and administrative policies

required to implement the program. The consequences of discontinuing the program will create a ripple effect that will have ramifications for thousands of individuals: physically, socially, professionally, and academically. Therefore, if hands cannot be untied, it is imperative that the ties be loosened at the very least.

Accommodating contradictions

According to Vail (2007), there has been decreased sport participation in recent years due to community needs being ignored (promotional advertisements and top down initiatives do not improve sustainability) so community development strategies were developed in order to combat this issue. The community development approach focused on 3 elements: identifying a community champion, developing collaborative partnerships, and delivering quality sport programming (Vail, 2007). A champion is an individual who recognizes the potential for change and is proactive in taking the steps to create interest and support (they are usually well connected and respected- leadership role). Action in the community is initiated by this individual by recognizing and approaching community partners (Vail, 2007). The Special Needs Activity Program aligns well with this approach but the process is impeded when faculty and staff should be able to be proactive in theory but in are prohibited from doing so in reality because of their position within the institution. Instead of recognizing the contradictions and addressing them, it seems as though they are being accommodated because it is more convenient to do so. Reed (2007) suggests that bringing parts of the past into the future makes moving forward toward the unknown more comfortable (individuals are more willing to try new things when they are able to build on the things that are working instead of starting from “scratch”). If there is no money in the budget to support the Special Needs Activity Program and sustain it in

the institution that currently houses it, perhaps the answer to sustainability is expansion. S.N.A.P is meeting a community need, but the tensions caused by contradictions are preventing it from becoming sustainable. Though the University Senior Administrator believes that the program has become “institutionalized”, it cannot operate and be facilitated each year without a champion. The Service Learning Professional mentioned that the program was like a “leadership incubator” so it may be advantageous to view that as an opportunity to develop a community of champions. In theory, these champions have the potential to be advocates for the program and possess the knowledge to employ complementary programming.

Recommendations for Future Studies

Volunteer Recruitment

Volunteers are the program’s greatest strength and weakness, therefore, an intervention that relies on volunteers should make additional considerations when using SWOT and/or SOAR analysis. A study conducted by Khoo & Engelhorn (2011) on volunteer motivations during a National Special Olympics event, concluded that recruitment strategies for sporting events need to focus on purposive incentives (incentives that focus on doing something good for the organization or community) or altruistic motives (volunteers want to help because it is the right thing to do and it makes them feel good about themselves). Further, when recruiting first-time volunteers, it is important to emphasize the unique nature of the volunteer experience and personal growth factor, and when recruiting experienced volunteers, it is important to emphasize that they have useful skills and knowledge that will contribute to the success of the event. When individuals feel that the work they are doing is important, positive effects resulting

in reduced stress, turnover, absenteeism, dissatisfaction, and increases in commitment, satisfaction, and engagement (Stavros & Hinricha, 2009). Moreover, individuals experience “personal and collective power” by participating in Appreciative Inquiry which in turn, increases loyalty from stakeholders (Whitney & Trosten-Bloom, 2010).

SWOT and SOAR Evaluation

Though SWOT evaluation and analysis focuses on weaknesses while SOAR focuses on strengths, evaluators should not discriminate between one or the other. SWOT evaluations are typically focused on identifying weaknesses and threats in order to develop prevention strategies (Stavros & Hinrichs, 2009). However, SOAR evaluations focus on strengths and opportunities by continuing to build on what the organization currently does well (Stavros & Hinrichs, 2009). Instead of choosing to use one evaluation tool over the other, I decided to combine both because I viewed program evaluation as a progressive process. SWOT evaluation is analysis oriented which I believe is an important foundation for SOAR evaluation since it is action oriented. Using both evaluation tools has the potential to allow organizations to implement the most appropriate strategies by recognizing strengths in order to combat threats and maximize opportunities. Appreciative Inquiry is inductive and deductive because ideas and opportunities arise during data collection so researcher cannot preplan what the results will be (they are contextual and will depend on viewpoints of various individuals). However, preplanning occurs in the form of learning about the specific case and discovering strengths (Reed, 2007). Furthermore, SOAR invites members from each stakeholder group to be part of the process. This is important because people’s

expectations about what they believe a specific service should offer are made explicit (Reed, 2007).

S.N.A.P on a smaller scale

The Special Needs Activity Program is adaptable and therefore could be implemented in elementary and high schools. The literature on the benefits of physical activity and the benefits reaped by the special needs population (and typically developing population) when interventions are introduced early is substantial. In 2005, the Education Minister of Ontario declared that as part of the “Healthy Schools Program”, every elementary student is required to take part in at least 20 minutes of physical activity daily (Ontario Ministry of Education, 2009). Since Daily Physical Activity (DPA) is a requirement in elementary schools across Ontario, teachers can use S.N.A.P as a guide to develop activity stations in their respective schools. Students will attain the suggested amount of daily physical activity while simultaneously continuing to develop motor skills. All of the educational assistants that participated in my study believed that activities from S.N.A.P could be easily transferred to their own school. Since the literature also states that teachers are inadequately prepared to adapt their physical education environment to include students with disabilities (Block & Obrusnikova, 2007; Kodish et al., 2006; Spencer-Cavaliere & Watkinson, 2010; Houston-Wilson & Lieberman, 2003; Hutzler, 2007; Kirk et al., 2006; Wilhite et al., 1999; DePauw & Doll-Tepper, 2000; Cook, 2002; Emes et al., 2002) and most Educational Assistants do not possess a Physical Education background. If S.N.A.P is in fact a “leadership incubator” that has the potential to cultivate a community of champions, these champions will have the ability to instruct teachers willing to implement adapted physical activity. Considering there is no APA pre-service training for teachers, perhaps a feasible compromise could be adding

an Additional Qualification (AQ) course. The AQ course could certify teachers in APA so they are confidently able to facilitate their students and carry out appropriate movement activities. All activity should be and can be adapted since all individuals have varying degrees of skill. When activity is open-ended and allows students to problem solve using their own movement repertoires, it increases success rates and is self-motivating. Offering variety and choice during activity lessons allows students to decide on the most appropriate level of difficulty for themselves (which helps to facilitate more positive movement experiences in childhood that lead to the continuation of healthy living habits in adulthood). When activity is presented in this way, it is quality adapted physical activity.

Furthermore, comparable programs [to the Special Needs Activity Program] should be researched to determine how they are sustained. Once comparable programs are compared and contrasted, the relevant information could be applied to the S.N.A.P outreach in order to improve sustainability.

The intention for my study was for it to have practical outcomes. According to Patton (2002), the research I have conducted has the potential to be used in a practical way because it satisfies the following criteria: a priori knowledge was supported by the data, misconceptions were made explicit, and important information was uncovered that was not common knowledge but should have been. Therefore, I would like to make clear that though these are my conclusions, it should not presume an end; this project is a beginning. It is the beginning of a process seeking practical interventions toward sustainability.

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Appendix A

Checklist of elements likely to be present in an observation (Merriam, 1988 p. 90)

1. *The setting*: What is the physical environment like? What is the context? What kinds of behaviour does the setting “encourage, permit, discourage, or prevent” (Sellitz, Jahoda, Deutsch, and Cook, 1959, p. 209)?
2. *The participants*: Describe who is in the scene, how many people, and their roles. What brings these people together? Who is allowed here?
3. *Activities and interactions*: What is going on? Is there a definable sequence of activities? How do the people interact with the activity and with one another? How are people and activities “connected or interrelated- either from the participants’ point of view or from the researcher’s perspective” (Goetz and LeCompte, 1984, p. 113)?
4. *Frequency and duration*: When did the situation begin? How long does it last? “Is it a recurring type of situation, or unique? If it recurs, how frequently? What are the occasions that give rise to it? How typical of such situations is the one being observed” (Sellitz, Jahoda, Deutsch, and Cook, 1959, p. 210)?
5. *Subtle factors*: Less obvious but perhaps as important to the observation are:
 - Informal and unplanned activities
 - Symbolic and connotative meanings of words
 - Nonverbal communication such as dress and physical space
 - Unobtrusive measures such as physical clues
 - What does *not* happen- especially if it ought to have happened (Patton, 1980, p. 155)

Appendix C

LETTER OF INVITATION [to interviewees]

May, 2012.

Title of Study: Physical Activity Program Development and Evaluation for Youth with Special Needs: An Evaluative Case Study

Principal Investigator: Elyse Lappano, Student, Department of Kinesiology, Brock University

Faculty Supervisor: Dr Maureen Connolly, Professor, Department of Kinesiology, Brock University

I, Elyse Lappano, Graduate student from the Department of Kinesiology, Brock University, invite you to participate in a Master's Thesis project entitled "The S.N.A.P Evaluation".

The purpose of this research project is to evaluate the Special Needs Activity Program. Evaluating the S.N.A.P will lead to improvements that will contribute to the sustainability of the program. Should you choose to participate, you will be asked to participate in an interview conducted by the principle student investigator. You may answer any of the questions you feel comfortable answering. The interview will be recorded and the principal student investigator will be writing notes as you speak (with your permission). There is a possibility that you will be contacted to expand or clarify a response in order to ensure that your feedback is being represented accurately.

Confidentiality

You will have the option of choosing a pseudonym should you choose not to use your real name. This name will be the one used in the final write-up. Further, if I would like to use a direct quote from your interview, I will only do so with your permission. Information collected during the research process will be stored in a locker that only I, the principal student investigator will know the combination to and will be destroyed once my thesis is defended in the spring of 2013.

Potential Benefits and Risks

By participating in this research study, you will have the opportunity to identify what the strengths and challenges of the program are from your perspective. This feedback will benefit those affiliated with the Special Needs Activity Program both directly and indirectly. Evaluating the program will lead to improvements that will contribute to enhanced experiences for future coordinators, participants, and the like. If you decide not to be a participant in this study or drop out at any point, there will be NO consequences.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any further questions, please feel free to contact me (see below for contact information).

Thank you,

Principal Student Investigator:
Elyse Lappano, Graduate Student
Applied Health Sciences, PEKN
PEKN
Brock University
289-241-5514
el06qy@brocku.ca

Principal Investigator:
Dr. Maureen Connolly
Applied Health Sciences,
Brock University
905-688-5550 ext 3381
mconnolly@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [**11 - 180 - CONNOLLY**].

Appendix D

Consent Form [interviewees]

Date: May, 2012

Project Title: Physical Activity Program Development and Evaluation for Youth with Special Needs: An Evaluative Case Study

Principal Student Investigator:
Elyse Lappano, Graduate Student
Applied Health Sciences, PEKN

Brock University
289-241-5514
el06qy@brocku.ca

PEKN

Faculty Supervisor:
Dr. Maureen Connolly
Applied Health Sciences,

Brock University
905-688-5550 ext 3381
mconnolly@brocku.ca

INVITATION

You are invited to participate in a Master's Thesis Project that involves research. Firstly, the purpose of this study is to evaluate the Special Needs Activity Program in order to improve and sustain it. Secondly, the information gathered via the evaluation will become a resource for those who wish to develop and/or evaluate similar programs in their own contexts.

WHAT'S INVOLVED

Should you choose to participate, you will be asked to be interviewed by the Principal Student Investigator at a time that is mutually agreed upon. The interview will be semi-structured in nature and will take approximately 30 minutes of your time. Once the interview is complete and transcribed, you will have the option of seeing the transcript.

POTENTIAL BENEFITS AND RISKS

By participating in this research study, you will have the opportunity to identify what the strengths and challenges of the program are from your perspective. This feedback will benefit those affiliated with the Special Needs Activity Program both directly and indirectly. Evaluating the program will lead to improvements that will contribute to enhanced experiences for future coordinators, participants, and the like.

CONFIDENTIALITY

You will have the option of choosing a pseudonym should you choose not to use your real name. This name will be the one used in the final write-up. Further, if I would like to use a direct quote from your interview, I will only do so with your permission. Information collected during the research process will be stored in a locker at Brock University that only I, Elyse Lappano, the Principal Student Investigator will know the combination to and will be destroyed once my thesis is defended in the spring of 2013. Access to this data will be restricted to the Principal Investigator, Elyse Lappano, and Faculty Supervisor, Maureen Connolly.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary, agreeing, or not agreeing to participate will in no way impact your involvement in the program (i.e., grades, participation, experience, etc.). If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which you are entitled. You can choose to stop participating in this study at any time and can do this without any consequence. Parental or legal guardian consent is needed for those participants under the age of 18.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available via Elyse Lappano, el06qy@brocku.ca

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the Principal Investigator or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [11 - 180 - CONNOLLY]. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Appendix E

Parental Consent Form [for parents/legal guardians of participants]

Date: May, 2012

Project Title: Physical Activity Program Development and Evaluation for Youth with Special Needs: An Evaluative Case Study

Principal Student Investigator:
Elyse Lappano, Graduate Student
Applied Health Sciences, PEKN

Brock University
289-241-5514
el06qy@brocku.ca

Faculty Supervisor:
Dr. Maureen Connolly
Applied Health Sciences,
PEKN
Brock University
905-688-5550 ext 3381
mconnolly@brocku.ca

INVITATION

Your son/daughter is invited to participate in a study that involves research. The purpose of this study is to evaluate the Special Needs Activity Program. It is important to gain different perspectives from various participants in order to create a balanced and comprehensive evaluation. Their feedback will contribute to deciphering what the strengths, weaknesses, opportunities, and threats of the program are and therefore, will contribute to the improvement and sustainability of the S.N.A.P.

WHAT'S INVOLVED

Should you choose to participate, your son/daughter will be interviewed following a Thursday S.N.A.P session. The interviews will be audiotaped and the resulting transcript will be kept confidential between the Principal Student Investigator and the Principal Investigator. You will be notified ahead of time as to which Thursday the Principal Student Investigator would like to interview him/her. The interview will take approximately 15 minutes of their time.

POTENTIAL BENEFITS AND RISKS

By participating in this research study, your son/daughter will have the opportunity to identify what they enjoy and do not enjoy about the program from their perspective. This feedback will benefit them as it will be taken into consideration in order to improve the program. Future improvements could have: physical, social, and/or cognitive benefits.

CONFIDENTIALITY

The information your son or daughter provides will be kept confidential. Their name will not appear in any report resulting from this study; however, with yours and their permission, anonymous quotations may be used under a pseudonym. Data collected during the duration of this study will be stored in a locker at Brock University that only the Principal Student Investigator will know the combination to. The data will be destroyed once my thesis is defended in the spring of 2013. Access to this data until then,

will be restricted to the Principal Student Investigator, Elyse Lappano and Faculty Supervisor, Maureen Connolly.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If your son/daughter wishes, they may decline to answer any questions or participate in the study. Further, they may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which they are entitled. Parental or legal guardian consent is needed for those participants under the age of 18.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available via Elyse Lappano, el06qy@brocku.ca

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the Principal Investigator or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [11 - 180 - CONNOLLY]. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Appendix F

VERBAL SCRIPT FOR ATTAINING CHILD ASSENT

(Name of participant), I'm doing a study on S.N.A.P and was wondering if you'd like to help me out, but only if you want to.

If it's okay with you and your parents/mom/dad, I will ask you 5 questions about your experience at S.N.A.P.

Does that sound like something you want to do?

Appendix G

Consent Form [questionnaire]

Date: May, 2012

Project Title: Physical Activity Program Development and Evaluation for Youth with Special Needs: An Evaluative Case Study

Principal Student Investigator:
Elyse Lappano, Graduate Student
Applied Health Sciences, PEKN

Brock University
289-241-5514
el06qy@brocku.ca

Faculty Supervisor:
Dr. Maureen Connolly
Applied Health Sciences,
PEKN
Brock University
905-688-5550 ext 3381
mconnolly@brocku.ca

INVITATION

You are invited to participate in a Master's Thesis Project that involves research. Firstly, the purpose of this study is to evaluate the Special Needs Activity Program in order to improve and sustain it. Secondly, the information gathered via the evaluation will become a resource for those who wish to develop and/or evaluate similar programs in their own contexts.

WHAT'S INVOLVED

As a participant, you will be asked to provide your mailing address so that a questionnaire can be mailed to you. Upon completion, you will place the questionnaire into a pre-addressed and stamped envelope provided to you and mail it back to Brock University. A third party who has signed a confidentiality agreement will collect the questionnaires, and reorganize the data so the responses cannot be easily traced back to the respondent. The questionnaires will then be given to the Principal Student Investigator for analysis. The questionnaire will take approximately 15 minutes of your time. Should you choose to participate, please contact Janet Westbury (third party) via email: snapeval@gmail.com or by phone: (905) 688-5550 x4143. Janet Westbury is also the individual to contact should you choose to withdraw from the project.

POTENTIAL BENEFITS AND RISKS

By participating in this research study, you will have the opportunity to identify what the strengths and challenges of the program are from your perspective. This feedback will benefit those affiliated with the Special Needs Activity Program both directly and indirectly. Evaluating the program will lead to improvements that will contribute to enhanced experiences for future coordinators, participants, and the like.

CONFIDENTIALITY

The third party will code all questionnaires before they are given to the Principal Student Investigator so that responses cannot be easily traced back to respondents. If I would like

to use a direct quote from your interview, I will only do so with your permission. Information collected during the research process will be stored in a locker at Brock University that only I, Elyse Lappano, the Principal Student Investigator will know the combination to and will be destroyed once my thesis is defended in the spring of 2013. Access to this data will be restricted to the Principal Student Investigator, Elyse Lappano, Faculty Supervisor, Maureen Connolly, and Third Party, Janet Westbury.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. The Faculty Supervisor's role as Director of the Special Needs Activity Program has been acknowledged, and agreeing, or not agreeing to participate will in no way impact your involvement in the program (i.e., grades, participation, experience, etc.). The Principal Investigator (Maureen Connolly) will not have access to data until grades have been submitted. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which you are entitled. You can choose to stop participating in this study at any time and can do this without any consequence.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available via Elyse Lappano, el06qy@brocku.ca

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the Principal Investigator or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [11 - 180 - CONNOLLY]. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Appendix H

LETTER OF INVITATION [to coordinators, parents of participants, volunteers, educational assistants]

May, 2012.

Title of Study: Physical Activity Program Development and Evaluation for Youth with Special Needs: An Evaluative Case Study

Principal Investigator: Elyse Lappano, Student, Department of Kinesiology, Brock University

Faculty Supervisor: Dr Maureen Connolly, Professor, Department of Kinesiology, Brock University

I, Elyse Lappano, Graduate student from the Department of Kinesiology, Brock University, invite you to participate in a Master's Thesis project entitled "The S.N.A.P Evaluation".

The purpose of this research project is to evaluate the Special Needs Activity Program. Evaluating the S.N.A.P will lead to improvements that will contribute to the sustainability of the program. Should you choose to participate, you will be asked to complete a written questionnaire.

Confidentiality

There will be a pseudonym option on the questionnaire should you choose not to use your real name. This name will be the one used in the final write-up. Further, if I would like to use a direct quote from your questionnaire, I will only do so with your permission. Information collected during the research process will be stored in a locker that only I, the principal investigator will know the combination to and will be destroyed once my thesis is defended in the spring of 2013. The questionnaires will be sent to a third party who will sign a confidentiality agreement and organize the data so that the responses cannot be easily traced back to the respondent.

Potential Benefits and Risks

By participating in this research study, you will have the opportunity to identify what the strengths and challenges of the program are from your perspective. This feedback will benefit those affiliated with the Special Needs Activity Program both directly and indirectly. Evaluating the program will lead to improvements that will contribute to enhanced experiences for future coordinators, participants, and the like. If you decide not to be a participant in this study or drop out at any point, there will be NO consequences. Should you decide to participate, please contact Janet Westbury (third party) via email: snaeval@gmail.com or by phone: (905) 688- 5550 ext. 4143

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any further questions, please feel free to contact me (see below for contact information).

Thank you,

Principal Student Investigator:
Elyse Lappano, Graduate Student
Applied Health Sciences, PEKN

Brock University
289-241-5514
el06qy@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [**11 - 180 - CONNOLLY**].

Principal Investigator:
Dr. Maureen Connolly
Applied Health Sciences, PEKN

Brock University
905-688-5550 ext 3381
mconnolly@brocku.ca

Appendix I

Qualitative Questionnaire (for educational assistants)

1. For how many years have you been accompanying your student to the Special Needs Activity Program? Please specify the months and year(s).

2. What do you believe are the characteristics of a quality adapted physical activity program?

3. What do you believe is the greatest strength of the Special Needs Activity Program? Why?

4. What do you believe are the weaknesses of the S.N.A.P program? Why?

5. If you could make any changes to the program what would they be?

6. Do you believe activities that your students participate in at S.N.A.P could be easily transferred to your own school?

7. Additional comments:

Appendix J

Qualitative Questionnaire (for coordinators)

1. What do you believe are the characteristics of a quality adapted physical activity program?
2. What do you believe is the greatest strength of the Special Needs Activity Program? Why?
3. What do you believe the weaknesses of the S.N.A.P program are? Why?
4. If you could make any changes to the program what would they be?
5. What was your most positive experience as a S.N.A.P coordinator?
6. What was your least favourite thing about being a coordinator? Why?
7. What are the most important things you learned from your experience as a coordinator?

Appendix K

Qualitative Questionnaire (for volunteers)

1. For how many semesters have you volunteered for the Special Needs Activity Program? Please specify the months and year(s).
2. What do you believe are the characteristics of a quality adapted physical activity program?
3. What do you believe is the greatest strength of the Special Needs Activity Program? Why?
4. What do you believe the weaknesses of the program are? Why?
5. If you could make any changes to the program what would they be?
6. What was your most positive experience as a S.N.A.P volunteer?
7. What was your least favourite thing about being a volunteer? Why?
8. What were the most important things you learned from your experience as a volunteer?

Appendix L

Qualitative Questionnaire (for parents of participants)

1. How long has your child been attending the Special Needs Activity Program?

2. What do you believe are the characteristics of a quality adapted physical activity program?

3. Have you noticed a change in your child since they have attended S.N.A.P that you would attribute to the program?

4. What do you believe is the greatest strength of the Special Needs Activity Program? Why?

5. What do you believe the weaknesses of the program are? Why?

6. If you could make any changes to the program what would they be?

7. What are the most significant barriers your child faces regarding physical activity opportunities?

8. Additional comments:

Appendix M

S.N.A.P Portfolio Groups Mandates / Responsibilities

School Liaison

Areas of responsibility:

Call in days/booking
Announcements and correspondence to schools
Profiles and record keeping
Sign in and pay in
Ongoing liaison with schools
School Baskets and signage

Expectations weekly:

Attend S.N.A.P, assist on floor, set up and clean up
School sign in and pay in
Profiles picked up; name tags, “no photo” designations, floor passes
Record keeping
Liaise with Volunteer group
School call back as necessary
Regularly check email
Entrances and exits clear
Baskets, signage, tables
Communicate updates to Communications and Fundraising group

Curriculum and Equipment

Areas of responsibility:

Developmentally appropriate activity stations and strategies for utilizing them (eg, posters, visual schedule, instruction cues, progressions, motor planning suggestions)
Gym Plan; Equipment room plan (eg, diagrams/schematics)
Maintenance of small equipment room (eg, room 100)
Supervision of/participation in set up and take down
Equipment purchase and maintenance
Coordinating delivery of program of activity
Boomer

Expectations weekly:

Check supplies
Tidy organized equipment
CER equipment order
Set up of stations
Tables as necessary
Return of equipment in orderly and correct manner
Attend S.N.A.P, assist on floor, set up, clean up
Supervise and check equipment stations
Modify set up for age, stage and size of participants

Communicate any changes to Communications and Fundraising group
Boomer

Volunteer Recruitment and Training

Areas of responsibility:

Volunteer awareness, recruitment, training, ongoing communication, appreciation, supervision, professional development
Volunteer sign in and sign out
Management of volunteer hours
Reference letters
Liaise with School Liaison group
Coordinating profile form distribution and collection
Announcements as necessary

Expectations weekly:

Attend S.N.A.P, assist on floor, set up and clean up, volunteer table
Weekly communications to volunteers
Best practices awards
Profile form management
Onsite interventions and supervision
Communicate any changes or updates through Communications and Fundraising group
Coordinate sign in and sign out of volunteers
Space and line-up management

Communications and Fundraising

Areas of responsibility:

Email
Website
Multi-media equipment set up and maintenance
Banner
Logo, letterhead, posters, signage
Intra-team communication
Announcements and public awareness, on and off campus
T-shirts (team)
Fundraising events (at least one per term)
Make more than you spend

Expectations weekly:

Attend S.N.A.P, assist on floor, set up and clean up
Post S.N.A.P updates at snap@brocku.ca or website as appropriate
Gather information from each portfolio group and post it at snap@brocku.ca as necessary
Provide information on each S.N.A.P to Brock Press and to website
Check on status of banner and signage
Invite a variety of visitors both on and off the Brock Campus to attend, observe and appreciate
Update on any fundraising upcoming or completed.

Appendix N

**Semi-structured interview guide
(to be conducted with service learning expert)**

1. What is your background experience in Service Learning?

2. Are you familiar with the Special Needs Activity Program?

YES: What do you believe the primary strengths of the program are?

What are the weaknesses of the program from your perspective?

3. What are the pros and cons of service learning in your opinion?

4. What are the key components to a sustainable program?

Appendix O

**Semi-structured interview guide
(to be conducted with a university senior administrator and faculty senior administrator)**

1. Are you familiar with the Special Needs Activity Program?
2. Do you believe it is a valuable program?
3. According to Brock University's Strategic Plan (December 2010), and Brock University's Integrated Strategic Plan: Priorities to Actions (August 2011), the Special Needs Activity Program parallels the institution's vision. Are policies being put into practice in order to ensure the sustainability of the program? If so, what policies specifically?

Appendix P

**Semi-structured interview guide
(to be conducted with S.N.A.P participants)**

1. How long have you been coming to S.N.A.P?
2. What makes the whole experience fun?
3. What activities did you do today?
4. What is your favourite thing to do at S.N.A.P? Why?
5. What activity don't you like? Why?

Appendix S

University Senior Administrator- Wordle

