

Lived Experiences of Children with Disabilities
in Various Movement Programs

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Abstract

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This research offered children with disabilities the opportunity to express their voices in the description of their movement experiences. Three children aged 10-13 shared their experiences in school physical education and adapted physical activity. Observations of participants using interactive media activities in an adapted physical activity program were used to supplement interviews. The aim of this research was to discover how future professionals are prepared to design and implement physical activity and physical education programs for children with disabilities. A document analysis of Ontario university course calendars in the fields of physical education and kinesiology, disability studies, and teacher education was utilized. Data from each data context underwent four levels of reduction: 1) content, 2) categorical, 3) thematic, and 4) indigenous typologies. Findings are presented at each level leading to the presentation of indigenous typologies. Typologies of Forbidden-ness and Dichotomous Thinking were identified in the research.

Keywords: adapted physical activity, physical education, disability studies, professional preparation

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Chapter I - Introduction

Everyday life experiences assist in the development of individuals' understanding of the world around them. Through these experiences people form beliefs and attach meaning to certain things and events. Experiences are the interactions one has with the world, the way in which the world acts upon the individual and how one acts upon it. Though one's experiences may be shared with others, the meaning connected to each experience is highly variable. Each individual's perception determines the meaning of his or her experience. Previous occurrences and social and cultural diversity lend to differences in individual perception of experience concerning the same phenomenon.

Significance of Research

Insights concerning education have primarily come from teachers' experiences in the classroom (Morley, Bailey, Tan & Cooke, 2005). The majority of research in adapted physical education has focused on teachers' beliefs and is largely under representative of students' experiences (Fitzgerald, 2006). Progressive researchers such as Hayley Fitzgerald and Donna Goodwin have devoted themselves to understanding what the phenomenon of physical education is like for children with disabilities (*see glossary*). Similarly other research has been devoted to understanding the experiences of children with disabilities in sport, recreation and dance programs. As an individual with experience in adapted physical activity programming I believe it is necessary to turn to the participants to inform me on what these movement experiences are like for them in order to foster more positive experiences for participants of similar programs in the

future. This information will be beneficial for future programming efforts and curriculum based teaching.

The involvement of children with disabilities in physical activity and school physical education is imperative. All children should have equal opportunity to learn about movement through creative discovery and the learning of motor skills whether it is in school physical education or an adapted physical activity program (*see glossary*).

With obesity rates of children on the rise it is crucial that all children live active and healthy lifestyles. Prevalence of obesity is proven to be even higher in children with disabilities than their able-bodied peers (De, Small & Baur, 2008; Menear, 2007; Patradoon-Ho, Scheinburg & Baur, 2005; Rimmer, Rowland & Yamaki, 2007). The health of this population is a major concern that requires immediate attention and continued interventions.

Movement environments that are inclusive (*see glossary*) bring children together, provide them with equal opportunities, and foster positive learning experiences. Increased contact experience has been shown to heighten positive attitudes towards persons with disabilities (Crystal, Hirozumi & Rusan, 1999). By encouraging children to work cooperatively in a movement environment the stigma of disability can be minimized by students developing a better understanding of other children's experiences.

Fitzgerald, Jobling and Kirk (2003a) state that students enjoy contributing to their education by helping to construct lessons with their teachers. This finding is consistent with constructivist education practices where students are actively involved in the learning process (Byra, 2006). As part of my project I provided children with an avenue to share their insights concerning physical activity and school physical education. By

refocusing their attention to student and participant perspectives, professionals will be able to design movement contexts to suit the needs of all children.

Past research has shown that positive movement experiences can increase physical competence, awareness of potential, and feelings of self-enhancement (Taub & Greer, 2000). The purpose of this study is to understand the experiences of children with disabilities in various movement contexts. This information will be used to provide ways for program coordinators and physical educators to alter movement environments and tasks in order to foster more meaningful and positive experiences for children with various disabilities.

Research Questions

The first guiding question of this research is “What are school physical education and other movement-based programs like for children with disabilities?” Specifically I am interested in the essences which make movement experiences meaningful for this population and what are the integral components of structured physical activity and school physical education experiences. I used first-hand narrative accounts from participants recruited from various movement programs (*see glossary*) to provide rich detail as to what these experiences are like for children with disabilities. Descriptive data has been collected about a variety of contexts including school physical education and movement programs that are inclusive, semi-inclusive and specialized (*see glossary*). Data from these various contexts have provided a wide range of possible movement experiences, as well as experiences that are shared among participants.

The narrative accounts are accompanied by observations from a closed area of a semi-inclusive movement program where multimedia activities are used as a form of physical activity. As part of my observation I recorded spontaneous narratives of participants to assist in the description of what this particular movement experience is like for children with disabilities. Particularly I was most interested in observing the interactions of participants in the movement environment. This includes interactions with the self, with the activities, and with others. Observational field notes have been recorded and analyzed.

The second guiding question of this project is “How are professionals being prepared to design and implement physical activities or school physical education for children and youth of varying abilities?” Specifically, “How are educators prepared to foster positive and inclusive movement experiences for children with disabilities in school physical education?” I completed a document data analysis of Ontario University course calendars to obtain this information. Academic programs included in the analysis are: Physical Education & Kinesiology, Disability Studies, and Teacher Education.

This research adds to the progressive literature in the fields of physical education and adapted physical activity. The following chapter includes a discussion of related literature which is organized into the following seven topics: models of disability, phenomenology, inclusive physical education, adapted physical activity, professional preparation and the need for an abilities-based approach, Foucault’s theory of power-knowledge, and role in play and education.

Chapter II – Literature Review

Theoretical Models of Disability

Medical model of disability.

Disabled bodies and ill minds were at one time cast off into shadows of institutions, isolating people with disabilities from the rest of the population. The institutionalization of individuals with disabilities allowed for surveillance over their behaviours and control of their diseases. Hayes and Hannold (2007) attribute this desire for control over disabled people to the rise of capitalism. This shift placed higher value on bodies that could produce profit than those which were less productive. The category of disability was created to separate those who could work and generate profit from others who placed economical strain on the system (Hayes & Hannold). With an emphasis on reducing ill-minds and bodies, the rise of the medical model commenced placing people with disabilities at the hands of medical professionals to treat disease and disability.

The medical model views disability as a disorder that can and should be treated in an attempt to normalize an individual (Humpage, 2007). This approach places disability at the level of the individual, viewing the condition as something to be dealt with (Chappell, Goodley & Lawthorn, 2001). There is a strong emphasis on getting an accurate diagnosis in order to treat the illness or impairment (Marks, 1997). Since rehabilitation and treatment is dependant on a diagnosis, the physician holds a great amount of power over the individual, almost as though one must have permission to be disabled. Take for instance a 55 year old woman who has experienced extreme pain in her right knee for several months. In Ontario, doctors are incredibly hesitant to provide

knee replacements to adults this young. Until a specialist is found that will approve a joint replacement the woman continues to experience pain and disability without it being acknowledged by others.

In *The Rejected Body* (1996), Susan Wendell refers to the power scientific Western medicine has over describing our bodies as 'the cognitive and social authority of medicine'. Wendell reveals how medicine has shaped a socially accepted reality of disability. She states that the authority of medical professionals reaches far outside of hospitals and care facilities into schools, workplaces, and throughout entire communities.

Arguments against the medical model rarely protest against rehabilitation, rather it is the pressure that is placed on people with disabilities by the medical profession to normalize themselves that is problematic. Individuals must come to the decision independently to seek rehabilitation, therapy, or support of assistive devices. Forcing individuals to take these steps may make the pressure on them to normalize even worse (Hayes & Hannold, 2007; Wendell, 1996).

Moving toward a social model of disability.

The medical model approach does not take personal and social experiences of individuals with disabilities into consideration. The emphasis is on treating an ill-body, ignoring factors outside of the physical condition (Marks, 1996). Marks (1996) shares her thoughts on the social problem of disability:

When one reads disabled people's accounts, one quickly discovers that it is more often the attitudes of others and the frustrations of discrimination, rather than the intrinsic effects of impairment, which produce trauma. Society needs to adjust to

impaired people rather than disabled people needing to adjust to their impairment (p.87).

Many other scholars would agree with Marks (1996) that disability should be evaluated at the societal level rather than locating the problem within the person with a disability (Brittain, 2004; Chadwick, 1999; Chappell et al, 2001; Crystal, Hirozumi & Rusan, 1999).

Marks (1996) describes the social model of disability as “a theoretical elaboration which developed out of substantive struggles for independent living and citizenship or civil rights for disabled people” (p.88). This model views disability as a socially constructed concept, created by negative attitudes and environmental constraints (Humpage, 2007). This approach considers an individual’s physical impairment as separate from disability. The social model recognizes the effect of impairment on ability, however it views the meaning society attaches to impairment as being the disabling factor (Chappell et al, 2001). The social model of disability promotes working toward a socially aware, active, and inclusive culture by minimizing the barriers placed upon individuals with disabilities by society.

People with physical impairments are disabled by the lack of accessibility and adjustments made in the environment (Chadwick, 1999; Chappell et al, 2001). In addition to environmental factors, hostile attitudes and discrimination play an integral role in the disabling process (Chadwick, 1999). Oppression and discrimination of individuals with disabilities is similar to racism and sexism in that a dominant group exerts power over ‘the other’ causing inequality between societal groups. The social model highlights the

societal and cultural boundaries used to separate persons with disabilities from the general population.

According to the social model, 'disability' is a social event in which meaning is dependant on context and shared societal values (Crystal, Hirozumi & Rusan, 1999). Social groups internalize shared beliefs which define what is and is not normal. The fixation of normality is often emphasized in special education through a variety of normalization strategies (Brittain, 2004).

Brittain (2004) states the concept of normality is historically and culturally driven. Rather than referring to what is 'common' people often consider 'normal' as being the 'right' way of doing things (Brittain, 2004). The social construction of normalcy has led to the general view of disability being a 'problem to be dealt with'. Smith and Polloway (2008) used a narrative excerpt of a woman experiencing disability from Reeves (1948) to illustrate how the concept of 'normal' creates the apparent 'problem' of disability:

"D'you know, its normal people who are the real problems. They think us feeble-minded people are problems, but they're the real ones. They got so much to think about, half the time they don't know what to think. Yessir, normal people are the real problems..." (p. 237)

Without such ideals and claims as to what constitutes normality, issues surrounding disability would be minimized.

According to Linton (1998), 'disability' is a category derived from medicine to encompass any human variation that is recognized by society as being abnormal. Much like Foucault stressed the importance of hearing the subordinated group's truths and

reality, Linton (1998) suggests we turn to the people experiencing such phenomena to provide us with a vivid and accurate depiction of their experience.

Disability is a construct of the political and social environment and the unwillingness to accommodate differences in ability. Adjustments to spaces and structures can minimize the disability of those who require the use of mobility devices. Providing visual, audio and tactile (brail) instructions can offer alternatives for those who have sensory impairments. Many alternatives are available to create more inclusive environments, however the effort and dedication to ensure equity for people with disabilities has not been satisfactory.

The social model of disability has received much resistance from medicine and psychology (Shakespeare & Watson, 1997). This is not surprising since the beliefs of the social model do not correspond with these fields, limiting the power medical professionals can exert over persons with disabilities. It is important however to understand that although the medical model receives much scrutiny, the blame is not to be placed on medical professionals themselves but instead on the traditional medical model. Medical professionals have the option to choose a more unified approach, both social and individual, to counsel individuals with disabilities.

Finding a combined approach through the lived body model of disability.

The lived body model involves a complex intertwining of the medical and social models, readdressing the body while attending to the many issues of disability which are socially constructed. This post-modern approach to disability studies addresses the social model's separation of bodily impairment from socially constructed disability (Patterson & Hughes, 1999), creating a problematic mind-body dichotomy which disvalues the body

(Wendell, 1996). This separation rejects the impaired body from having influence over the experience of disability (Patterson & Hughes, 1999). Hughes and Patterson (1997) argue that by casting out the body the social model reinforces the medical model by presenting the disabled body as a 'faulty machine'.

The lived body model argues for embodiment of disability since one's experience of disability is neither purely social nor purely physical, rather a complex interplay of both. One cannot experience the world without his or her body, thus making it impossible to exile it from the disabled experience (Wendell, 1996). Hughes and Patterson (1997) describe the experiential nature of the body:

The body-be it impaired or not- is an experiencing agent, itself a subject and therefore a site of meaning and source of knowledge about the world. The impaired body is a 'lived body'. Disabled people experience impairment, as well as disability, not in separate Cartesian compartments, but as part of a complex interpretation of oppression and affliction (p.334-335).

Disability is experienced in, on and through the body, just as impairment is experienced in terms of the personal and cultural narratives that help to constitute its meaning (p.335).

Once the body is recognized as one's outlook on the world it seems unnatural to cast it out from the understanding of disability. This model has been helpful to me during my research in my attempt to understand the experiences of children with disabilities.

Phenomenology

The philosophical basis of the lived body model described above is phenomenology. Phenomenology is the 'study of essences' (Van Manen, 1984a), focused on understanding what it means to live through a particular human experience. The essences of an experience are the constituents that make it what it is. Phenomenology is inherently interpretive (Patton, 1990) and requires continuous reflection by the researcher and participants. Our experiences are formed according to the culmination of our senses during a particular phenomenon. These experiences are interpreted and afforded meaning by each individual. Since each person's interpretation determines how the experience is perceived, the researcher should be prepared for a range in descriptions of the same phenomenon across the sample population. A phenomenological perspective was deemed suitable for this project as the aim was to understand participants' perceptions of their movement experiences.

Criteria in regards to a suitable number of participants for a phenomenological study are not set. Large and small sample populations each have benefits. More participants can result in a greater variation of responses, enhancing the ability to extract the 'essences' of the experience (Giorgi, 1985). Limiting the number of informants allows the researcher to spend more time eliciting rich descriptions from each individual (Drew, 1989).

The outcome of a phenomenological study should stand up for the principle of human freedom (Van Manen, 1990). A project of this type should enhance our understanding of what it means to live through a human experience. Using this framework, belief systems should be questioned in order to uncover the meaning of

experiences rather than looking to solve a problem. For example, rather than accepting that children with disabilities are excluded from some movement experiences, the ideologies of these structures should be questioned. One must question the ways in which these children are being disadvantaged, disvalued or suppressed by current practices. Phenomenology will be revisited in the third chapter of this thesis.

Inclusive Physical Education

The debate of how to provide an inclusive movement environment for students with disabilities has been ongoing for more than 20 years (Winnick, 1987). Descriptions and theories of inclusive education are fairly similar. An inclusive educational environment brings all children together and provides them with equal learning opportunities (Florian, 2008), while providing a variety of options for a range of identities and differences (Slee, 1997). Although inclusion raises many pedagogical and curricular issues it is strongly argued that learning in a general classroom context is most beneficial for most children with disabilities (Goodwin & Watkinson, 2000; Hutzler, Fliess, Chacham & Auweele, 2002; Taub & Greer, 2000). While the theory of inclusion is well known there is a major disconnect preventing theory from transferring into practice (Rizzo & Lavay, 2000; Slee, 1997).

The downfalls of a non-inclusive movement environment are extensive and have been felt by children with disabilities throughout history. Although physical educators have been attempting a variety of tactics described by books, manuals, and research, inclusive physical education is still lacking in many schools (Morley et al, 2005). Not only have children with disabilities not been included in physical education equally to

their able-bodied counterparts but recent research has shown that some students have been rejected from the movement environment entirely (Fitzgerald, 2005). Failure to provide an inclusive physical education environment can lead to negative outcomes such as social isolation, questioned competence, and restricted participation (Goodwin & Watkinson, 2000). Experiencing failure in an inclusive environment was actually shown to have more positive responses from students than being excluded from physical education altogether (Hutzler et al, 2002).

The legitimization of inclusive school physical education has been proven in extensive research (Fitzgerald, 2005; Fitzgerald et al, 2003a; Goodwin & Watkinson, 2000; Hutzler et al, 2002). Perceptions of competence, feelings of self-enhancement, social interaction and bonding were all attributed to positive experiences in an inclusive movement environment (Taub & Greer, 2000). Goodwin and Watkinson (2000) found that inclusive activities led to a sense of belonging, skillful participation, and shared benefits. The focus must turn to discovering how to implement inclusive practices and what elements are necessary to foster positive movement experiences for children with disabilities.

Slee (1997) argues that anti-democratic discourses and normalizing strategies of special education are accountable for the delayed implementation of inclusive practices. Inclusion can at times mask assimilation (Slee, 1997), which attempts to lessen the disability. Attempting to normalize children is anti-thesis to inclusive education which aims to provide equal learning opportunities regardless of difference.

Educators and policy makers are not making the necessary steps to reach inclusion. Often educators will claim they foster inclusive educational environments

when really all that has been done is the integration of children with disabilities into a regular classroom (Davis & Watson, 2001). Integration of children into mainstream schools does not automatically transfer to inclusion; it is possible for children to be in the same environment without all receiving benefits. An inclusive environment promotes togetherness where the teacher and students act as a community with shared learning and equity (Emes, Longmuir & Downs, 2002). The outcome from working together in an inclusive environment is children who value people equally regardless of their differences.

Adapted Physical Activity

The necessity of adapted physical activity programs has been made clear in recent research which has proven that persons with disabilities are at elevated health risks in comparison to their able-bodied peers (Rimmer & Rowland, 2008). Benefits from adapted physical activity programs include: improved mental and physical health, increased motor capabilities, and control of impairment (Apache, 2005; Donaghy, 2007; Murphy & Carbone, 2008; Valvano & Rapport, 2006).

Adapted physical activity (APA) has a history of over 75 years, most of which has focused on the disability of an individual instead of their abilities (Emes, Longmuir & Downs, 2002). Following World War I, APA was characterized by corrective physical education to provide treatment to veterans who were injured during the war (Sherill, 2004). Persons with disabilities were separated from the general population for physical activity and education. Veterans from World War II reacted against the corrective philosophy of adapted physical activity (Sherill, 2004). Individuals with impairments

made it clear that corrective measures should not be taken since their conditions were irreversible (Sherill, 2004). Throughout the 1950s and 1960s adapted sports leagues and the Special Olympics were introduced to bring about a new era in APA. Since 1970 the only major change in APA is the inclusion movement (Sherill, 2004). The philosophy of this movement is to provide support for all individuals to remain in mainstream physical education and physical activity programs.

Adapted physical activity can be separated into two categories: impairment-centered and movement-centered. Impairment-centered APA follows a task- or skills-based approach, focused on correcting movements and minimizing impairment. Physical therapy is typical of impairment-centered programming. Movement-centered APA follows a person-first approach which focuses on the strengths of an individual (Emes, Longmuir & Downs, 2002). Most current APA programs are impairment-centered (Emes, Longmuir & Downs, 2002). The philosophy of this type of activity is based on the medical model and its aim is to identify and solve motor problems (Emes, Longmuir & Downs, 2002). Claims have been made that many programs have moved away from the philosophy of the medical model; however the goals of diagnosing a problem and prescribing a solution are still present (Emes, Longmuir & Downs, 2002). Further evolution must be made to develop programming on the level of the individual instead of the impairment.

Movement-centered APA follows a similar philosophy to movement education which involves the use of guided discovery during physical activity to enhance problem-solving, decision-making and social skills. This type of programming revolutionized from a broadened theoretical foundation of APA, presenting benefits of physical activity in

addition to those that are used to treat impairments (Emes, Longmuir & Downs, 2002).

The focus of APA has shifted from only institutional and educational means to promoting healthy lifestyles for persons with disabilities across the lifespan (Emes, Longmuir & Downs, 2002). This shift in focus is important because education needs to be considered more of a 'gateway' to a lifetime of physical activity experiences rather than the sole target. It is vital for physical educators and APA coordinators to devote themselves to providing positive movement experiences for children in order to lay a solid foundation for their healthy active living in the future.

Professional Preparation and the need for an Abilities-based Approach

Professional preparation.

The quest to discover new and increasingly effective strategies for inclusive physical education and adapted physical activity require professionals to question current practice. Extensive research has been devoted to instructors' experiences in these fields (Lieberman, Houston-Wilson & Kozub, 2002; Meegan & Macphail, 2006; Morley, Bailey, Tan & Cooke, 2005); however few of the suggestions have led to effective changes in policy and training. When asked to describe perceived barriers to full inclusion two-thirds of physical educators mentioned teacher preparation (Lieberman, Houston-Wilson & Kozub, 2002). Since not all physical education teachers are trained in APA (Emes, Longmuir & Downs, 2002) it is not surprising that lack of training is a limiting factor of inclusion.

Lytle, Lavay & Rizzo (2010) describe four criteria for training of highly qualified physical educators of children with disabilities including: a Bachelor's degree in physical

education teacher education, a teacher education diploma, twelve semester hours addressing the needs of students with disabilities, with a minimum nine hours specific to adapted physical education, and a minimum of 150 hours of practicum experience. With these criteria in place I question how many (or few) teachers would be classified as adapted physical educators by these standards.

The majority of those who have training in APA have only taken one undergraduate course, some of which do not include a practicum (Hodge & Johnson, 1999). Kowalski and Rizzo (1996) state that one course is not sufficient to train students in APA. This is startling since teachers claim that previous experience with children with disabilities is one of the best ways to enhance professional preparation (Lieberman, Houston-Wilson & Kozub, 2002). Hodge & Jansma (1999) studied the effectiveness of placements in APA, finding that a ten-week practicum was sufficient for positive attitude formation toward individuals with disabilities. The authors suggest on-campus placements are more effective since professors have increased control over the experience and can provide an active leadership role during the placement (Hodge & Jansma, 1999). Regardless of where the training takes place, feedback from physical educators tells us that more preparation and first-hand experience is necessary to cultivate more inclusive movement environments.

The term inclusion is often used loosely to describe various educational and movement settings. Many teachers claim they use inclusive practices but often fail to do so effectively (Davis & Watson, 2001). When teachers were asked for their perceptions of adapted physical education one instructor described “inclusion as an aspiration” rather than a reality (Morley, Bailey, Tan & Cooke, 2005). Due to minimal training and

experience, physical educators are unaware of the changes that can be made to movement environments to enhance participation for all students.

Teachers without previous experience with persons with disabilities can form opinions of these individuals prior to meeting them based on their disability (Hodge, Murata & Kozub, 2002). Since the medical model is used to develop most adapted physical education courses the material is often disability-centered using a categorical approach (Emes, Longmuir & Downs, 2002). Rather than emphasizing how each person is unique, a disability-centered approach groups people together according to their disability and provides an explanation of a 'typical case'. Educating future professionals using this approach is problematic as it promotes stereotypical perceptions (Emes, Longmuir & Downs, 2002) which often lead to negative attitude formation, causing a major impact on the movement experiences of students. Teacher educators must commit to preventing prejudgments and negative attitude formation to the best of their ability (Hodge, Murata & Kozub, 2002). A practical component to an adapted physical education course can provide an alternative first-hand experience to the medical-based information in textbooks and course material.

In addition to first-hand experience, Meegan and Macphail (2006) recommend using the social model perspective to develop material for professional preparation courses. Brittian (2004) showed that replacing the medical model with the social model in teacher training led to more inclusive physical education classes and positive experiences by students. The social approach to understanding disability considers all of the social, cultural, and environmental factors that combine to construct disability. Teachers' abilities to provide an inclusive movement environment will depend upon how well they

overcome environmental constraints, or whether or not they view themselves as having constraints to begin with (Smith & Green, 2004). The fewer perceived barriers, the more likely a physical educator is to be successful in inclusion practices.

An abilities-based approach.

An abilities-based approach for developing movement education, both in and out of schools, has been recommended in the research (Emes, Longmuir & Downs, 2002). This approach promotes the design of a movement activity that is compatible with the interaction between the person and the environment- both physical and social. An individual's capabilities are placed at the center of the planning process while other factors including the environment, task, and disability are all considered but are not the central focus. This approach values the need for individualization and optimal participation for all students (Emes, Longmuir & Downs, 2002).

Factors influencing successful implementation of movement education using the abilities-based approach are: person-centeredness, openness, and compatibility (Emes, Longmuir & Downs, 2002). Person-centeredness places the focus on the individual rather than the disability. The teacher makes the move from being an 'expert' and becomes a 'team player', allowing for student investment in the planning process (Emes, Longmuir & Downs, 2002). Openness refers to inclusion as a philosophy or constant mindset (Emes, Longmuir & Downs, 2002). Approaching a movement context with openness requires instructors to discard traditional non-inclusive activities. The focus shifts from "what cannot be done due to students' disabilities?" to "what can be done based on students' abilities". Compatibility is how all aspects of the movement context combine to create an individual's movement experience (Emes, Longmuir & Downs, 2002). In order

to foster more positive experiences all aspects must be considered. When a change is made to the environment the instructor must evaluate how this change will affect each of the other factors involved. This approach presents how the social model can be used in action in adapted physical activity and education.

The abilities-based approach described by Emes, Longmuis & Downs (2002) is comparable to the use of differentiated instruction in schools. Differentiated instruction allows for common goals to be reached by all students by attending to various learning styles of students (Ellis, K., Lieberman, L. & LeRoux, D., 2009). Differentiated instruction was introduced for teaching gifted children but has been implemented regularly in the general classroom and in recent years has been introduced to physical education (Ellis, K., Lieberman, L. & LeRoux, D., 2009). Implementing differentiated instruction in physical education is not easily achieved. Ellis, Lieberman & LeRoux (2009) describe the costs of the teacher and many rewards of the student:

Effective teachers take all of the skills and abilities of their learners into account.

By differentiating instruction, students are set up for success and are taught to their strengths. Differentiated instruction does take time, energy, attention, and patience; yet, the outcome is well worth the energy. By assessing each student and then setting up effective instruction, grouping, and curricular approaches, every child will be successful (p. 23).

Taking an abilities-based approach and differentiating instruction in physical education will provide equal learning opportunities for children of all abilities.

The beliefs and attitudes of educators are a major driving force in how well they are able to provide inclusive physical activity environments. Improved training and

resources are not likely to bring about major changes in the values of physical educators on their own. The possibility of full inclusion in movement contexts will only be possible once teachers begin to question their philosophy in order to transform the way they think about disability. Until the philosophy of adapted physical education is questioned and altered to mirror the theoretical model of inclusion, discourses of inclusion will remain as such and the struggle to provide meaningful physical education for all will continue.

Foucault's Theory of Power-knowledge

Throughout history, power has been considered something that is possessed. Michel Foucault argued against the possessive notion of power and instead deemed it to be something that is exerted (Verstraete, 2007). An emergent theme throughout Foucault's writing is power-knowledge (Foucault, 1980) which served as the title for an interview collection regarding the history of his writing. The power-knowledge argument presents power as a strategy used by individuals in authoritative positions to produce truths which maintain their position of supremacy. Power-knowledge presents the inseparable nature of power from truth creation (Foucault, 1980), "power produces knowledge because knowledge serves power" (Chadwick, 1999). Foucault believed power only existed when put into action through the production of truth (Verstraete, 2007).

Foucault argued the political nature of power and that its use justified inequality within social circumstances, leading to the oppression of a particular person or group (Foucault, 1980). Society is made to believe that an individual is in some way lacking moral character through the political construction of 'the other' (Verstraete, 2007). This

outcast is continually suppressed by those who exert power to create knowledge of 'difference'.

Foucault's ideology of power-knowledge closely aligns with the social model of disability. Members of the disability movement and scholars in disability and social studies have used the theory of power to examine how it is exercised in order to maintain the inequity between persons with disabilities and the general population. Impairments are often seen as pathologies requiring some form of treatment (Danforth, 2000). Danforth (2000) argues that we must consider the politically constructed 'other' as people first, with their own unique experiences and opinions, whether they are of a different race, culture or have a disability.

Research participants are often in positions of minimal control. An authoritative scholar will choose a population of interest, use tests and instruments to measure them and present the results as truths about the population. Foucault argued that qualitative inquiry provides informants with the opportunity to share their own truths with the researcher who acts as a facilitator, sharing their experiences with the academic community (Mills, 2003).

Hegemony exists when a dominant group persuades the subordinate 'others' in their beliefs and values (Mills, 2003). The suppressed group is led to accept their lower hierarchical status as being natural (Mills, 2003). In social situations such as parenting or teaching, authoritative figures' perceptions can be passed on and affect how children perceive themselves and interact with others (Brittain, 2004). Fitzgerald (2005) showcases how the 'for your own good' mentality works on children with disabilities. One student exemplified how children take on the beliefs of those in authoritative

positions by stating “It’s rough and you get hurt, Mr Jones and mum say I don’t have to. So I don’t” (Fitzgerald, 2005). Other children described having the desire to participate in activities from which they were excluded since the tasks were deemed unsafe or inappropriate for them (Fitzgerald, 2005).

In *Madness and civilization* (1965), Foucault related the confinement of people with leprosy in 12th century Europe to the institutionalization of the clinically ‘mad’ in the 17th century. Mills (2003) discusses how the desire to identify, isolate, and cure these populations is similar to how persons with disabilities have been treated. Placing these individuals in separate schools and therapeutic programs to ‘normalize’ them is not entirely different from confining people with diseases until they have received adequate treatment.

Foucault presents the “Insurrection of Subjugated Knowledges” in the chapter “Two Lectures” of *Power/knowledge* (1980). These ‘subjugated knowledges’ are the experiential accounts of persons whose truths have concealed and replaced by knowledge that serves a higher power (Foucault, 1980). Foucault argues that in order for subordinated groups, such as persons with impairments, to take control of their own lives their voices must reemerge in the telling of their reality.

In order to reach and sustain equity for persons with disabilities constant resistance against power-exerting groups is necessary. A long-term solution cannot be achieved as long as there remain people fighting for dominance over others. Foucault (1980) argues that power imbalances are inevitable but must continually be questioned and challenged. If left alone oppression of persons with disabilities will continue and likely worsen in the future.

Roles in Play and Education

People assume roles in their everyday life by choice or subconscious action. Once a role is assumed an individual is expected to act in a certain way (Mead, 1999). Roles such as mother, sister, teacher, or student are examples of common roles which are accompanied by a certain set of expectations. George Herbert Mead studied the roles of children in free play and stated that all cognitive activity consists of assuming roles (Mead, 1999). During play, roles were found to determine one's relationship with others (Mead, 1999). The role of one individual would lead to the adoption of a corresponding role by another child. Mead (1934) believed that assuming roles is a social process in which children develop their sense of self within a social group. By making sense of one's own role and others' roles a child can understand his or her identity within the group.

While children's adoption of roles during socialization are most often self-selected or achieved, children are at times forced into, or ascribed, roles. For instance, Gracey (1975) described how children are ascribed the role of student in kindergarten and are expected to learn the role and responsibilities it entails to take forward into future academic years. Rogers and Evans (2007) warn adults to be cautious when ascribing children roles. They found children resisted against adopting roles when over-directed by their teachers and did not have autonomy in role-adoption. The authors offered a suggestion to avoid such resistance by allowing children to take some control over role adoption in the educational play environments (Rogers & Evans, 2007).

While the previous literature references studies of young children using role play, Poling & Hupp (2009) used role play in a college level child development class. The

authors attribute role playing of real world scenarios to increased student enjoyment and interest as well as long term retention of material. There is no doubt that role play can help in the understanding of real life scenarios but whether or not it works as an effective learning strategy is still left up to question.

While minimal research could be found on role play in education as a learning strategy the Sport Education Model (SEM) clearly uses elements of role play in its function. Within the SEM, students take on variable roles in order to gain a deeper understanding of each role within the sport context. Within the guide to this model, SEM is described as inclusive by valuing all children and offering each student a meaningful role within the sporting experience (Siedentop, Hastie & Van der Mars, 2004). Without all individuals' inclusion and cooperation the sporting experience is not complete (Siedentop, Hastie & Van der Mars, 2004). Foley, Tindall, Lieberman and Kim (2007) state the SEM places responsibility on the students to make necessary modifications to include children with disabilities, creating an accessible sporting context. In addition the SEM offers teachers the opportunity to introduce disability sports to a general physical education class (Foley, Tindall, Lieberman & Kim, 2007). The SEM exhibits how the use of role play and disability awareness can be included in the physical education curriculum to foster better understanding of disability in health and physical education.

Chapter III – Philosophy and Process of Research Methods

Qualitative Research and Phenomenological Inquiry

My personal experiences as a volunteer and coordinator of adapted movement programs are what formed my connection to the focus of this research project. Voices of these individuals are not well represented in adapted physical activity and educational literature. This research has provided the opportunity for children involved in APA programs at Brock University to share their movement experiences with members of the academic community, which will hopefully lead to more inclusive and enjoyable experiences of children with disabilities in the future. Qualitative research inquiry was used to capture these experiences.

Qualitative research uses naturalistic inquiry which is the exploration of real-life situations that unfold naturally (Patton, 1990). Rather than controlling or manipulating variables this approach allows for the natural unfolding of events. Outcomes emerge directly from the data and are not predetermined prior to data collection.

Using a qualitative approach allows a researcher to build rapport with participants (Patton, 1990). This close relationship between researcher and participant often affects the depth of information retrieved. Stories that would not be shared using quantitative methods can be revealed in qualitative inquiry if the participant believes the researcher is compassionate and understanding.

Qualitative research is heavily reliant on context (Patton, 1990). Findings are context-laden, specific to time and space. Many factors contribute to variable meaning and interpretation of experiences, making it difficult to generalize results. Though these

outcomes are rarely used to form theories or predict future events they are valuable representations of a particular phenomenon at a specific point in time.

My first research question was “What is it like for children with disabilities to experience physical activity in a variety of movement contexts?” and more specifically, “What makes these experiences meaningful?” The theoretical orientation used to address these research questions was phenomenology. In order to gain a deeper understanding of what this phenomenon is like from the ‘emic’ perspective it was imperative for me to retrieve participants’ personal experiences through first-hand narrative accounts, uncovered by qualitative interviews. Additionally, I used close observation within a semi-inclusive movement program to capture spontaneous narratives, behaviours, actions, and interactions of children with disabilities during a particular movement experience.

This project focused on the characteristics of movement experiences of children with disabilities that are irreplaceable and make them meaningful to the people involved. When qualities of the movement experience were shared among participants these elements were considered to be essential to the particular phenomenon for this group of people. Characteristics that were not shared were still valued as possible movement experiences, but were not seen as essential factors.

The end of phenomenological inquiry should provide information as to how to act tactfully in a particular situation (Van Manen, 1990). This directly relates to one of the end goals of my project which was to discover what can be done to foster more positive experiences for children with disabilities. Suggested methods include description, interpretation, self-reflection, and critical analysis (Van Manen, 1990), all of which have been used in this project.

Critical Disability Studies

Another guiding question of this study asked how movement experiences of children with disabilities can be made more inclusive and enjoyable. Since this project was partly concerned with causing change in current social practices I chose to incorporate a critical research orientation informed by a critical disability studies framework. A critical analysis has been used to assess how future professionals are being trained to teach physical education to children with disabilities and what can be done to foster a more inclusive philosophy in the minds of future movement specialists.

My research framework is informed by the work of scholars Hayley Fitzgerald and Simi Linton. Fitzgerald is an advocate for the involvement of children with disabilities in physical education and youth sport. Her research is dedicated to involving youth with disabilities not only as participants but also as co-researchers. Linton is an expert in disability studies involved in a variety of cultural and professional organizations. Her involvement ranges from assisting with art, theatre and film projects to holding university seminars and presenting at national conferences. The common ground of these two professionals is their commitment to challenging the limited inclusion of disability in education and curriculum.

Disability is a social phenomenon involved in all aspects of everyday life and yet a single field of study has been designated 'disability studies'. Linton (1998) claims exclusion from other academic programs "points to the inadequacies of the entire curriculum with respect to the study of disability" (p.3). Models in social policy and legislation are changing to account for the social construction of disability, which takes into account the meaning it lends to particular lived experiences. Rather than creating a

separate field of study, a disabilities approach should be offered in all humanities programs in order to address issues of social justice and public policy (Linton, 1998). Disability is no longer restricted to hospitals and long-term care facilities in society; however its place in academia was still largely treatment-based up until the emergence of disability studies.

Academic institutions lend to sustained inequity by excluding disability from the majority of the curriculum. Linton (1998) states “the enormous energy society expends keeping people with disabilities sequestered and in subordinate positions is matched by the academy’s effort to justify that isolation and oppression (p.3).”

Disability studies emerged to serve as a site for examining the construction of ‘disability’ and the function it serves in society (Linton, 1998). The evaluation of social practices within disability studies has led to changes in social systems and policy. Linton (1998) argues that curriculum has fallen far behind legislation in regards to disability. Universities are an ideal place for introducing disability to all aspects of curriculum in humanities, especially since this is the preparatory ground for teachers who will eventually educate others.

Hayley Fitzgerald has demonstrated how research can serve as a channel for exposing inequity in regards to disability. The majority of literature in physical education does not attend to how experiences are affected by disability. Most discourse of inclusive physical education is presented from the view of educators (Fitzgerald, 2006). Teachers have been asked questions such as “what it is like to use inclusive strategies and what factors they attribute to the ineffectiveness of current practice” (Morley et al, 2005). The voices of students have been overpowered by those of their teachers. Fitzgerald (2005)

argues “only when views of children with disabilities are listened to can the nature of (movement) experiences be understood.” The experiences of students with disabilities must be understood before inclusion can be expected to work effectively.

Trustworthiness

Lincoln and Guba (1985) presented criteria for rigor in qualitative inquiry. Four points were included in their criteria: truth value, applicability, consistency, and neutrality. The features of my research design will be discussed addressing each of these four criteria.

Truth value is the level of confidence in the collection, management, interpretation, and presentation of data (Lincoln & Guba, 1985). In order to address truth value I used triangulation of my sample population, data collection, and data analysis methods. My sample population included informants from three adapted and inclusive physical activity programs which will be discussed further in the research methods section. When information from various samples yields similar results findings are more likely to be deemed reliable. Data collection methods included observations, interviews, and document data. When various data sets reveal similar findings a study is more likely to be considered dependable. Data analysis was layered into content analysis, categorical analysis, and thematic analysis. If after these three levels of analysis data sets converge to reveal related themes the findings of this study will more likely be deemed trustworthy.

Applicability is how well the findings apply to other contexts with other participants (Lincoln & Guba, 1985). Since the sample population is heterogeneous- male and female, with diverse disabilities- it is likely the results will have some application to

other children of the same age group with disabilities in various movement contexts. Although all interviewees have the same disability, Autism is a spectrum disorder indicating these participants may have highly variable abilities.

Consistency is how well another researcher can replicate the study in order to find the same results (Lincoln & Guba, 1985). I used a journal to track my steps throughout the research process to ensure that I provided enough detail in my final document that will ensure its ability to be repeated. If another individual wanted to reproduce this study it is likely the project could be repeated, but not replicated. This means that although the two projects may be very similar they should not be identical since the researcher has a major effect on the overall process. The interview guide and instructions for data collection methods can serve as a tool for another researcher to conduct the same study.

Neutrality is the extent to which the outcome of the research is determined by the sample population and social context rather than my interests and predispositions (Lincoln & Guba, 1985). Throughout the research process I used reflective writing including a complete description of my actions, thoughts, and feelings throughout the research process. All biases and reactivity to participants, data, or experiences have been noted and included in the final transcript. Since I have acknowledged my biases, outsiders should be able to locate my presence in the data to distinguish between the participants' first-hand accounts and my interpretations. In order to ensure the experiences of the sample population are adequately portrayed I used member checking during the interviews. This allowed participants to clarify their statements so I could fully understand their portrayal of their experiences and inform me of any misinterpretations.

These ethical considerations have assisted in the design and guided the path of this project. All of these issues are extremely important for maintaining rigor in design and value of participants. An ethics application was submitted to the Brock University research ethics board and was approved in August 2009 (*Appendix A-1*).

Research Methods

Ethical considerations.

When performing research with a human sample there are seven guiding principles at Brock University based on the Tri-Council Policy Statement's cardinal principle of Respect for Human Dignity. These criteria include: Respect for Free and Informed Consent, Respect for Vulnerable Persons, Respect for Privacy and Confidentiality, Respect for Justice and Inclusiveness, Balancing Harms and Benefits, Minimizing Harm, Maximizing Benefit (*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2005). Each of these principles has been addressed in regards to this research project.

Respect for Free and Informed Consent.

Individuals have the right and ability to make informed decisions regarding their actions (*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2005). This right was respected by allowing all children to choose whether or not they wished to participate in this study. Children who agreed to participate completed an assent form for minors. I designed this form using age appropriate language (*Appendix B-1*) to explain benefits, harms and the purpose of the study to possible participants. Prior to

the start of each interview, I informed participants of their right to withdraw from the project at anytime prior to the sharing of results. No participants have exercised this right.

Respect for Vulnerable Persons.

Individuals who may not have the capacity to make informed decisions are protected under this principle (*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2005). In order to protect informants' rights a parent was required to complete a third party consent form (*Appendix B-2*) prior to the start of the interview process. A parent was present at the time of each interview to ensure the safety and protection of all participants. Children required parental consent in order to participate in activities within the observation setting since research was being conducted in this area. Invitation letters and permission forms for this adapted physical activity program are routinely sent through the school board offices to be shared with schools and parents. This permission form (*Appendix B-3*) was updated in 2009 to include permission to participate in research.

Respect for Privacy and Confidentiality.

Research standards protect the privacy, confidentiality, and potentially the anonymity of sample populations (*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2005). Only the principle student investigator and supervisor had access to personal information and raw data from the participants. Confidentiality of interview participants was ensured by assigning avatars of X-men characters to children; however anonymity was not possible since I conducted the interviews. After this project has been completed and the final transcript is defended all materials will be destroyed and original audiotapes of the interviews will be sent to

participants' guardians. The names of children present at the time of my observations have not been shared, instead name assignments have been given to refer to participants in the findings section (*example: Austin, Brody, Colin*)

The location of the interview was at the discretion of the participant and parental guardian. They had the option of completing the interview in the privacy of their own home. One parent preferred that I did not come to the home and the interview was completed in a private office at Brock University.

Respect for Justice and Inclusiveness.

No portion of the sample population should have unfair weight of the risks or burden of the research (*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2005). All participants in this research study had the same opportunity to share their experiences and no burden was placed on informants.

Balancing Harm and Benefits, Minimizing Harm, Maximizing Benefit.

Research ethics requires that possible benefits of a study outweigh any potential harm (*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, 2005). In this project the only potential harm to participants was psychological or affective; however it was deemed to be no greater than experienced in everyday life. Psychological or affective disturbances may have occurred when recalling past negative movement experiences. Benefits of the study include advancement of knowledge in the topic area, the opportunity for children to share their experiences and be included in the research process was provided, and the possibility for increased inclusive practices in movement programs and physical education to foster more positive experiences.

I recruited interview participants from three movement programs and conducted observations within an adapted physical activity program. Consequently I was required to inform gatekeepers of these programs with information about my study. These individuals could have had a strong affect on my ability to recruit since they had the right to deny me access. I informed a coordinator from each program of my research project and asked permission to recruit participants from these sites. I was granted access to each program in August 2009 and each coordinator gave me assistance during the recruitment process by handing out information on my project to eligible participants.

Sample population.

Criteria for interview participants' inclusion.

I used purposeful sampling of interview participants to meet the objectives and limitations of this study. Existing related literature already includes the experiences of secondary school students with disabilities in school physical education. The experiences of elementary school students should vary from those of older youth since physical education is still mandatory (for most students) at this level. It was necessary for me to ensure participants were able to provide rich detail of their experiences; therefore the age range of interview participants was limited to 10-13 years old. Children and youth of this age group are in elementary school but are able to recall memories well enough to provide detailed descriptions of their experiences.

An additional exclusionary factor was that interview participants had to be able to verbally communicate with the researcher. This created a language limitation since I am only fluent in English all interview participants must be able to speak the English

language. Any child who wanted to participate could do so if they had verbal ability, used a talking device, or used sign language to communicate through a translator. All interview participants communicated verbally.

This study required interview participants to provide descriptions of movement experiences making it mandatory for each child to be enrolled in a physical activity program, however they were not required to participate in school physical education. All three of the informants were enrolled in at least one movement program at Brock University and participated in physical education at school. Interview participants had to identify as having a disability in order to be eligible to participate in the study since the primary goal was to understand in what ways movement experiences are meaningful to children with disabilities. Participants identified as having a disability by responding to the letter of invitation and also by verbal confirmation at the start of the interview.

Recruitment and research sites.

Interviews.

I recruited interview participants from three movement programs at Brock University including Autism Camp, Children's Movement Program, and Niagara Penguins. The number of participants was determined by responses to recruitment posters and letters of invitation given to eligible participants from each program (*Appendix C-1 & C-2*). I received approval from each of the program coordinators prior to recruitment. I posted recruitment signs at the pick-up and drop-off locations at each of the physical activity programs. I received a lot of support from each of the program coordinators. Each coordinator spoke with me about my research and made suggestions as to who they

felt would be appropriate participants. I was kindly introduced to parents of potential participants at each program so I had the opportunity to speak with them in person about my research and why I was interested in speaking with them and their children. I presented letters of invitation to parents of eligible participants, inviting them to call me or email with any questions or if they were interested in taking part in my research. Those families who were immediately interested in participating gave me their contact information to schedule an interview date and time. Recruitment began in August 2009 and lasted until October 2009 once all eligible participants had been invited to participate.

Prior to the onset of recruitment I was nervous to speak with the coordinators of each program, worried that they may not support me recruiting participants for this research. I was pleasantly welcomed into each of the programs, and each of the individuals was extremely understanding, providing me with introductions to each eligible participant's family. The parents also turned out to be very supportive and welcoming. Most of the parents I spoke with were initially wary of what I was doing and what my reasons were, but once I explained that I was most interested in hearing about their children's experiences their concerns faded away. There was only one parent who- out of concern for her daughter's emotional well-being- told me immediately that they would not be interested in participating. The eligible participants actually seemed to be the most suspicious of my intentions from the start. I found that being overt and honest with them was the best way to show them they could trust me and that I was not there to harm or critique them in any way. Overall the recruitment process was very positive and not nearly as nerve wracking as I had initially expected.

The Autism Spectrum Disorder Camp takes place during the last two weeks of summer prior to commencement of the fall term. Autism Camp is devoted solely to children with Autism, ranging in severity, making it a specialized movement program. Brock University students in fields such as Physical Education, Recreation and Leisure Studies, Education, Child and Youth Studies, and similar programs can complete a directed study by volunteering at the camp. The camp provides tasks that help build participants' strengths and reduce motor and behavioural characteristics commonly associated with Autism while emphasizing fun and parallel play.

The Children's Movement Program (CMP) is run by Brock University recreation services. Children with and without disabilities actively participate in CMP, making it an inclusive movement context. University students volunteer as movement partners to participants between the ages of one and 13. The program is directed by Brock movement specialists and professors and a handful of experienced students are employed to lead activities and mentor the volunteers. The curriculum of CMP is based on Brock's movement education program which encourages problem solving and creativity through the use of educational gymnastics, creative dance, and developmental games.

Brock Niagara Penguins is a movement program for youth with physical disabilities. This community based program is led by experienced staff and student volunteers from Brock University. Niagara Penguins is a semi-inclusive program as it welcomes children with various disabilities, particularly those with physical and cognitive impairments. Youth are given the opportunity to be physically active in an aquatic environment and on land in a variety of movement activities including gymnastics, games, and wheelchair basketball.

My recruitment efforts within these programs formed an interview sample of three children and youth: Pheonix, Storm, and Wolverine. Pheonix is a twelve year old female in grade seven. She participated in Autism Camp and her superpowers include holding nothing back and speaking what is on her mind. Pheonix has a great ability to recall information about anything she has seen, read, or experienced. She is able to recall even the most miniscule details about any happening. When I first met Pheonix she seemed mysterious with her dark brown hair waving around the curves of her freckled face, never bearing a grin. Instead she wore an inquisitive expression, making it quite obvious she was trying to figure me out. As time progressed, Pheonix opened up to me, asking if I would return the next day to spend more time with her. When I asked if she could describe what it was like to have autism she responded with the following:

I was diagnosed when I was three. I had it so badly. The things I did when I was three, I ate lots of bugs, I licked the tires, I licked the road, I lay on the road, I'm sensitive to touch which means I don't like anyone to touch me at all. I scream, I cry. I'm worse than *****. Really worse. (Pheonix)

At the start of the interview Pheonix was highly interested in talking with me and sharing stories, going on about her friends and family and how she wanted to be an Olympic swimmer. Throughout our conversation she became less focused and more interested in playing with her young puppy. As our conversation ended she quickly sprung up and ran into the next room to catch up with the floppy haired dog, coming out only to wave goodbye and thank me for the cookies I brought to share.

Storm is a ten year old male in grade five. He attended Autism Camp and CMP and was interviewed about both programs. Storm is a force of nature, who has the ability

to take out anything in his path when provoked. His affectionate yet mischievous grin draws new people in but warns those who have felt his wrath that trouble may be in the near future. Storm's figure is thin and wiry, with a pasty-white complexion, and his head topped with a mess of big blonde curls. Although he was initially wary of me, Storm became more comfortable as I introduced myself and explained why I wanted to speak with him. Since I had been told he dislikes being asked questions I was straightforward with Storm, letting him know I would be asking many questions but would understand if he chose not to answer them and most of all I was interested in what he had to tell me. This approach was successful since it made Storm feel more comfortable and he was prepared for the interview. When asked what it is like to have autism he responded as follows:

Well I don't feel any different... but I no I don't really feel any different at all.

(Storm)

While Storm does not feel any different he also does not seem different to outsiders. Although his short temper occasionally takes reign he is very bright and energetic. His cleverness makes it easy for him to outwit his peers and in many cases his mentors as well.

Wolverine is a thirteen year old male in grade eight. Although one might see Wolverine's size as great strength he views it as his personal weakness. Wolverine came across to me at first as quiet and timid, shying away from shaking my hand or telling me his name. When I first arrived he let his mother answer the door, standing far back, guarded by the oversized sofa. During the interview he stayed tucked by his mother's side, looking to her for approval as he shared his experiences with me. Wolverine looked

away as he spoke to me, keeping his chin low to his chest as he refrained from cracking a smile. Looking to the floor his glasses slid down his nose repeatedly. Each time he would push them back up only to have them slide down to the base of his nostrils again. When I asked if Wolverine would share with me what it is like to have autism he firmly declined, forcing me to move forward with the interview and inquire about his experiences at CMP. Pheonix, Storm and Wolverine will be revisited in the findings chapter of this thesis.

Observations.

A recruitment process for the observation population was not necessary since I observed activities within a pre-existing adapted physical activity program. Any children who received permission and participated in the observed activities were automatically included in the research. The research site of my observations was the multimedia room at the Special Needs Activity Program (SNAP) at Brock University. Observations were completed at the program once a week for seven weeks between October and December of 2009.

SNAP has been designed specifically for children with a wide range of disabilities including, but not limited to, intellectual, behavioural, and physical disabilities. SNAP welcomes children with special educational needs and various disabilities, congenital or acquired. Only children with special needs and disabilities are included in the movement environment making it a semi-inclusive movement program. Students with special needs from schools in the Niagara region are invited to participate one week each semester. Participants of children's service programs such as Bethesda and Children's Autism Program are invited to participate in every SNAP session. Children, youth and young

adults ages five to 21 take part in the program; however the majority of participants are in elementary school.

Interactions with peers and volunteers emphasize the building of social skills. Students are free to choose which activities they participate in and are assisted by a student volunteer from the university. Physical activities include educational gymnastics, rhythm and dance, developmental games, and fine motor activities. Multimedia activities –‘Nintendo Wii’ and ‘Rockband’- were introduced to SNAP in October of 2009. These games were located in a separate room to minimize distraction from other activities.

Brock Athletics and the Brock Women’s Basketball team let SNAP use their team room for the duration of the program to house the multimedia activities. This space was named the ‘multimedia room’ and was the site for my observations. The room was lined with lockers with one long bench which stretched from one end of the room to the other. A couch resided on the far wall. The television screens and game equipment were situated opposite to the bench so spectators could view the screen easily. There was a small bathroom area in the team room including two shower stalls, a toilet, and sink. This area was sectioned off for the duration of the program.

‘Nintendo Wii’ offers physical activities including golf, baseball, bowling, tennis, and boxing. Players use a controller to mimic actions similar to swinging a bat, club, or racket, or throwing a baseball or bowling ball. ‘Rockband’ includes a three piece instrument set including drums, a guitar, and a microphone. Participants can choose their song and level of difficulty, playing along to visual prompts provided on screen. Colour prompts on screen indicate to the players which buttons to push on the guitar or which drums to hit. These interactive media provide children with the opportunity to participate

in activities which would normally require a lot of space, equipment, playing fees, and teammates or opposing players. The skill level required by the interactive activities is not equal to their life size counterparts, providing individuals a greater chance of successful participation. While video games and other forms of multimedia have been traditionally viewed as sedentary pastimes, 'Nintendo Wii' and 'Rockband' provide a mix of fun and physical activity.

The sample population of my observations included 195 of the 223 participants who used the multimedia activities over the seven week duration of the program. I attempted to make observations and write field notes for each participant who entered the multimedia room; however I was not able to make observations of all children. Reasons for this include the participant may not have been in the room very long or my focus was on other children in the room.

Data collection.

I used three data collection methods in this research. These methods include observations and field notes, in-depth qualitative interviewing, and collection of university course calendars. Triangulation of these data sets are used in a cross examination in order to increase the credibility and reliability of results found in this study. The data collection methods involved in this project did not require completion in a predetermined order. Document data were collected first in the summer of 2009, prior to collection of the other two data contexts. Additional document data which was initially missed was added in winter 2010 during document data analysis. Interview and observational data was collected concurrently in fall 2009.

Observations.

In the original methods section a 'Speakers' Corner' activity was proposed to retrieve spontaneous accounts of children's experiences during the SNAP program. Ethical guidelines required additional consent and assent forms to be sent out with program information. The program coordinator and I came to a decision that sending out additional forms and documents would alter the vision of SNAP from a fun movement program dedicated to the growth and enjoyment of children to one that is research driven. The 'Speakers' Corner' activity was abolished and instead observational data was collected in the multimedia room. Although going through ethics was a difficult process and I missed out on doing the 'Speakers' Corner' activity, the process helped to shape my research since I added observations as an alternative data method. Through the observations process I discovered many interesting findings I may not have found otherwise.

The multimedia room included 'Nintendo Wii' and 'Rockband'; these interactive media were introduced to SNAP in October of 2009. This data collection method allowed for my close observation of a specific movement context within the very large and variable movement environment of SNAP. The main location for activities at SNAP is in the Ian Beddis Gymnasium at Brock University. The multimedia activities were located in an athletics team room down the hallway from the main gym. This minimized the distractions 'Nintendo Wii' and 'Rockband' would have created had they been in the same space as the other activities. The interaction between the participants and I was maximized using this space and I was also able to observe a newly devised interactive media station promoting hidden activity.

During observation I wrote field notes to describe children's actions and relationships while using these activities. Each week I would recognize new patterns in participants' actions and relationships. I was always making note of specific details to each child and also general observations for each day. While observing, the relationship between the participant and volunteer often caught my attention. I think that as a former volunteer and coordinator of this program I was far more critical of these relationships than an outsider may have been. I paid close attention to how volunteers approached their child-partners and how volunteers were received by the participants. I believe this may be part of the reason why my findings are heavily based on relationships.

I completed my observations during seven three-hour sessions with one session each week lasting from October 22, 2009 concurrently to December 5, 2009. I created a field notes chart (*Appendix D-1*) to document my observations. Information including age, gender, time spent in room, activities used, disability, and happenings were logged on the chart. If information such as age or disability were not available they were identified as 'unknown'. I made detailed notes on nearly all children and youth who entered the multimedia room. Over the seven week duration of the program, 223 participants entered the multimedia room and I observed all but 24, making detailed field notes on each child that I observed. The most important information for me to include in the observations was specific happenings. Some examples of happenings that were recorded in my field notes include spontaneous actions, interactions, and narratives. I paid close attention to the relationships between participants and their peers and participants and their volunteers. Participants' effort and involvement in the activities were also considered important details to include in my field notes.

Interviews.

I performed in-person interviews with child participants aged ten to thirteen to retrieve in-depth narrative descriptions of their movement experiences in physical activity programs and school physical education. In order to protect the rights of informants each child had to have a parent or guardian present during the interview. Assent and consent forms (*Appendix B-1 & B-2*) were used to obtain permission to audiotape the interviews and use any information for the intended research project.

I chose to use a semi-structured interview approach, using a combination of an interview guide approach and a standardized open-ended interview (Patton, 1990). My rationale for using a combined approach was to give myself the structure of standardized questions, with the openness to ask additional questions and use probing techniques to gain a deeper understanding of participants' experiences. This design emphasized the use of open-ended questions to avoid dichotomous answers containing minimal description.

Patton (1990) recommends using 6 types of questions: demographic, behaviour, value, feeling, knowledge, and sensory. Demographic questions provide the researcher with the informants' background information. Behaviour questions ask what the individual does in a particular situation. A behaviour question elicits a response describing observable behaviour or experience (Patton, 1987). Value questions inquire about participants' thoughts, opinions, or beliefs concerning a particular issue. Feeling questions require children to recall emotional responses to a particular happening during the movement experience. Knowledge questions were asked to retrieve the facts a person knows, greatly differing from opinion questions based on personal beliefs. Sensory questions elicited descriptions about what was seen and heard in each movement context.

I designed the interview guide with a range of questions including each of the six types which Patton (1990) recommends. Each question was specifically designed to be age-appropriate for participants in regards to the language used. I ordered questions in the interview guide (*Appendix D-2*) according to the movement context. I asked demographic questions first to retrieve background information about each participant. I asked questions pertaining to the adapted physical activity program immediately following demographics. The questions in this section were designed in accordance with the inclusion condition that all interviewees participated in at least one of the three physical activity programs previously outlined. I asked questions about physical education last. I designed two separate sections of questions about physical education- one for those who participate and another for those who do not. All three informants participated in school physical education, therefore only the first section of physical education questions was used for data collection.

I used the interview technique of probing when a participant provided a response containing minimal description concerning his or her experience. This interview strategy was meant to deepen the response provided by the interviewee (Patton, 1990). Since the participants were children aged ten to thirteen, I used detail-oriented probes (Patton, 1990) in order to maintain focus and flow of the interview. Examples of such probes include when, who, where, what, and how questions.

I began each interview by introducing myself and explaining why I wanted to speak with the informant. Upon receiving both verbal and written consent by the parent and child I turned on a tape recorder to document the interview. Additional field notes were taken to back up the audio recordings and to log my thoughts and feelings during

the interview process. The duration of the interview ranged from 30 to 60 minutes, including time for short breaks. This time frame was chosen in order to retrieve detailed descriptions from participants regarding their movement experiences. When creating this guideline I understood that some children are not able to sit through an extensive interview, thus a length of 30 minutes was chosen. Some participants chose to share more information than others, increasing the length of the interview up to nearly 60 minutes. This time frame was only to be extended at the discretion of the participant and parental guardian. None of the interviews went beyond 60 minutes. Participants were given five to 10 minute breaks after we finished the physical activity program questions and before I began my inquiry of their physical education experiences. To conclude the interview I offered participants the opportunity to share any final thoughts and then turned off the tape recorder. I explained again what their stories would be used for and that they would be sent the audio recording and a summary of what I discovered in my research.

Time during the interviews went by very quickly. Although it may be surprising to some, I was least nervous for my first interview which was with Pheonix. I had previously spent nearly an entire day with Pheonix so I had built a rapport with her and felt comfortable speaking with her, also knowing that she would be comfortable sharing information with me. I made what one might call a 'first-time researcher error' by letting the tape run out during this first interview. Luckily I had played the tape back only minutes after I left the interview, making it much easier to recall Pheonix's responses to the questions that were missed by the audio recorder. Although I missed out on being able to share the exact descriptive language she used to answer the final few questions I

was confident that by using my memory recall assisted by my additional field notes I was able to represent her responses with dignity.

My second interview was with Storm who I had also met previously but was not on my list of children to recruit since he was only nine at the time he participated in Autism Camp. His birthday was in early Fall so by the time I recruited participants from CMP he had his tenth birthday, making him eligible to participate. My only concern going into this interview was that I had been told that he dislikes being asked questions. In order to avoid irritating Storm I told him prior to starting the interview that I would be asking him a lot of questions but that it was only because I was interested in what he had to tell me. I also made it clear that he did not have to answer any question and if he was not able to remember then he could just let me know and it would be okay. This approach seemed to have worked very well because Storm appeared to have fun during the interview, swiveling around in the desk chair and smiling as he recalled some of his past experiences. As a witness to some of Storm's previous outbursts, I was very happy that I did not cause any while interviewing him.

My third interview was with Wolverine. By the time I did this interview I was comfortable with the questions in my interview guide and the overall process. I had met and spoken with Wolverine's mother on a few occasions which calmed my nerves slightly but I had not had a chance to really speak with Wolverine prior to the interview. Before the interview he was bright and cheerful, sharing different stories with me and showing me his new 'Rockband' equipment. Once we started the interview he became much more shy, looking away from me and reluctant to answer questions with any detail. It is hard to express how I felt at this time. A part of me was frustrated, not with

Wolverine but with myself, as though I lacked the ability to get him to open up to me. His mother proved to be very helpful to me, paraphrasing questions and getting Wolverine refocused. As the interview continued I appreciated her help more and more. Near the end Wolverine became bored and restless. He moved down to the floor, lying down and rolling side to side becoming frustrated with his mother and I as we tried to clarify what he was telling us. Soon after this began we wrapped up the interview. Although it was the least detailed and most difficult interview it was a valuable learning experience and I still received a lot of information about Wolverine's experiences.

Document data.

Unobtrusive data were collected to monitor the preparation of professionals to facilitate inclusive movement environments for children of varying abilities. I examined course calendars from Ontario universities for the current year (2009-2010) and collected information to be used for analysis. Programs of interest were physical education and kinesiology (or similar), teacher education, and disability studies. Physical education programs were included because they are intended to educate individuals how to work with individuals in various movement environments. Course descriptions of any adapted physical activity or therapy based courses were retrieved from each university's website. Teacher education programs were included to see how future educators are being trained to teach children with disabilities, particularly in a physical environment. Descriptions of special education, diversity, and health and physical education courses were retrieved from each faculty of education's website. Disability studies programs at the undergraduate and graduate levels were included because they are dedicated to the

appraisal of social practices in regards to disability and the training of professionals to work with people with disabilities. I was interested to discover how these programs are designed and whether there is inclusion of content dedicated to movement or physical environments. Program mission statements and course descriptions of education related courses within disability studies programs were retrieved from online university course calendars. These materials were publicly accessible online and collection of this data did not require special permission or access.

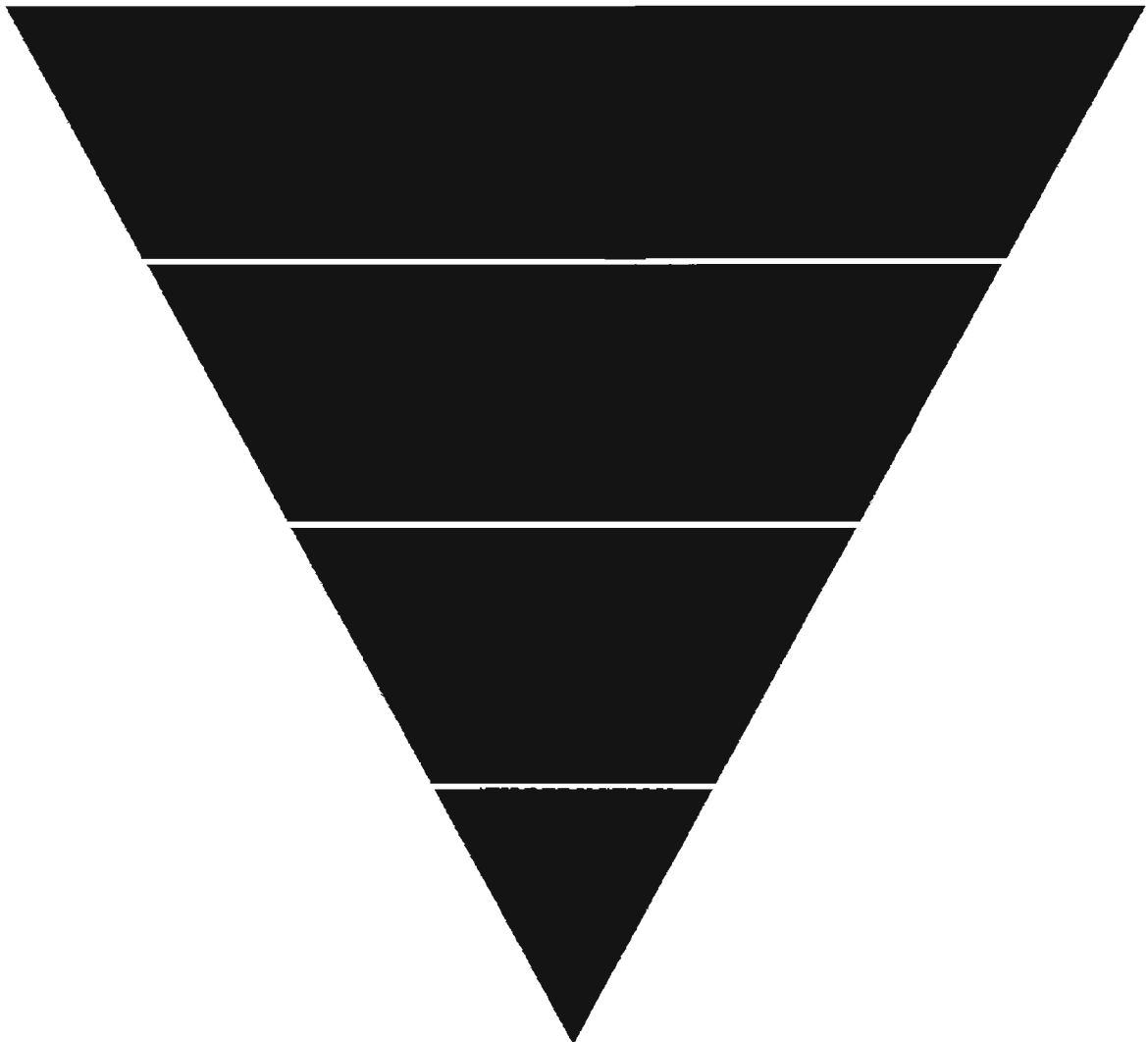
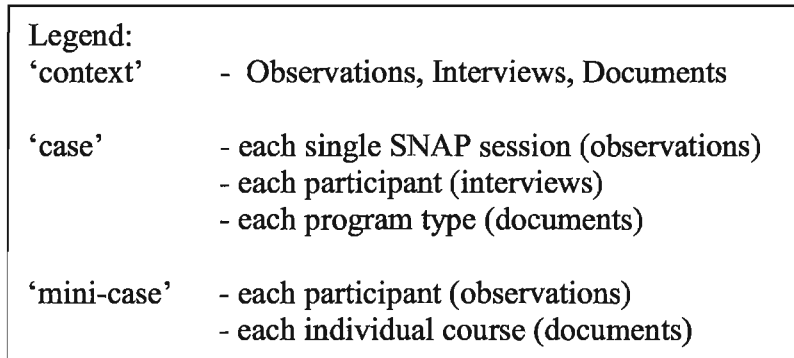
Data analysis.

I used an interpretive orientation for data analysis, allowing me to provide insight into the meaning of participants' experience. I began by organizing the document data into text and progressively reduced the data to reveal observable patterns within and across data contexts. I filtered data through three levels of analysis including content, categorical, and thematic. The reduction of data has led to the exposure of the meaning and essences of this particular human experience which is shared in the next two chapters.

A variety of analytical techniques have been used to lead to the findings of this project. I first transcribed data into text including observation field notes records, interview transcriptions, and course information data logs. I organized the texts according to basic content categories in order to easily cross compare cases within each data context. I created coding systems for each data context according to patterns apparent in the text. Codes were identified throughout the data and eventually grouped into categories according to consistencies between codes signifying similar meanings. A

cross examination of the categories identified within each data context revealed a new set of themes which were either very strong in one data context or appeared in more than one data context. These overarching themes showcase the essences of the human experience in question, and also highlight new findings revealed by this project. I provide further detail of each step of the analysis in the order of which they occurred. The first and second reduction of data has been split into the three data contexts, describing specific details of the analysis. The third and fourth levels of reduction cross compare data contexts and make connections between each. Figure 3.1 on the next page provides an overview of the progression of this analysis. Please see the legend for examples of context, case, and mini-case.

Figure 3.1 Overview of data reduction.



First reduction.*Observations – content level.*

The first reduction was directed towards content- the things that are present in the data. There was a large amount of data from the observations and field notes. Each observation day was represented as one complete case with seven cases total, one case for each of the seven observation days. Each of these seven cases included many observations of individual participants which were each represented as a mini-case. I needed to find a way in which to organize the data to easily view all of the mini-cases within each large case and also compare data recorded on different days. I organized the data into a grid including any information available on the following: age, gender, activities, time spent in room, disability, and field notes. I placed data in the grid within case (each observation day kept separate) with each of the individual mini-cases listed in the order they were recorded for that observation day. An example of this grid can be viewed in the appendix section (*Appendix E-1*). After reviewing the content of the observation data it became clear that much of the text related to body, space, and relation influences thus I determined the initial categories for the second reduction would be based on the four lifeworld existentials: lived body, lived space, lived time, and lived relation. Emergent categories and patterns will be revealed in the next level of analysis.

Interviews – content level.

Since the original interview data was audio recorded I needed to transcribe the data into text. I did this by playing back the recording and typing the interview dialogue into Microsoft Word 2008. I continually paused, rewound, and played the tapes to ensure

I captured every detail of the interview. Additional field notes and reflection were used to add description to the data. This was a long and tedious process but I found that it was beneficial to transcribe the data myself to put myself back in the experience, reliving it while transcribing.

Once the data was transcribed into text I needed to organize it in a way which would allow me to easily identify patterns and similarities. In order to compare responses in a cross case analysis I organized the data by question. A grid was designed with numbered questions from the interview guide along the left margin. Each participant was assigned a column and responses for each question were inserted into the grid. An example of this grid can be viewed in the appendix (*Appendix E-2*). In some cases the response included minimal description, requiring the addition of field notes in order to recall what the text was in reference to. I feel as though it would have been extremely difficult for anyone but the interviewer to have transcribed and analyzed the data effectively since many responses required additional description and detail that only I could provide.

I discovered through cross comparison of the interview data that participants' responses involved extensive reference to body actions and expressions, using the body in various ways, and relationships with volunteers, peers, and teachers. Since these patterns emerged once again in the interview data I decided to utilize the four existential themes of lived body, lived space, lived time, and lived relation as the starting point for the categorical analysis of the interview data. Emergent categories will be discussed in the next level of analysis.

Document data – content level.

The aim of the unobtrusive data analysis was to discover how professionals are being prepared to include and provide meaningful movement experiences for children with disabilities. Three programs of interest were investigated using Ontario university course calendars: physical education and kinesiology (or similar programs), disability studies, and teacher education. I scanned the physical education course calendars for courses with content on disability or adapted physical activity. Any courses with related content were included in the initial analysis. I scanned course calendars of disability studies programs at the undergraduate and graduate level for courses containing description related to education of children or youth with disabilities. These courses were included in the analysis. Courses in teacher education programs with content on health and physical education, special education, diversity, or inclusion were included in the analysis.

The information collected from university course calendars needed to be organized in a way in which I could cross compare course information and identify patterns. I designed a separate grid for each of the programs included in the analysis: physical education, teacher education, and disability studies. The physical education grid included headings: institution, course title, R/O (required or optional credit), year (of study), and practicum (requirement). During further analysis an additional heading of population focus was added to easily distinguish between those adapted physical activity courses which included content on children and youth and those which did not. An example of this grid can be located in the appendices (*Appendix E-3*). The disability studies grid included headings: institution, course title (if applicable), R/O (required or

optional credit), year (of study), and practicum (requirement). An example of this grid can be located in the appendix section (*Appendix E-4*). The teacher education grid included headings: institution, course title, and R/O (required or optional credit). During further analysis an additional heading focus was added to indicate whether special education, diversity, or similar topics were the main emphasis of the course or a secondary theme in the course content. An example of this grid can be viewed in the appendices (*Appendix E-5*). Patterns within the chart are discussed in the content level of the findings section. Course descriptions were kept separate and used later in the categorical analysis.

Second reduction.

Observations – categorical level.

The second level of the observation analysis was used to focus on patterns within the data. Following a within case cross comparison of findings in the content analysis I decided to use the four lifeworld existentials to find patterns within the data specific to lived body, lived time, lived space, and lived relation. I assigned each existential a different colour and highlighted text according to the category it best suited. Most mini-cases fit multiple existentials due to various happenings during one observation. In these instances I highlighted the mini-cases in multiple colours. I coded text for lived body if it was a description of body actions, expression, or activity. Text of duration or frequency is exemplary of data coded for lived time. I coded text involving places, spaces and levels for lived space. Text that was coded for lived relation described participants' interactions with their peers, volunteers, and the multimedia activities.

Following the initial coding by existential category, I examined data within each existential for commonalities and differences. I developed a coding system to attend to the patterns within the text. A constant comparison between codes revealed some with similar meanings leading to the same idea. Merging of codes led to the formation of subcategories within each existential. Lived body was subcategorized into role, active involvement, strategy, challenge, positive expression, negative expression, and participation as success. Lived space was subcategorized into forbidden spaces and gathering place. Lived time only had one subcategory continued involvement. Lived relation was separated into subcategories of peer to peer interactions, interactions with media, and volunteer as movement facilitator. I created a new chart separating text into categories; an example can be viewed in the appendices (*Appendix E-6*).

Multiple codes used towards the production of a single category were maintained within the chart. An example of this can be seen in the findings section in the description of children's peer to peer interactions. Positive and negative interactions were observed, revealing four distinct ways in which participants interacted with their peers. This can be seen in more detail in the categorical level of the findings section. The second reduction of observation data helped me to designate text into categorical groupings, showing significant patterns within the data. These categories will be used in the next level of analysis to reveal themes across all data contexts.

Interviews – categorical level.

The cross comparison of interview data by question in the first level of analysis led to my decision to use the four lifeworld existentials as categories in the second

reduction of textual interview data. The purpose of the second reduction was to organize data into categories based on patterns within the text. I assigned the same colours to each existential in the interview analysis as I used previously in the observation analysis. I examined and highlighted the text according to the existential that best suited the participants' responses. Assignment to multiple categories occurred less frequently in this section since each response was usually in connection with a particular happening related to only one of the existential categories. I coded text which included expressive language and actions for lived body. Text was coded for lived space when places and spaces were mentioned. I coded text involving interactions and relationships for lived relation.

Each existential had similarities within the text. I created a coding scheme to signify these patterns. These patterns led to the creation of more defined subcategories within each of the existential categories. Lived body was subcategorized into positive expression, negative expression, challenge, activities/movement, and roles. Lived space was left as a singular category of physical environments. Lived time was not included in the interview analysis as it was less salient in the text due to minimal description of lived time by participants. Lived relation was subcategorized into empathy for others, volunteer as movement facilitator, building relationships, and help interactions. I kept two separate charts of existential categories and subcategories; one for physical education experiences and another for movement program experiences. This separation was maintained so I could distinguish between narratives to present them accurately in the findings section. Examples of these charts can be located in the appendices (*Appendix E-7 & E-8*). The second reduction of interview data revealed patterns within the text between participants

and allowed a comparison of similarities and differences between responses about physical education and responses about movement programs.

Document data – categorical level.

The second reduction of document data was designed to examine the language used in course and program descriptions of those listed in the content analysis. I chose to use this form of analysis because the language used to describe a university course can help to reveal the content included and framework or philosophy that is used to present it. Only the physical education courses with content that includes children or youth with disabilities were included in this level of analysis; therefore courses from Waterloo, Western, and York were excluded. I set this inclusion criterion since the aim of the analysis was to discover how future physical educators and movement specialists are being prepared. Disability studies program mission statements were also included in the analysis since some programs do not offer courses specific to education. All teacher education courses involving content on special education, diversity and equity, or health and physical education were included in the discourse analysis.

My first reading of the documents was to get a sense for the language used in the course descriptions. During my second reading of the documents I used a keyword search to cross compare descriptions in a discourse analysis of the document data. Patterns in the language of the text led to the formation of four distinct categories: individual needs and well-being, accessibility and inclusion, physical activity and disability, and corrective or pathological. Document data was separated into categories and placed in a chart, an example of this chart can be viewed in the appendix section (*Appendix E-9*). I did a third

reading of the text to ensure all relevant text had been coded. Each of the categories will be discussed in depth in the next chapter. Not all categories are present in each of the programs investigated; this will be discussed further in the thematic analysis. The second reduction of document data has allowed me to reveal the patterns which are present in the text and also to acknowledge patterns of what is missing from the text.

Third reduction.

Observations, interviews, document data - thematic level.

In this level of analysis I completed a cross comparison of the categories which emerged within each individual data context during earlier reduction. I created a concept map, extracting patterns and underlying themes within the subcategories identified in the second level. Each of the categories was interrogated to discover deeper meaning relevant to the movement experiences of participants. When patterns were identified in the categories of more than one data context a new theme was revealed. Although the strongest themes were apparent in all three data contexts there were other very powerful themes that were discovered in only one or two of the data contexts. For example, a forced dichotomy of mind and body in education was a noteworthy pattern within the document data. The following are themes I identified in the interview and observation data during cross analysis: fun and activity, emphasis on achievement, social experiences, forbidden-ness, role development, metacognitive awareness. Those themes which were discernible in all three data sets include: push for autonomy and independence and issues of inclusion. These themes will be discussed at length in the findings chapter and will be followed by an analysis of the indigenous typologies revealed by this research.

Chapter IV – Reduction of Data Leading to Findings

Introduction

The methods described in the previous chapter foregrounds the disclosures displayed in the findings. Findings are presented by level of reduction for each of the three data contexts: observations, interviews, and document data. Three levels of analysis have been used to reduce data from its original form: content level, categorical level, and thematic level. A fourth section –indigenous typologies- includes an analysis of the novel and particular themes related to participants' experiences which were revealed by this research. Each level provides an explanation of how the data were progressively reduced to lead to the indigenous typologies. This chapter begins with an overview of the reduction of data. This overview will be followed by a detailed description of the findings from each level of reduction.

The first reduction or content level was used to reduce data into text and organize data for further analysis. Observations were placed in chart format within case, keeping observations from each SNAP session separate. Within each of these cases, individual mini-cases were displayed on the same page in order to complete a cross case comparison of different individuals on the same observation day. Patterns from the first reduction of observation data led to my decision to use the lifeworld existentials in further analysis during the second level of reduction.

The interview data were transcribed into text and organized into chart format in the content level. Informants' responses were organized by question to allow for cross case comparison among participants. Original interview transcripts and field notes were kept in case they needed to be referred to for more details in the portrayal of children's

experiences. Patterns related to the lifeworld existentials were also evident in participants' interview responses so these patterns were used as categories in the initial phase of the second reduction of interview data.

First reduction of document data involved the organization of text into chart format to perform a cross case comparison of course information within each related field of study: physical education, teacher education, and disability studies. Relevant course information from physical education programs was reduced and placed under the following headings: institution name, course title, required or optional credit, year of study, practicum requirements, and population focus. Course information from disability studies courses and programs was reduced and placed into the chart under the following headings: institution, course or program title, required or optional credit, year of study, and practicum requirements. Teacher education course information was reduced and placed under the following headings: institution, course title, required or optional credit, and course focus. Patterns found within these groupings will be discussed later in this chapter. Course descriptions were included in the raw data but were left in original form until the second reduction.

The second reduction or categorical level was used to locate patterns in the text to form significant categories for further analysis. Patterns in the content analysis of observations led to the use of the four lifeworld existentials; lived body, lived space, lived time, and lived relation; as the initial categories for second level reduction. I organized the text into these categories and examined text for additional patterns within each existential. I created a coding system to identify patterns within the text related to lived body, lived space, lived time, and lived relation. When codes led to similar meanings or

concepts they were grouped into subcategories to be used in the last level of reduction. Subcategories of lived body were role, active involvement, strategy, challenge, positive expression, negative expression, and participation as success. Lived space was split into forbidden spaces and gathering place. Lived time revealed only one subcategory of continued involvement. Subcategories of lived relation were peer to peer interactions, interactions with media, and volunteer as movement facilitator. Each of these subcategories will be discussed in depth in the categorical level of this chapter.

The second reduction of interview data was used to identify patterns in participants' responses to develop categories for in depth analysis. The content level of interview analysis revealed patterns related to the lifeworld existentials; lived body, lived space, lived time, and lived relation. These were used as the initial categories for second level reduction. Responses were assigned to each existential and new patterns were identified. I created another coding system to locate patterns within the text of the interview data. When more than one code was used for text revealing similar meaning or leading to the same idea they were combined into a subcategory. These subcategories are discussed later in this chapter with examples from the interview text to demonstrate how they are related to participants' experiences. Subcategories within lived body were positive expression, negative expression, challenge, activities/movement, and roles. Only one subcategory- physical environments- was revealed in lived space. Lived time was less salient in the interview text since participants' used minimal description related to this existential. Lived relation was reduced into empathy for others, volunteer as movement facilitator, building relationships, and help interactions. Subcategories

identified in the second reduction of interview data will be discussed further in the categorical level of this chapter.

In the second reduction of document data I employed a discourse analysis of language used in course descriptions. Only relevant courses from the first reduction were examined in this level. A keyword search was used to perform a cross case comparison of course descriptions. Patterns in keywords of the text led to the emergence of four categories: individual needs and well-being, accessibility and inclusion, physical activity and disability, and corrective or pathological. These categories will be explained further in this chapter. Categories are not inclusive of all of the programs of interest; discourse that is present and missing from the text will be discussed in the third reduction of document data.

The third reduction or thematic level of analysis was used to consolidate the findings from the three data sets. A cross examination of these categories revealed new patterns, some which were identified across all three data sets and others which were very powerful in one or two data sets. These new patterns led to the formation of themes which were identified as critical to the experiences of participants and will be discussed at length in regards to how they are essential components to the movement experiences of children with disabilities in this project. Themes identified across all three data sets include: push for autonomy and independence and issues of inclusion. Powerful themes which emerged from two of the three data sets are: fun and activity, emphasis on achievement, social experiences, forbidden-ness, role development, and metacognitive awareness. A dominant theme revealed by the document data is a forced dichotomy of

mind and body in education. Each of the themes is discussed at length in the thematic level.

The fourth section of this chapter provides a further analysis of thematic findings. Indigenous typologies will be presented and discussed at length regarding their importance to this study and relation to the meaning of participants' movement experiences.

1. First Reduction

1.1 Observations – content level.

As stated in the introduction of this chapter, the purpose of this level of reduction was to organize the observation data to make it easier to view and compare text within case and across cases for analysis. Data from each observation day were placed in a different chart. Each chart contained multiple individual observations of participants on the same day. The purpose of organizing the data in this way was to view each case separately but make it easy to cross compare mini-cases which are observations of individual participants. An example of this chart can be found in the appendices (*Appendix F-1*).

Once the data were compiled into chart form the text was examined for patterns within case and across mini-cases. Descriptions within the text were focused on body actions and expressions and relationships between individuals and with the multimedia activities. Because of these patterns evident in the text I chose to employ a categorical analysis using the four lifeworld existentials: lived body, lived space, lived time, and lived relation. This analysis is described in detail in the next level of reduction.

1.2 Interviews – content level.

As discussed previously in the introduction of this chapter, the purpose of the first reduction was to organize the interview data in a way that would make it easier to cross compare informants' responses. Each interview was audiotaped and transcribed into textual form. The text from each interview was compiled into a chart and organized by question from the interview guide. An example of this chart is located in the appendices (*Appendix F-2*).

After the text was organized in chart form I was able to cross compare participants' responses with ease. Patterns in the text revealed description of using the body in various ways, how their bodies moved, and relationships with their volunteers, peers, and teachers. Since two of the lifeworld existentials were prevalent in the text I chose to use them again as beginning categories in the second reduction of interview data. The categorical analysis of interview data will be explained in detail in the next section of this chapter.

1.3 Document data – content level.

As discussed previously in the introduction of this chapter, the aim of the first reduction of document data was to organize course information in a way which would allow for cross comparison. Data were organized into chart form and patterns emerged within each of the programs of interest: physical education, teacher education, and disability studies. As discussed in the methods section of this project, the initial scanning of course calendars revealed courses from each program with content related to education of children with disabilities and/or adapted physical activity (APA). Only these courses

were included in the document data analysis. Physical education courses were addressed in regards to: a) courses offered – required and optional, b) year of study courses are offered and c) practicum requirements. Courses in disability studies and teacher education programs were addressed in regards to a) courses offered – required and optional. Each of these items will be discussed in greater detail in this section.

1.3.1 Courses offered – required and optional.

Fourteen Ontario universities offer physical education, kinesiology, or human kinetics degree programs. Of these institutions, all but three –York, Waterloo and Western- offer an APA course with some content on children and youth. Eight of these schools include this type of course in their core curriculum, ensuring all graduating students have been exposed to APA content. Nearly half of the universities with a physical education degree program do not require students to take an APA course with content on school-aged populations. Because of this physical education specialists are not guaranteed to have appropriate training to design movement activities for children and youth with disabilities. A complete list of required and optional APA courses can be located in the appendices (*Appendix F-3*).

Degree programs in disability studies are offered at four Ontario universities; two are undergraduate programs and two are at the graduate level. These programs tend to focus on the social construction of disability and human rights issues, or are designed to teach behaviour analysis. Of the schools that offer programs in disability studies only York University offers courses related to education of children and youth with disabilities. Considering these programs are interested in betterment of the lives of people

with disabilities one would expect to see more courses with a focus of providing inclusive or accessible education. A complete list of the programs offered in disability studies and York's courses related to education can be seen in the appendices of this thesis (*Appendix F-4*).

Teacher education programs are offered at thirteen universities across the province of Ontario. Each of these programs offers a course including content on special education. All of these institutions require teacher education students to take one credit in this topic. Only six of these required credits include special education as the primary focus of the course, meaning that nearly all course content is related to teaching children and youth with special educational needs. The other seven courses only include special education as a secondary topic to other material such as educational psychology or diversity and equity of students. This means that less than half of Ontario teacher education programs require students to take a course specialized on teaching students with disabilities in the regular classroom.

Generalist teacher education students at the primary, junior, and intermediate levels are required to take a credit with some content on health and physical education (HPE). In some cases HPE content is included in courses with other subjects such as music, art, or social studies. Since universities require teacher education students to take only one credit of health and physical education this means generalist teachers receive minimal training within a physical environment. A complete list of courses in teacher education programs related to special education or HPE is located in the appendices (*Appendix F-5*).

1.3.2 Year of study.

The year of study that APA courses related to children and youth are offered varies among universities. Nipissing stands out by requiring physical education students to take a second year Special Populations course, introducing applicable content early on in their degree. Similar courses at all other universities are only offered in third and fourth year. Four schools- nearly half of those listing related classes- do not offer APA courses until the final year of study. Placing APA courses earlier in the curriculum would offer students the opportunity to apply their knowledge and training in other activity based courses such as dance, gymnastics, and games. Each course's year of study can be viewed in the appendices section of this thesis (*Appendix F-3*). Disability studies programs were not included in this section as only York University offers courses with content on inclusion and equity in education and both credits are offered at the graduate level. Teacher education programs were not included in this section since all credits are completed within one academic year.

1.3.3 Practicum requirements.

Placement opportunities in any given field offer practical learning experience not otherwise gained in the classroom. Students can reflect upon their experiences and adopt effective practices resulting in personal growth as a future professional. There are only seven relevant courses in all Ontario universities that include a field-based practicum as a course requirement. Laurentian, McMaster, and Queen's each offer one APA course with content specific to children and youth and require students to complete a practicum. Brock and Lakehead each offer three related courses, two of which include a practicum

requirement. Only five of the fourteen schools with physical education degree programs require students to leave the classroom and enter into the field, gaining valuable hands on experience with children and youth with disabilities in physical activity settings. Specific courses requiring a practicum are identified in the appendices section (*Appendix F-3*).

The first reduction of document data presented the courses available to students within each of the programs of interest, identified which are required and optional, the year of study they are offered, and placement requirements. During the next reduction level I used a discourse analysis of course descriptions to reveal the focus of each course and the content included in instruction. This can be viewed in the categorical level of document data findings in the next section of this chapter.

2. Second Reduction

2.1 Observations – categorical level.

The first level of reduction of observation data led to the recognition of patterns within the text related to the lifeworld existentials of lived body, lived space, lived time, and lived relation. These categories were used in the second reduction to reveal further patterns within the text. From this process thirteen new subcategories emerged related to the existential categories. Subcategories discovered within the lived body include a) roles, b) active involvement, c) strategy, d) challenge, e) positive expression, f) negative expression, and g) participation as success. Lived space was subcategorized into h) forbidden spaces and i) gathering place. Lived time includes the subcategory of j) continued involvement. Subcategories identified within lived relation were k) peer to peer interactions, l) interactions with media, and m) volunteer as a movement facilitator. Each

of the subcategories are expressed in greater detail in this section and accompanied by examples from the analysis.

Lived body.

2.1.1 Roles.

The category of roles emerged while coding the observation data related to the body. Many children using the multimedia activities appeared to adopt a role while playing. Participants using 'Nintendo Wii' acted as a character on screen playing one of four sports. While some children simply went through the motions of the game, others adopted the role of an athlete. Some participants took a stance, waving their controller back and forth awaiting the pitch from the other player while they were at bat. Others approached the television prior to releasing the bowling ball similar to walking toward the fault line in a bowling alley. Several children were quick on their feet moving around the area in front of the screen as though it was an actual tennis court or boxing ring. While many children adopted the role of an athlete while playing 'Nintendo Wii', others insisted on providing their volunteers with tips and strategies throughout the game. The following example illustrates how one participant adopted the role of a coach while playing with his volunteer:

Austin entered the room with excitement, immediately heading toward the 'Nintendo Wii'. He set up a game of bowling and gave his volunteer a quick run through of how to use the controller. As they progressed through the frames Austin directed his volunteer how to use the controller so she could move side to side on the lane to have a better aim at the remaining pins. He yelled out in

excitement when either of them did well during the game of bowling “Yeah! Strike! Look at this... watch that! Boom!”

This example illustrates how the role of coach was adopted by one participant playing ‘Wii’.

Children playing ‘Rockband’ adopted the roles of the characters on screen as members of the band. These roles were played out using adapted instruments with colour coded buttons matching the visual prompts on screen, indicating which notes needed to be hit. Many participants adopted the role of an entertainer while playing ‘Rockband’. There were a variety of personalities that came into the multimedia room to rock out on the guitar or drum set while others danced around the room singing at the top of their lungs into the microphone. Thunderous cheers from an audience made up of other participants, volunteers, and coordinators could be heard from outside the room. This example shows how one participant acted out the role of an entertainer:

Eagerly awaiting his turn to play drums, Brock couldn’t keep himself back while another child was still taking his turn. As soon as the other participant left he hopped on the chair and pulled himself toward the drum set with his feet dangling, not quite reaching the floor or the foot pedal. Brock used the drum sticks to tap along to the beat of the song, his eyes fixated on the visual prompts on the screen. When the song ended he sprung from the chair and grabbed a hold of the microphone. When on vocals Brock spun around, making loud noises into the microphone and jumped around as though he was performing on stage for an audience.

This excerpt showcases how Brock played out the role of an entertainer to the extent that he was truly entertaining to the spectators in the multimedia room. Children using the multimedia activities were not the only ones to act out roles; a number of participants came in the room as a fan or dancer of other children playing 'Rockband'. Additional examples related to the category of roles can be found in the appendices section of this project (*Appendix F-6*).

2.1.2 Active involvement.

The category of active involvement refers to children's high energy and active playing of the multimedia activities. Traditionally, multimedia activities did not require individuals to exert much effort; however in recent years video games have started offering fitness related and gross motor activities. The activities at SNAP required participants to be active while offering movement experiences that would otherwise not be available to them at the program. 'Nintendo Wii' games such as baseball, bowling, boxing, golf, and tennis traditionally require numerous resources including equipment, playing fees, large spaces and opponents. Individuals had the opportunity to participate in these activities in a very small space within the program. Similar to the traditional sports, participants chose their own personal level of involvement and intensity during the activity. This example shows how one participant exerted a lot of effort during his involvement in the multimedia activities:

Standing in front of the screen by himself with no other participants, Colin faced his on screen 'Wii' opponent with a stern, confident gaze. With the controllers held high in front of his face Colin made steady and continuous hitting motions

toward the screen. He shuffled around, light on his feet as though he was dancing around an actual boxing ring with his virtual opponent.

This description depicts how an individual can incorporate strategy and tactics while being actively involved in multimedia activities. Strategy will be discussed in depth as the next category in this section.

The 'Rockband' activity was often set to easy mode which did not require participants to be very active or highly skilled using the instruments, however many children chose to play more actively on the guitar or drums than required by the prompts on screen. This description shows how one child opted to play more actively than required by the game:

Sitting on the chair in front of the drum Deanna she waited for the song to begin, tapping the sticks on the drums. When the tune of the song began she started pounding away, not so much interested in following the prompts on the screen but more interested in drumming to the beat she could hear in the song. Playing very actively, using the foot pedal and drum sticks, Deanna moved her body along to the music.

This observation demonstrates that although an activity may require a certain level of intensity participants can choose their own level of involvement within the activity.

Further notes related to the category of active involvement can be viewed in the appendices (*Appendix F-6*).

2.1.3 Strategy.

The category of strategy includes actions of participants involving various approaches and tactics in order to be successful in an activity. While playing 'Nintendo Wii' did not require training or experience in the related tasks, some children opted to use strategy while playing in order to increase their level of success. Two types of strategy were evident in the text. The first involved strategy using the hand held controller. This example illustrates how one participant used the controller to maneuver while playing 'Wii' bowling:

Evan stood with the 'Wii' controller in hand, listening attentively as his volunteer described the actions of each individual button. As Evan's partner set up the game he waited anxiously for his turn to play. Evan took the direction of his volunteer very well, using it to his advantage in the game. There wasn't a single button on the controller that went untouched as Evan moved side to side, forward and back on the lane aiming at the last of the remaining pins trying every approach he could to edge himself ahead of his opponent in the game.

This observation depicts the use of strategy using the handheld 'Wii' controller. The second type of strategy involves the use of various body positions and movement. The following description illustrates how body movement and positioning was used as a form of strategy:

Frankie stood next to his friend from school who he was soon to be face to face with in a boxing ring via the 'Wii' characters on screen. When the bell rang Frankie's face showed no mercy as he took strong swings left and right, immediately ducking away from his opponents' retaliating hits. As the other boy

continually waved the nun chucks back and forth, Frankie ducked low and protected his face with his hands held high. In the final moments of the match Frankie stayed light on his feet, shuffling around the area in front of the television screen trying to avoid the wrath of his opponent's wild swings. As the final bell rang indicating the end of the duel Frankie took a deep breath in and waited for the results to appear on screen.

This excerpt shows how Frankie chose to employ strategy using body positions and movement. These examples indicate that children used existing strategies provided by the game and also developed some of their own while involved in the multimedia activities. Supplementary observations from the category of strategy can be found in the appendices (*Appendix F-6*).

2.1.4 Challenge.

The category of challenge depicts the experiences of children who had difficulty with the multimedia activities. Participants experienced challenge due to the effort or coordination required by the task. Some children found activities such as boxing or playing the drums strenuous because of the continuous physical effort required. Other participants found games such as tennis or baseball too challenging since they required accurate timing and coordination. This example demonstrates the challenge one child experienced with the effort required by boxing:

As Gordie faced off against his opponent in the virtual boxing ring he made continual hitting motions toward the screen. The other boxer took a moment to show Gordie how to use more control and imitated a protective stance. Looking

uncomfortable as Gordie mimicked the moves displayed by his opponent he soon resorted back to flailing his arms wildly in front of the screen, holding on tightly to the nun chucks. The game ended and as the coordinator came to set up a new boxing match Gordie yelled out in exhaustion “No! baseball! Boxing takes a lot of energy!” A look of relief appeared on Gordie’s face as she opted to set up a baseball game instead.

Due to the high physical demand this participant faced, he chose an alternative activity which he felt would be less strenuous. The next example demonstrates how the coordination demands of baseball were too high for one participant:

Imitating his ‘Wii’ character standing on the pitcher’s mound Hayden fired a third strike to get the last out of the inning. The teams on screen switched places and Hayden’s character strutted up to the batter’s box. Hayden stood with his body turned toward the side of the room and his head facing toward the screen as though he was in front of a real life pitcher. His opponent threw the first pitch and Hayden swung late after the ball had reached the glove of the back catcher on screen. Hayden stood waiting for the next pitch to be thrown and again he was too late to make contact. Hayden shook it off and made a third attempt to get the timing right, but after his first batter struck out Hayden’s volunteer stepped in to give some assistance. Thinking that verbal prompts might help, Hayden’s volunteer told him when to start swinging as each pitch was thrown. Hayden tried his best to follow his volunteer’s instructions and eventually made contact with the ball but still found the coordination demands of the activity too challenging and moved on to play ‘Rockband’.

While this description implies the demands of the activity were too high for Hayden, adaptations can be provided in an attempt to make the task less difficult. Additional observations within the category of challenge can be found in the appendices section of this document (*Appendix F-6*).

2.1.5 Positive expression.

One of the aims of this research project was to discover what makes movement experiences positive or negative for children with disabilities. During the observations I found my attention was often focused toward expressive statements and body language. Codes that were combined to form the category of positive expression included but were not limited to excitement, pride, and enjoyment. Many spontaneous narratives and observations could be used to illustrate positive expression of children in the multimedia room however I found this observation of Ivan to be a very telling example of positive expression:

As the first child to experience the multimedia room Ivan held nothing back, beating passionately on the drum set. Allowing his body to move freely along with the beat of the song, a look of euphoria glided across Ivan's face. As the music ended and a cheer burst from the onscreen audience Ivan expressed fulfillment in his performance by jumping up, pumping his fists into the air, and shouting out in excitement "Wicked! YEAH! Who's the man! I rock!"

The next example depicts Jaycee's continuous positive expression while playing 'Wii' bowling:

Jaycee stood next to her schoolmate, waiting for him to bowl before they could move on to the next frame and it would once again be her time to shine. In her previous turn Jaycee managed to knock down a few pins with each ball but wasn't able to clear all the pins from the lane. Suddenly a loud shriek was let out from that side of the multimedia room "Oh Yeah!" Jaycee shouted in excitement with a surprised look on her face. Jaycee had bowled her first strike and was circling around the room getting high fives from spectators waiting their turn to play. It was only the beginning as Jaycee soon went on a streak of bowling strikes and spares, each one followed by a loud cheer and another round of high fives.

The above descriptions and narratives assist in the illustration of positive expression displayed by participants while engaged in the multimedia activities. Further examples related to the category of positive expression can be viewed in the appendices (*Appendix F-6*).

2.1.6 Negative expression.

My focus on participants' expression of internal feelings during observations included moments when children voiced or showed signs of frustration, nervousness, boredom, and fear. Although these moments did not occur often I felt it was important to include these observations as possible experiences of the sample population in this movement context. This example depicts the frustration of one participant:

Keenan came into the room with the two volunteers he'd been matched with for the day. Keenan was standoffish at first, wary of the volunteers and me who were already in the room waiting for children to arrive. 'Nintendo Wii' was his activity

of choice. Keenan took the controller and attempted to set up the game himself, finding it difficult to get past all of the options before he could play the actual game. After multiple attempts to set the game up by himself Keenan shouted out “I’m gonna throw this thing across the room!” His nervous volunteers, looking unsure of what to do since it was their first day at SNAP, tried to get the controller from Keenan’s hands so he couldn’t follow through with his threat. When they tried to offer Keenan assistance in setting up the game he refused their help, jolting back with the controller in hand “No! I can do it!”

Keenan became frustrated when he had difficulty setting up the media before he even had a chance to play and experience the activity. Other observations relating to the category of negative expression can be located in the appendices (*Appendix F-6*).

2.1.7 Participation as success.

This category refers to the notion that involvement in the multimedia activities is a form of success in its own right. Rather than referring to successful participation and ranking various levels of success, these activities inspire the concept of participation as being successful in and of itself. With this philosophy there is less of an emphasis on winning or beating an opponent. Goals become focused on individual successes which for some are reached by plainly participating in the activities. Most children chose to use these activities not because they viewed themselves as highly skilled in the tasks but because they offer fun and enjoyment. This description of Lucas’ experience shows how participation in the activity was his only concern:

Standing atop the bench Lucas jammed on the guitar, moving his body to the music, looking around the room at all of the people listening to their rendition of a classic rock song. Lucas seemed disinterested in following along with the prompts on the screen, rarely looking in the direction of the television. With his gaze fixed to the drum set it appeared that Lucas' only concern was making the most of the time he had to use the instruments and show off his rockstar persona as a member of the band.

The next example depicts another participant's experience playing 'Wii' golf where he was focused on achieving small challenges throughout the game:

Martin's first swing of the golf club sent the ball soaring through the air to where it eventually fell to the ground just off the green behind a line of trees in a patch of high grass. Martin took his next swing at the ball pushing it out from behind the trees and onto the green. A look of accomplishment moved across Martin's face as he prepared himself for his next move. Although the ball landed in the sand Martin wasn't discouraged, instead he focused on the next challenge of hitting the ball out of the sand trap. As the round continued he met a string of new challenges and he approached each one with determination. With one swift, controlled swing Martin edged the ball near the target, jumping in excitement and anticipating the moment he'd see the ball sitting in the bottom of the hole.

The above description reveals how providing small objectives within an activity can offer multiple opportunities for success. Providing opportunity for all children to participate and lend themselves to the activity may help to foster a more inclusive movement

environment. Additional observations within the category of participation as success can be viewed in the appendices (*Appendix F-6*).

Lived space.

2.1.8 Forbidden spaces.

There were certain areas within the multimedia room that were closed off from participants. Similar to an equipment closet that hosts a sign reading “Teachers only” or setting boundaries for children during a game these spaces were clearly marked with signs. Within the room there was a single stall bathroom and two showers. Children were often curious of these spaces wondering why they were not allowed to enter these areas, however only two individuals attempted to cross into these forbidden spaces. This example depicts one of these happenings:

As soon as Naomi entered the multimedia room her attention was drawn to the locked bathroom stall. She ducked down to look inside and without notice started crawling under the door. Naomi’s volunteers pressured her to come back out so they would walk next door to the nearest bathroom but Naomi insisted on using this bathroom right away. With no other choice but to follow along, the volunteers guarded the door so nobody could see underneath. A flush of the toilet alerted people in the room, turning their gaze toward the door as Naomi casually walked out of the stall, washed her hands in the sink and looked around the room to see what activities it had to offer.

Even with the encouragement of her volunteers to wait and walk to the nearest restroom Naomi was insistent on entering into the forbidden space. Another forbidden space was

evident in the text though it was not clearly marked or decided upon in advance; rather participants declared that the space between individuals playing 'Nintendo Wii' and the screen was not to be crossed during game play. A similar societal principle implies it is rude to walk in front of a live performance or television screen. Many children appeared to believe in this code and were frustrated with those who did not abide. This example is representative of Oren's value of this principle:

As Oren wound up to pitch the ball to his opponent another child came running into the room and blew past them, interrupting Oren's focus on the game. Oren brought the controller back to the starting position again and completed the pitch this time uninterrupted. As Oren was batting during the next inning of the game, two children and their volunteers walked in front of the screen blocking his vision of the approaching baseball. Oren became visibly frustrated with others who were interrupting their game and he moved forward toward the screen forcing them to walk around the outside of the room.

This example illustrates how children can set their own boundaries in addition to those presented by an authority figure. Additional notes related to the category of forbidden spaces can be located in the appendices of this thesis (*Appendix F-6*).

2.1.9 Gathering place.

The multimedia room became one of the most popular spaces at SNAP, gaining interest of participants, volunteers, and school personnel. Most children who entered the multimedia room did so because they wanted to use the activities; however there were others who came in with no interest of playing any of the games. Some participants

entered to check out the space and watch their peers while a small number of children appeared interested in the activities but exited shortly after watching others play. A number of children like Patti came in to cheer on a friend who wanted to play. This example shows Patti's involvement in the activities as a spectator:

Patti entered the room with her friend who was excited to play 'Rockband'. The coordinator offered them instruments to play and Patti politely declined, remaining seated on the bench looking content. Patti watched her friend with excitement, swaying back and forth to the music. When I approached Patti to ask if she wanted to play she responded by saying she was just there to support her friend from school and listen to the music.

This description helps to demonstrate how the multimedia room became a social gathering place where individuals could engage in an activity simply by watching others, similar to spectators at a sporting event or concert. Further observations related to the category of gathering place can be viewed in the appendices (*Appendix F-6*).

Lived time.

2.1.10 Continued involvement.

The time each child spent in the multimedia room was included in my field notes, providing a record of how long individuals spent in the room as well as if they returned after leaving. In the first two sessions children would opt to spend extended periods of time on these activities and in some cases refused to go back to the gym when encouraged by their volunteers. Since some children were missing out on the chance to participate, there was an introduction of a signup sheet in the third week. The schedule

was divided into fifteen minute intervals in which children could place their name on a waitlist for a chosen activity. Even though the signup sheet helped to limit the time most individuals spent in the room, there were some who still found their way back a second or third time. This account of Quinton shows how he was determined to stay in the multimedia room for as long as he could:

Quinton drummed along using the sticks and foot pedal, playing actively but without direction as he wasn't looking toward the screen to follow the prompts. Quinton's volunteer warned him that they had to head back to the gym shortly as they were already in the room for more than 15 minutes. When the song ended Quinton hopped up from the drums and grabbed onto the guitar, strapping it over his shoulder and preparing for his next performance. Quinton's volunteer took a seat and reminded him that they needed to return to the gym to let others have a chance to play. He seemed disinterested by what his volunteer was saying and got ready to play his new instrument. A true rock star was born on the guitar as Quinton danced around the room and played along. As the song ended, Quinton handed the instrument on to the next player and took a seat to watch the new band perform. His volunteer, now looking flustered, demanded that they leave to return to the gym. Quinton eventually lost the battle and was guided out of the room appearing unimpressed that he was being forced to leave.

The continued involvement of participants, even after the implementation of a signup sheet, indicates these activities were popular and enjoyable for a number of children at the program. All observations of children who spent more than 15 minutes on multimedia

activities and those who returned for additional playing time are included in the appendices (*Appendix F-6*).

Lived relation.

2.1.11 Peer to peer interactions.

The SNAP program encourages parallel play and interactions between peers; however peer to peer interactions are not forced in this movement context. Some children had minimal interaction with other participants and few observations were made under these circumstances. Those individuals who did interact with their peers varied in their levels of cooperation. The category of peer to peer interactions was developed from the following codes: dominant, inability to share or participate with others, patience and courtesy, and highly cooperative. Individuals who were dominant in their relationships with peers were observed as being controlling or competitive. This example illustrates how one participant had a dominant demeanor while interacting with his peer:

Rory led his volunteer into the multimedia room as though he was a professional basketball player strutting onto the court, exuding pride and self-assuredness. His volunteer told me Rory had referred to himself as a jock while they were playing soccer in the gym. Rory was insistent on playing 'Wii' tennis against another who was boy half his age with delayed motor skills. When the young boy was having difficulty making contact with the ball on screen Rory loudly proclaimed "Come on, it's just like regular tennis!" Rory continued to play at his own level, eventually getting bored with the game and moving on to play 'Rockband'.

This individual's only concern was his own pleasure and made no apologies for making his opponent visibly nervous and upset. The prior description illustrates how Rory was dominant over the other player in their game of tennis. The next example is a description of Brock and how he was unable to share with other participants:

As Brock entered the room he set his sights on 'Rockband', wanting to play drums. Other participants were already midway through a song so Brock's volunteer suggested they play 'Wii' baseball while they wait. Brock's attention swayed between the game of baseball and the drum set. During a break in the baseball game Brock ran to the drums and tried to get on them before the next child sat down to play. His volunteer brought Brock back to play 'Wii' and told him it wasn't his turn yet. After the next song ended Brock raced over to the drum set once again and the other child walked away, giving up his turn to play. Brock's volunteer told him that he was wrong but could still play since the other participant gave up his turn.

The preceding examples represent negative peer to peer interactions. In contrast, the next observation describes how another participant was patient and waited his turn while other children continued to play:

Scott patiently sat on the bench with his volunteer waiting his turn to play 'Rockband'. A new song came on and Scott got up to dance with his volunteer as the other participants continued playing. His energy lit up the room, enticing others to join in on the fun and dance along to the music.

Not only did Scott display patience but he also chose to stay active while waiting his turn. The next example demonstrates Thomas' cooperation with his peer (Gordie):

Thomas prepared himself by taking a protective stance before facing off against Gordie in the hypothetical boxing ring. Gordie appeared to be having difficulty, not knowing how or where to hit. As his Gordie flailed his arms around in front of the screen, Thomas took a moment to show him how to use better technique. Thomas demonstrated controlled hitting motions and imitated a protective stance. The boys continued to play 'Wii' but opted instead to play baseball after they finished their first boxing match. Before the baseball game began Thomas gave Gordie an overview of how to use the controls to bat and pitch.

Thomas was not only cooperative but also provided guidance to his friend during the game. The two latest descriptions show how children exemplified positive social interactions with their peers. Additional summaries related to the category of peer to peer interactions can be viewed in the appendices (*Appendix F-6*).

2.1.12 Interactions with media.

The category of interactions with media involves participants' relationships with the multimedia activities. These interactions were coded as strong focus or concentration on the game and visual feedback provided by the game. Many children became absorbed in the activities, staring wide-eyed focusing all of their attention toward the games. These participants would ignore other children and volunteers in the room, consumed by the task at hand. This example illustrates one child's intense concentration on the activity:

With his gaze fixated on the screen Eugene swung the controller initiating the 'Wii' character's movement. As other children and volunteers walked past, coming in and out of the room, Eugene's eyes were stuck to the game. Another

child joined the game for a brief moment, leaving after batting only once, as though he felt he was imposing on the connection Eugene had with the game. Disregarding all others in the room, Eugene finished his game and returned to the gym. Later on in the SNAP session the door to the multimedia room swung open as Eugene sauntered in, returning to play the same game as if it was an old friend he was reconnecting with.

This description depicts the strong focus Eugene, like many other children, bestowed upon the activity. The excitement of children playing 'Wii' and 'Rockband' appeared to be fueled by the visual feedback that was provided by each game. For others this feedback provided a measure of their performance in the activity. Slogans on screen such as "You Rock!", "Strike!" and "Knock Out!" indicated to children that they did well. When a point was lost in 'Wii' tennis steam would pour from the characters heads on screen. Similar types of visual feedback lent to participants' measure of their success in the games. Recall Austin's excitement during his game of bowling:

Austin's ability to visualize his personal successes was heightened by the visual feedback provided by the game. Austin appeared disappointed in himself when there were pins remaining on the lane after he bowled. He watched intently as his next ball rolled toward the end of the lane... he yelled out in excitement "Yeah! Strike!" Knocking down all of the pins was celebrated with large text appearing on the screen reading "Spare!" or "Strike!" similar to an emphasis "BOOM!" in a comic book during an explosion. Austin commentated during the instant replay of his performance "Look at this... watch that! Boom!"

This observation depicts how children are able to visualize their performance from the visual feedback provided by the activities. This feedback offers the opportunity for participants to weigh their level of success and also see how they can change their actions to improve for their next performance. Additional examples related to interactions with media can be located in the appendices (*Appendix F-6*).

2.1.13 Volunteer as a movement facilitator.

An analysis of the child-mentor relationship in the multimedia room at SNAP reveals how volunteers can help to facilitate positive movement experiences of children at the program. Volunteers were matched as movement partners to participants. They took on the responsibility to keep children active while completing purposeful movement activities during each session. The coding process during this level of reduction revealed how volunteers can help to shape the experiences of children at SNAP. While a volunteer could simply take part in activities along side his or her match, some individuals became far more engaged in facilitating children's movement by providing them with assistance, direction or guidance, and encouragement. This example describes how Vernon's volunteer offered him direction:

His volunteer held the door as Vernon swept into the room in his high powered wheelchair. Situated in front of the television screen at the 'Wii' station, Vernon watched as his volunteer set up the bowling game on screen. She gave him a demonstration of how to use the controller in order to maneuver the character on screen. With no hesitation Vernon followed the direction she had given him and put it into action, keeping up with her in the game without any assistance.

This example illustrates how Vernon's volunteer provided him with direction prior to starting the activity increasing his autonomy and freedom of movement while completing the task. I often saw participants scanning the multimedia room looking for their volunteers' support. This example portrays Wesley's search for his partner's approval:

Wesley beat forcefully on the drum set, following the prompts on screen but playing much more actively than necessary. Keeping with the beat of the song Wesley took a moment to turn and look to his volunteer behind him who flashed him a smile of encouragement. Wesley confidently returned his gaze to the screen and continued to drum away to the song.

Wesley played actively and was concentrated on his game and yet still looked for the support of his volunteer. Encouragement from volunteers appeared to be valuable to children for initiating movement, continuing involvement, and indicating performance. Additional examples from the category of volunteer as movement facilitator can be found in the appendices (*Appendix F-6*).

From the categories developed from the second reduction of observation data, the next step was to consider which of the categories from this section demonstrate the essences of the movement experiences of children in the multimedia room at SNAP. This is explored in the third reduction of this chapter.

2.2 Interviews – categorical level .

The first reduction of interview data helped to identify patterns within the text related to the lifeworld existentials of lived body, lived space, and lived relation.

Although lived time has its place in the movement experiences of participants it was less

salient in the text and therefore no subcategories emerged from this existential category. The existentials were used as initial categories in the second reduction to reveal further patterns within the text. From this process ten new subcategories emerged related to lived body, lived space, and lived relation. The subcategories within lived body were a) positive expression, b) negative expression, c) challenge, d) activities/movement, and e) roles. The subcategory of f) variability of physical environments was coded within lived space. Lived relation was coded into g) empathy for others, h) volunteer as movement facilitator, i) building relationships, and j) help interactions. Each of these subcategories is expressed in greater detail in this section and accompanied by examples from the analysis.

Lived body.

2.2.1 Positive expression.

Participants were asked to share their memories, thoughts, feelings and beliefs about physical education and the movement program(s) they attended. Any responses related to positive feelings or outcomes were coded and included in this category. During his interview Storm shared what he believed to be positive outcomes of physical education:

Energy and exercise a good amount of exercise. The majority of the time everyone has fun. (Storm)

Pheonix and Wolverine's responses were similar, adding that physical education is a good form of physical fitness. In addition to pointing out some of the positive outcomes of physical education, children shared positive feelings they had before and during gym.

Wolverine confirmed that he was happy and excited to go to gym while Storm recalled feeling good and energetic during gym class. Storm made the following statement about how he feels before physical education:

Really excited for gym. I love gym but it's only once a week. (Storm)

These responses indicated that participants value physical education for the physical health benefits as well as the positive outcomes on their emotional health such as feeling good, excited, or having fun.

All three participants told me they believed the physical activity programs they attended were important. Each individual shared different reasoning as to why they believe this. Pheonix told me that Autism Camp is important because it is always fun. In this response she recalled how she felt while at camp:

I feel happy and okay and safe. It's fun extremely fun! (Pheonix)

Storm added to this by stating Autism Camp gave him energy, happiness, and excitement. He also referred to the physical benefits he gets from going to CMP:

Well I always feel good after I feel like I have a lot of energy after. I feel like I had my exercise for today. (Storm)

Wolverine agreed that going to CMP is a good form of exercise. Participants' responses involving positive expression about physical education and the movement programs were similar in that they both offer physical and emotional health benefits. Additional narratives relating to positive expression in regards to physical education and movement programs can be located in the appendices (*Appendix F-7 & F-8*).

2.2.2 *Negative expression.*

Participants were asked to share their memories, thoughts, feelings and beliefs about physical education and the movement program(s) they attended. Any responses related to negative feelings or outcomes were coded and included in this category. The only negative response that was coded in the interview text regarding the movement programs was when Storm recalled feeling apprehensive about getting along with his peers prior to attending CMP:

When I first started going I was a bit nervous about it but not anymore. I don't think I get nervous about anything there anymore. Well it hasn't really been happening often anymore but if someone was bugging me or something but that's actually never happened. (Storm)

As he stated in the above excerpt, Storm's feelings of apprehensiveness have gone away since he started going to CMP since his peers have not bothered him.

Participants indicated they believe physical education can be tiring and frustrating. Pheonix described how her body feels during physical education:

Well I feel like sometimes I don't like phys ed because it's gonna make me have stitches. Yeah it hurts, it causes me to slow down. I'm like a car except it doesn't last really long. (Pheonix)

Her description reveals how she sometimes experiences physical exhaustion and even pain during physical education. The above example relates to negative outcomes in the physical domain, whereas most responses involving negative expression were in relation to emotional outcomes. All of the participants described themselves as getting frustrated or upset during physical education, specifically in the game of volleyball. Pheonix told

me she dislikes volleyball because she is not good at it, it is boring and not fun for her.

Wolverine recalled moments during the game when he felt nervous that the ball would hit him:

I try and like duck I try to do something so it doesn't hit me. I'm not scared of it
it's just that... it's just that I don't wanna be hit. (Wolverine)

During our discussion, Storm described volleyball as an activity that was challenging for him but also recalled other children in his class who had negative experiences:

One of the kids gets mad yes so bad things can come from it but it's not that
often. (Storm)

*Okay, so one of the kids gets mad when he's not able to do something
or...(Researcher)*

When he is out of the game. (Storm)

Oh okay. So like in dodgeball? (Researcher)

Yes in dodgeball, ship to shore. (Storm)

Not only is this a telling example of negative emotional outcomes, Storm indicated that elimination games are used in his physical education class and led to negative emotional outcomes for at least one of his classmates. The conversation continued as I asked if Storm could think of a way to make physical education more enjoyable for children in his class:

Okay so you can get eliminated in those games? (Researcher)

Yes. (Storm)

*Okay and so you said one of the kids in your class gets upset when he's eliminated
what if... How could that be changed? (Researcher)*

I really don't think it can. (Storm)

From this conversation with Storm I discovered that he accepts exclusion in his gym class even though he understands it is problematic since it produces negative outcomes for some children. Participants expressed negative feelings and beliefs about physical education in regards to physical and affective outcomes. Further responses related to this the category of negative expression can be found within the appendices of this study (*Appendix F-7 & F-8*).

2.2.3 Challenge.

This category emerged from participants' responses related to difficulties and challenges they faced during physical education and movement programs. Activities were seen as challenging if participants did not view themselves as skilled in the task or if the task demanded a lot of physical effort. Wolverine had a hard time remembering activities he had difficulty with at CMP until his mom reminded of a moment she had witnessed at the program:

Climbing the rope you're not able to hold your weight on the rope right? (Parent)

That's because I'm larger and it's not my fault it's gravity's. Cause of gravity.

(Wolverine)

Pheonix told me about many activities she found challenging at Autism Camp:

Well the only thing that's difficult is my counselor keeps asking me to go down the waterslide at the YMCA community centre cause I was scared while I was up there cause I hate putting my head under the water and cause water goes in my lungs and I don't like that. I can't even try to plug my nose. There's skipping too

and I'm not good at skipping. One time we had this skipping tournament at my school. It's called Jump Rope for Heart.

Yeah, it's so hard and it made me really tired. I just went home and had a really big rest. (Pheonix)

But other than not enjoying skipping was it okay? (Researcher)

Oh a little bit though and I don't like skipping. I'm not good at it. I always...like, like one time I did it but if I keep doing it over and over again I get frustrated. (Pheonix)

So then you probably didn't find a lot of things difficult at camp right just a few things? (Researcher)

The most difficult thing that happened is we walked in the forest and I mean you're really tired. You get to go on different tracks and I keep saying "when are we done?" or "can we go back?" I keep saying that the whole time and sometimes I don't like walking (Pheonix)

The challenges Pheonix recalled were facing her fear of holding her head under water and activities that were tiring. Storm felt confident in his ability to do all of the activities at CMP and Autism Camp and could not recall any challenging moments from either movement program. He described volleyball as being a challenging task in physical education:

Volleyball. With a volleyball. With sponge balls it was easy but with a volleyball it was hard. Brand new hard volleyballs. We tried with actual volleyballs at the end. (Storm)

Storm mentioned in the above response that when the equipment was modified from the regulation volleyballs to softer sponge balls he found the task of playing the game to be manageable. Pheonix and Wolverine also recalled having difficulty while playing volleyball in physical education. Wolverine's recollection of playing volleyball was shared in the category of negative expression. Pheonix told me that volleyball is not fun for her, she is not good at it, it is boring and she has trouble concentrating. None of the participants could tell me what it was about volleyball that made it difficult for them. Participants described challenges at the movement programs that required a lot of physical effort such as Wolverine holding his weight on the climbing rope or Pheonix walking and skipping for long periods of time. Challenges faced in physical education were not clearly defined but all participants referred to volleyball as a difficult activity. Further responses related to the category of challenge can be viewed in the appendices (*Appendix F-7 & F-8*).

2.2.4 Activities/movement.

This category includes participants' descriptions of what they do during physical education and movement programs. Activities described by participants as being part of physical education were sports, games and fitness in all cases. Storm told me about what he does in his gym class:

Dodgeball, a lot of dodgeball. Our warmup is uhh just a lot of stretching and movement. We also sometimes do laps but sometimes most of the time they have this dvd... music along with kids doing these exercise things and we try and follow what they're doing. (Storm)

While Storm was the only participant to mention playing elimination games in school, descriptions involving similar activities were given by Wolverine and Pheonix.

Wolverine said his class just plays games all the time and Pheonix recalled playing a variety of games and sports as well as fitness activities such as running, jumping jacks, and exercises. Narratives did not indicate that their physical education classes include any creative or explorative movement.

When recalling activities from their physical activity programs individuals referred to taking part in structured movement activities, gymnastics, dance, low organizational games, and fitness related activities. Storm and Pheonix both attended Autism Camp and recalled doing a variety of fine motor activities as well. Pheonix provided an in-depth recollection of the activities she took part in at Autism Camp:

Go swimming in the pool. Sometimes we get to swim alone. We play some games, like we play with the ball and we get to ride around on scooters and then after awhile we go upstairs and we play upstairs of the gym for a bit. There's these blocks piled up and then you jump on them and get to pop off we get to fall onto big blue mats. There are trampolines there too... after snack we go for a walk in the forest and then we go back in and we do these activities on the floor next to the room where we played earlier. There are puzzles and papers to colour and then we go on our field trip. (Pheonix)

Storm provided a summary of the activities offered at the Children's Movement Program:

Pretty much the same activities ropes, crash mat, swinging like bars to climb on. Well I think half of it is organized games and half of it you just do whatever you want. (Storm)

The activities described in the above narratives offer a structured movement experience while also allowing for freedom of personal choice and creativity. Refer to the appendices for additional descriptions about the activities in participants' physical education classes and movement programs (*Appendix F-7 & F-8*).

2.2.5 Roles.

The category of roles emerged from the interview responses related to being assigned duties in their classes. Pheonix and Wolverine both recalled being assigned roles or duties, making them responsible for completing certain tasks. Wolverine told me about how he was assigned as linesman when he forgot his gym clothes. Pheonix explained how each student in the class is assigned a different role:

Like first when we get there anybody who's been chosen to be captain means we have to do, like when they do some gym exercises we have to follow them along and then they announce us how many laps we have to do. We get to be chosen every week. Every week a kid will be chosen to do one of the jobs like I was once chosen to be the helper, means I get to hand out sheets and stuff like that. I usually don't do the boards cause that's usually for kids who don't take the bus and I take the bus. That happened the same thing in grade six. We'd get different jobs each week. Once we do the chairs, then we'd get to be captain, we hand out sheets.

(Pheonix)

Pheonix was excited by the roles she was assigned including being a DPA (daily physical activity) leader for the grade one and two class in her school. She clearly understood the responsibilities that went along with each role and why some children were assigned roles

that others were not. Interview text related to the category of roles can be viewed in the appendices (*Appendix F-7*).

Lived space.

2.2.6 Variability of physical environments.

Each participant's description of his or her physical education class was much different in comparison to the others. Rather than recognizing patterns indicating similarities among the three classes I noticed a lot of variability in the text describing physical spaces. Physical education classes differed in the instructors, grade levels, and whether they were general or special education classes. The children who were interviewed did not provide lengthy description about the spaces used during physical education; however Pheonix did recall a moment when her class got to play outside instead of in the gym:

One time last summer we got to play this game outside and we placed pylons all along the soccer nets. We had to try to run across the field, try not to get touched and we'd pick up a pylon and run across and the people who are on the other side can't touch you if you're carrying a pylon. And whoever gets the most pylons will win. It's really fun. It was like we were protecting a princess from invaders from the other side just like from Narnia. (Pheonix)

Pheonix spoke of this memory with enchantment, referring to it as an adventure where she was able to use her imagination. Wolverine mentioned a similar moment from Autism Camp:

They have this horse thing that looks like a horse. Yeah I more like riding it like it's a horse than what you're supposed to do. You're supposed to do it with your feet. (Wolverine)

Here he speaks of the pommel horse that is used at CMP. Instead of using the equipment for its traditional function in gymnastics, Wolverine opted to exercise his imagination riding it as though he was on horseback.

Pheonix and Storm made it clear that they enjoyed the variety of activities offered at Autism Camp through the use of multiple physical environments. Numerous spaces on campus –both inside and outside– were used to facilitate movement. During the interviews, participants recalled the many locations they travelled to off campus, including this excerpt from Pheonix's interview:

Go Karts! Go Karts was really fun! It was like Mario Kart, but a little different.
(Pheonix)

She followed up by telling me that her most memorable moment from camp was going to MarineLand and Storm would agree. When I asked him to describe a moment where he felt happy and excited he described his favourite activity at the park:

Uhh at MarineLand on this one... they have this big ride that's a swing that goes around in circles and I liked it a lot. (Storm)

The physical environments described above offered Pheonix and Storm the opportunity to take part in extracurricular activities in which the movement components were masked by fun. The participants were focused on their enjoyment of the activities rather than considering any additional benefits. Specifically for children with Autism, various physical environments can offer a wide array of sensory stimulation. Participants'

descriptions related to the category of variability of physical environments are located in the appendices (*Appendix F-7 & F-8*).

Lived relation.

2.2.7 Empathy for others.

Participants were asked during the interviews if they noticed other children in their classes or movement programs having difficulty with certain tasks. Pheonix and Storm both recalled moments when they noticed fellow students having difficulty during physical education. Each of them showed a true concern for other students in their class when they appeared to be having difficulty or were not having fun.

Pheonix told me about one boy in her class specifically who she knows has trouble during some tasks. She described him as having more severe characteristics of Autism than she does and recalled moments when he had a difficult time during gym, saying she felt badly because he could not do the same things as other kids. Pheonix told me she wants to help her peer and tries to help but it is hard for him to do the activities.

Storm also spoke of children in his class who have a difficult time with tasks in physical education:

Sometimes (notices other kids having difficulty). I just wish they enjoyed it more.

(Storm)

These responses illustrate how participants felt empathetic when they observed other students experiencing difficulty during physical education. The responses related to this category can be viewed in the appendices (*Appendix F-7*).

2.2.8 *Volunteer as movement facilitator.*

All of the participants' narratives included some mention of how their volunteers at each of the movement programs provided them with direction, guidance, support, or encouragement. Wolverine told me about how the volunteers at CMP guided him through dance activities:

Yeah sometimes umm I don't know at first but then after I know it. I'm alright if I umm look at what they're doing. (Wolverine)

Wolverine indicated that the dance activities are easier to do when he is able to follow along with the volunteers and mirror their movements. Similarly, Storm shared with me how he believed the volunteers helped to guide and encourage the children at Autism Camp:

They're probably telling us that there's something we should... we're not doing right or that we're doing that we shouldn't be doing or if we're doing something really good. Yeah encouragement and pointing out things that might be a problem. (Storm)

This narrative helps to illustrate how volunteers are active in participants' movement experiences by providing guidance, support, and positive and negative reinforcement.

This category presents the concept that volunteers are present at the movement programs to maximize children's active involvement and progression through movement tasks.

Supplementary examples of this category can be located in the appendices (*Appendix F-8*).

2.2.9 Building relationships.

This category became evident from participants' responses to questions regarding interactions with volunteers and other participants. Individuals who attended CMP recalled making lasting connections with the volunteers they worked with over the span of the eight week program. Storm recalled the connection he had with his volunteer:

I like the partner that I'm with ****. He's really fun to be with. (Storm)

Wolverine and his parent also shared stories with me about the connection he built with a volunteer he was paired with in a previous year. He told me about how they continued to meet after the program had ended to go to the movies and play games together.

In addition to building relationships with volunteers, Pheonix spoke of the friendships she has made with other children at Autism Camp and mentioned two of her friends during the interview:

Yeah sometimes like that (makes new friends) but there are other other kids in there I already knew like ***** and *****.

Yeah, like ***** goes to this Cave Springs camp, have you heard of that camp?

Like it's so fun you get to stay there all week long. I was in a cabin with eight girls, some of them were mean to me, but some were nice and ***** was there.

He loves that place. Places that he goes is gonna cause me for me to go there. And he was, like... I went to three camps this summer. He always went me with them, like at the St. Theresa's school.

I think he's following me every Brock camp I go. (Pheonix)

This narrative shows how Pheonix's friendship with one of the other children from Autism Camp has continued over many years and they have reunited at a number of

different programs. Each of the participants have been returning to their respective movement programs year after year and have built long lasting friendships with other participants and continue to meet new individuals each year. These narratives in this category show how movement programs can help children build relationships with young adult mentors as well as their age-related peers. Responses from the category of building relationships can be found in the appendices of this study (*Appendix F-8*).

2.2.10 Help interactions.

The category of help interactions emerged from the text as participants described situations where they or other children in physical education or movement programs experienced difficulty. Help interactions were characterized by two different scenarios: situations where they received help and other situations where they wanted to provide or did provide help to others. The first involved a teacher, educational assistant, volunteer, or coordinator helping a student or participant. The second involved participants helping their peers.

Pheonix and Wolverine both stated that teachers and educational assistants tried to offer help to students who were having difficulty but were perceived as not knowing how to help effectively. Wolverine and his parent discussed how his teacher helps him during physical education:

When you're having a little bit of tricky times what does she do to help you? Can you tell me what happened once when you had a tricky situation in gym? (Parent)

Uhh she shows me how to do it. (Wolverine)

So she comes right up to you and helps you? That's kind eh?(Parent)

No she shows me. (Wolverine)

During the interview Wolverine made a distinction between receiving physical assistance and receiving guidance. To Wolverine the notion of receiving help implies that the he would require physical assistance to perform the task whereas the notion of receiving guidance implies only that he was shown how to properly perform a task himself.

Pheonix described a similar situation from Autism Camp when she had trouble skipping:

Well they keep helping me. They keep showing me what to do. They show me different tricks I never done before. (Pheonix)

Pheonix clearly describes how her volunteers helped to promote her independence by offering guidance and direction rather than providing physical assistance to complete the task.

The second type of help interaction discussed by participants involved helping their peers. Both Pheonix and Storm expressed wanting to help their peers at school who experienced difficulty during physical education. Here Pheonix tells me about how she helped other children at Autism Camp during fitness and gymnastics activities:

Well I showed them things like to **** and ***. (Pheonix)

Similar to the help interactions from teachers and volunteers, Pheonix was able to demonstrate a task to help others rather than physically assisting them through the activity. Additional responses from the category of help interactions can be viewed in the appendices (*Appendix F-7 & F-8*).

Once these categories were developed during the second level of analysis of interview text I needed to look further into which of the categories demonstrate the

essences of participants' movement experiences. This is explored in the third reduction of the findings chapter.

2.3 Document data – categorical level.

In this level of reduction I used a discourse analysis of the language used in course descriptions of relevant courses from the content analysis. I used a keyword search to perform a cross case comparison of course descriptions. Patterns in keywords of the text led to the emergence of four categories: individual needs and well-being, accessibility and inclusion, physical activity and disability, and corrective or pathological. Each category will be visited individually in this section. Categories are not inclusive of all of the programs of interest; discourse that is present and missing from the text will be discussed in the third reduction or thematic level.

2.3.1 Individual needs and well-being.

This category developed from the language used to describe courses that emphasize taking into account individual differences, needs, and support to provide increased quality of life and well-being. Patterns related to this category were revealed in the language of course descriptions from each of the program types included in this investigation. Physical education course descriptions that were coded for this category had an emphasis on adapting to people's individual needs or designing programs to meet the needs and abilities of individuals with disabilities. Nine of the eleven programs with related courses included at least one course description with some mention of individual needs or well-being, excluding Lakehead and Ottawa. The course description of

McMaster's APA course titled "Physical Activity for Challenged Populations" emphasizes attending to individual needs:

"to become aware of the unique needs of special populations, and how individualized physical activity programmes can attend to those needs"
 "gain experience in adapting physical activity to the specific needs of certain populations" (McMaster University, "Physical Activity for Challenged Populations")

This description places importance on adapting to the needs of individuals to provide support in a movement environment. Many of the courses offered similar descriptions related to meeting the needs of individuals with disabilities. Windsor's course "Physical Activity for Special Populations" uses a slightly different viewpoint:

"emphasis will be placed on defining the characteristics of the population, the needs and strengths of each population, and matching the strengths with the appropriate physical activities" (University of Windsor, "Physical Activity for Special Populations")

The focus here is on individual characteristics and their strengths, promoting independence and maintaining dignity.

Disability studies programs are committed to protecting the rights of people with disabilities in order to enhance their quality of life and well-being. Brock's program mission statement refers to this dedication:

"ADS is designed to contribute to the betterment of the lives of persons with disabilities" (Brock University, Applied Disability Studies program mission statement)

The philosophies of disability studies programs are similar to Windsor's focus on promoting independence and maintaining dignity of individuals with disabilities.

Program mission statements identify human rights issues which cultivate the oppression of people with disabilities as their main focal point. This description refers to the role of the social model in the program philosophy of Windsor's disability studies program:

“based on the social model of disability, essential to the program philosophy, as it reflects the rights and anti-oppressive needs of people with disabilities”

(University of Windsor, Disability Studies program mission statement)

These programs are not interested in fixing or correcting people with disabilities but instead are committed to providing them with services and opportunities to promote independence and social equity in their everyday lives.

There is mention of special, unique, and diverse needs of students in most special education courses in teacher education programs. One course description stood out during this level of reduction referring to individual needs of students:

“an introduction to the field of special education...to address diverse learning needs in inclusive classrooms. This course surveys the learning needs of children and adolescents with both high and low incidence exceptionalities, and highlights methods of differentiating classroom instruction to meet their individual needs”

(University of Windsor, “Differentiated Instruction for Students with Special Needs”)

This course description is important as it emphasizes individual needs rather than special needs of a general population. Additional course descriptions that emphasize individual

needs and well-being from physical education, disability studies, and teacher education programs can be found in the appendices (*Appendix F-9*).

2.3.2 Accessibility and inclusion.

This category developed from patterns in course descriptions from each of the program types included in this investigation. Physical education course descriptions that included language regarding inclusion referred to integration, adaptation, and accessibility. Only five of the related physical education programs offer courses with inclusive language in their descriptions. The course description for Queen's "Sport, Recreation and Exercise for Persons with Disabilities" course includes mention of these inclusion variables:

"Students will be introduced to fundamental principles such as inclusion, accessibility, barriers, empowerment and advocacy"

"methods for planning inclusive adapted and individualized programs" (Queen's University, "Sport, Recreation and Exercise for Persons with Disabilities")

Other related text mentioned using adaptations to task and environment variables to overcome or remove barriers in order to provide individuals with disabilities access to programs, activities, and physical environments. The intended outcome of these steps is an inclusive movement environment for children of varying abilities. Only five of the schools, not even half of those included in this level of reduction had a course description referring to accessibility and inclusion.

Similar patterns were recognized in the language used in disability studies program and course descriptions. Recognizable patterns emerged in regards to

integration, inclusion, accessibility, and social justice. These programs take a critical stance, evaluating current inclusion practices and accessibility. The following course description provides an example of how this is done:

“the rhetoric of integration, inclusion, unjustifiable hardship and educational disablement are analyzed”

“examine the physical and pedagogical accessibility of schools as well as look at how the complicated issues related to inclusion are framed in law and policy”

“critically examines the international discourses of special education, inclusion and integration” (York University, “Social Inclusion: Theory and Practice in Education and Social Policy”)

The above text represents how these programs evaluate how far the disability studies and inclusion movements have come but also attend to what is missing and future directions in regards to inclusion and accessibility of all individuals.

Teacher education courses with language suitable to be coded for this category mention inclusion and equity. These keywords are mentioned generally in most special education or diversity classes. One course to describe specifically how inclusion is incorporated in class material is York’s “Inclusive Education”:

“inclusion of children with exceptionalities in the general education classroom”

“As a group, we define inclusion, identify the stakeholders in inclusion, address the roles of the stakeholders, and explore accommodations and modifications.”

(York University, “Inclusive Education”)

While other schools discuss inclusion as a topic in special education courses York offers this course which is dedicated completely to the understanding of inclusion philosophies, principles, and practices.

Western offers a course called “Teaching for Equity and Social Justice: A Focus on Inclusive Curriculum”. Not only is this course focused on creating inclusive learning environments but it emphasizes the importance of an inclusive curriculum, one in which all children can see themselves reflected in the content they learn. Disability is mentioned in the course description for this class however it is absent from the aims, goals, objectives, outcomes, and major themes listed on the course syllabus. This information was found in the syllabus which was available online through the university’s website and link to course information. The absence of disability from major themes on the course syllabus led me to question the value placed on this topic and whether it is included in the course content at all.

Teacher education courses in health and physical education were included in the analysis. Only of one the thirteen schools that offer this type of preparation course included inclusive language in the course description. Brock’s health and physical education courses for the primary/junior and junior/intermediate divisions both have the same description:

“Fundamental movement skills, active participation, concepts of healthy living, appropriate teaching methods and a philosophical orientation which fosters learning by all.” (Brock University, “P/J Health & PE” and “J/I Health & PE”)

The above course description refers to using a philosophical orientation which is representative of inclusive values as it ‘fosters learning by all’. Additional course

descriptions that use language related to the category of accessibility and inclusion can be viewed in the appendices (*Appendix F-9*).

2.3.3 Physical activity and disability.

This category is specific to courses which emphasize physical activity for children and youth with disabilities. Although all of the health and physical education teacher preparation courses are movement based, there is an absence of disability from the course descriptions. In contrast, special education and disability studies courses are disability-centered but did not include any mention of learning in a physical environment outside of the general classroom. The only courses to use language related to physical activity and disability were from physical education programs.

Physical educators work in a specific movement environment, one that does not involve treatment but instead fosters learning of movement based concepts and skills in a social context. Nearly all of the programs which offer courses with content on children and youth with disabilities include at least one class based on programming for physical activity, exercise, or physical education. The only school which does not offer this type of course is Ottawa; instead a psychomotor rehabilitation course is used to educate students on how to design interventions for special populations.

These courses emphasize the importance of designing and adapting physical activity programs to meet needs of the individual, similar to the first category of this level of analysis. Additionally, they offer instruction in a variety of movement contexts.

Queen's "Sport, Recreation, and Exercise for Persons with Disabilities" exemplifies this:

"successful participation in physical, recreational and leisure activities"

“recreational and competitive sport opportunities for persons with disabilities”

“examine physical activity and recreational needs of individuals” (Queen’s University, “Sport, Recreation, and Exercise for Persons with Disabilities”)

Courses such as this can provide future professionals with the ability to provide a spectrum of physical activity opportunities for children and youth with disabilities.

Toronto offers a course with similar content:

“effective ways of providing physical activity opportunities to individuals with a wide range of abilities. Attention will be paid to the physical, psychological and social supports that enable people with disabilities to adopt the active living lifestyle of greatest interest to them. The ability of physical activity professionals to include individuals with different abilities will be examined across a wide variety of physical activity settings (e.g., school physical education, community recreation, fitness training, coaching, etc.)” (University of Toronto, “Adapted Physical Activity”)

Not only does this course offer a wide variety of movement contexts but there is an emphasis on relating activity to the individual- allowing opportunity for involvement as well as choice. The outcome of this type of instruction is preparation of professionals to encourage and foster lifetime participation for all individuals in a variety of physical activity contexts. Other course descriptions from the category of physical activity and disability can be located in the appendices section of this thesis (*Appendix E-9*).

2.3.4 Corrective or pathological.

In contrast to the previous category, other course descriptions referred to pathology, disease, and poor health rather than individuals' abilities or strengths. Corrective and pathological language was apparent only in courses offered within physical education programs; therefore there will be no mention of disability studies or teacher education courses in this section. The use of this language implies that disability is something to be fixed, as the goal of treatment based movement is to reduce the characteristics of a person's disability. An attempt is made to minimize individual differences via therapeutic interventions. This example illustrates how corrective language is used to explain course content:

“the roles that nutrition and exercise can play in preventing, lessening or delaying the onset of specific diseases and/or ill health states. Disease states and injuries to the body can dramatically a) compromise the ability of the body to exercise or to respond to nutrition and b) result in special needs for the body” (University of Guelph, “Special Populations: Nutrition & Exercise”)

The language used in this description speaks only of a flawed body, disease, and injury, failing to include any mention of individuals or their strengths. Of the five schools that had course descriptions coded in this category, only Brock included any mention of the person with the disability or disease to be treated while the other four institutions only spoke of the flawed body, disease, or disability. Supplementary descriptions that include corrective or pathological language can be found in the appendices section (*Appendix F-9*).

The categories from this section will be revisited in the next level of analysis. Further reduction of the secondary data will reveal the strengths of each program included in the investigation but will also highlight the gaps within each and disconnect between programs.

3. Third reduction - thematic level

During this level of analysis I performed a cross examination of the categories identified in the second reduction. This analysis revealed new patterns, some which were identified across all three data sets and others which were very powerful in one or two data sets. These patterns led to the formation of themes which are critical to the meaning of participants' experiences. Themes identified across all three data sets are: push for autonomy and independence and issues of inclusion. Themes which emerged from two of the three data sets include: fun and activity, emphasis on achievement, social experiences, forbidden-ness, role development, and metacognitive awareness. A dominant theme revealed by the secondary data is a forced dichotomy of mind and body in education. Each of these themes will be discussed further in this section.

3.1. Push for autonomy and independence.

Instructions for reading Table 4.1: 'push for autonomy and independence' was a prominent theme within each of the three data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data

context is from the category of 'negative expression'. Although the category of 'negative expression' did not have any clear patterns related to the theme of 'push for autonomy and independence' I felt the example provided best illustrates this theme. The example chosen to portray this theme from the interview data context is from the category 'volunteer as a movement facilitator'. The example chosen to portray this theme from the document data context is from the category 'physical activity and disability'.

Table 4.1 Locating the theme of ‘push for autonomy and independence’ in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Active Involvement	Choose their own level of participation and intensity of activity	When Keenan experienced difficulty setting up the Wii by himself his volunteer tried to give him assistance. He jolted the controller back from her hands and said “I can do it!” (Negative Expression)
	Strategy	Choose whether or not to employ strategy and many develop their own	
	Forbidden Spaces	Some are participant-determined Challenge boundaries set by others	
	Volunteer as a Movement Facilitator	Independence encouraged as much as possible Guidance and direction used rather than physical assistance	
Interviews	Volunteer as Movement Facilitator	Use of guidance, support, and encouragement to promote independence	“They’re probably telling us that there’s something we should... we’re not doing right or that we’re doing that we shouldn’t be doing or if we’re doing something really good. Yeah encouragement and pointing out things that might be a problem.” –Storm (Volunteer as a Movement Facilitator)
	Help Interactions	Distinction made between guidance and physical assistance Children do not want help if it reduces autonomy	
Document Data	Individual Needs and Well-being	Emphasis on individual’s specific needs and strengths Promote choice	“matching strengths with appropriate physical activities” -University of Windsor, Physical Activity for Special Populations (Physical Activity and Disability)
	Physical Activity and Disability	Emphasis on individual’s specific needs and strengths Promote choice	

After analysis of the data it was apparent that participants wanted to determine their own level of involvement and be as independent as possible during their movement

activities. Children enjoyed choosing their own levels of intensity during activity, finding new strategies to employ, and in some instances creating their own sets of rules and boundaries. Although participants were open to suggestions and encouragement from volunteers, coordinators and teachers they did not welcome uninvited help or physical assistance in the same way. A very clear line was drawn to distinguish between the positive impact of providing guidance and support and unwanted physical assistance. Many volunteers showcased behaviours which were supportive of children by encouraging independence during movement tasks while testing children's limits in the activity. The 'push for autonomy and independence' is against unwarranted help or assistance, freeing children with disabilities to choose their own strategies and pathways when participating in movement activities.

3.2 Issues of inclusion.

Instructions for reading Table 4.2: 'issues of inclusion' was an important theme within each of the three data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category 'participation as success'. The example chosen to portray this theme from the interview data context is from the category 'activities/movement'. The example chosen to portray this theme from the document data context is from the category 'accessibility and inclusion'.

Table 4.2 Locating the theme of 'issues of inclusion' in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Participation as Success	All children are involved in activities and lend themselves to movement experience in different ways All participants get what they need from experience	Martin achieved small successes within the game, leading him toward a larger end goal. (Participation as Success)
Interviews	Activities/Movement	APA programs provide variety and choice – something for every participant APA programs are population specific PE classes based in fitness, games, and sport Elimination games used in PE	“Dodgeball, a lot of dodgeball. Our warmup is uhh just a lot of stretching and movement. We also sometimes do laps but sometimes most of the time they have this dvd... music along with kids doing these exercise things and we try and follow what they're doing.” –Storm (Activities/Movement)
Document Data	Accessibility and Inclusion	Issues of accessibility and inclusion are addressed in only some of the investigated university curriculum. Mainly include inclusion discourse. Transfer to practical use in the classroom/physical environment is not guaranteed.	Some presence in physical education and kinesiology courses Disability studies involves evaluation not practice Teacher education special education courses flooded with inclusion discourse Teacher education physical education courses involve no mention of inclusion (Accessibility and Inclusion)

Participants shared their experiences from multiple movement contexts with me, bringing to light some issues regarding inclusion in APA programs and physical

education. Each of the APA programs which were involved in either the interview or observation portion of this project is specifically designed for certain populations. These programs are designed to be exclusive and specially adapted for target populations to ensure each child is benefiting from the movement experience. None of these programs claim to be something they are not. For example the Special Needs Activity Program is designed specifically for children with special needs of any kind and is exclusive of children who do not have special needs. These programs are able to remain individualized and benefit all of the children involved.

While a variety of activities are offered at the adapted physical activity programs, participants described their physical education classes to be based solely in fitness activities, games, and sports. Using only these activities limits students' movement experiences and minimizes potential creativity. One participant shared with me how his teacher defies inclusion principles by using elimination games as a staple in his physical education class.

My examination of university course calendars included a discourse analysis related to accessibility and inclusion. Disability studies programs evaluate inclusion and accessibility of laws and programs among other things; however practical implementation of such practices is not apparent. Some physical education and kinesiology programs offer courses with content relating to accessibility and inclusion of children with disabilities, however this content is not included in all related courses or available at all schools. Teacher education lacks any discourse related to accessibility and inclusion in physical education courses. Teacher education involves a lot of inclusion discourse in

special education and diversity courses but an analysis of whether it is transferred into practice teaching experiences should be done.

Considering the issues regarding inclusion- whether or not it has been met, whether or not it is possible to meet, and whether or not to include it in teacher preparation courses- it is clear that there is still a long way to go before Ontario classrooms and University curriculum will truly foster inclusion and accessibility.

3.3 Fun and activity.

Instructions for reading Table 4.3: ‘fun and activity’ was a prominent theme in two of the three data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category ‘positive expression’. The example chosen to portray this theme from the interview data context is from the category ‘positive expression’.

Table 4.3 Locating the theme of 'fun and activity' in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Roles	Taking on a role and playing video games masks the activity with fun Open for them to act in any way they please	Jaycee was actively involved in her bowling game with her friend from school. Her excitement was fuelled whenever she did well and she celebrated by circling around the room giving 'high-fives' each time she bowled a spare or strike. (Positive Expression)
	Active Involvement	Games require children to be active Big activity in a small space	
	Positive Expression	Excitement, pride, and enjoyment during activity	
Interviews	Positive Expression	Both physical and emotional benefits described for APA and PE	"Energy and exercise a good amount of exercise. The majority of the time everyone has fun." – Storm (Positive Expression)

Throughout the process of this project I discovered that it is realistic for physical activity to be fun for children with disabilities while also providing them with physical benefits. The enjoyment and excitement I witnessed in the multimedia room at SNAP made it obvious to me that fun and activity can coexist. Interview participants shared this with me as well by describing their APA programs and physical education classes as good exercise and fun. The notion that fun and activity can coexist is best exemplified by the multimedia activities. Video games- the archenemy of physical activity and fitness- have become a staple in some people's workout routines or active lifestyles. Games such as 'Nintendo Wii' and 'Rockband' offer mild to moderate physical activity masked by the fun and enjoyment of gaming. In an era overtaken by television and gaming, children have less interest in hitting the courts to play a full game of tennis but are eager to play vicariously through their on-screen 'Wii' characters. Multimedia activities should not be

used to replace the life size activities which they represent but instead can be used as an alternative approach when appropriate such as in a program like SNAP.

3.4 Emphasis on achievement.

Instructions for reading Table 4.4: ‘emphasis on achievement’ was an essential theme in the observation and interview data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category ‘strategy’. The example chosen to portray this theme from the interview data context is from the category ‘challenge’.

Table 4.4 Locating the theme of ‘emphasis on achievement’ in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Strategy	Use of strategy to increase level of success in game	Evan used the actions of the ‘Wii’ controller to strategize and move his player around the bowling lane, aiming to make the best possible shot. (Strategy)
	Participation as Success	Achievement of small challenges throughout activity Multiple opportunities for achievement	
Interviews	Challenge	Skill-based tasks emphasized in both APA and PE APA offers individualized measurement of success/ achievement	“My counselor keeps asking me to go down the waterslide at the YMCA community centre cause I was scared while I was up there cause I hate putting my head under the water and cause water goes in my lungs and I don’t like that. I can’t even try to plug my nose.” –Pheonix (Challenge)

Achievement was emphasized in each of the movement contexts however it was the way in which achievement was measured that is variable. Participants' physical education classes focused on skill-based tasks. Achievements outside of performing a skill well were difficult to measure, making participants feel inadequate when they were unable to perform a skill they were working on in class. APA programs focused on skill-based movement as well however children completed tasks on an individualized level and progressed at their own pace. The multimedia activities at SNAP offered small individual challenges within each task providing multiple opportunities for achievement with an activity. The visual feedback available in the games provided children with knowledge of their performance. Participants were able to adjust their movements and correct past errors in future attempts since they were able to visualize their current performance. Opportunities for all children to experience success should be available by emphasizing individualized and progressive achievement levels.

3.5 Social experiences.

Instructions for reading Table 4.5: 'social experiences' was a central theme in the observation and interview data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category 'peer to peer interactions'. The example chosen to portray this theme from the interview data context is from the category 'building relationships'.

Table 4.5 Locating the theme of 'social experiences' in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Gathering Place	Creation of a community, all children find a way to become involved	Brock was impatient, trying to get on the drums twice before it was his turn. His volunteer insisted on teaching him that he needed to wait his turn while others were playing. (Peer to Peer Interactions)
	Peer to Peer Interactions	Necessary to interact with other children in the room Both positive and negative behaviours exhibited	
Interviews	Building Relationships	Lasting relationships with volunteers Friendships with age- and ability-matched peers	"I like the partner that I'm with ****. He's really fun to be with." – Storm (Building Relationships)

Movement experiences of participants were also social experiences in many ways.

The interactions among peers and those between participants and volunteers affected children's movement experiences in different ways. The multimedia room at SNAP became much like a community where each individual had a role, everyone was very supportive, and most children worked together very well.

Interview participants spoke of long lasting relationships they built at APA programs with their volunteers who they enjoyed spending time with. Friendships were described between participants and their peers who were age and ability matched. Pheonix expressed relief about getting to return to a program where there would be other children with Autism. Movement experiences whether they were in APA programs or physical education proved to serve also as social experiences for participants.

3.6 Forbidden-ness.

Instructions for reading Table 4.6: ‘forbidden-ness’ was an important theme in the two of the three data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category of ‘roles’. The example chosen to portray this theme from the interview data context is from the category ‘roles’.

Table 4.6 Locating the theme of ‘forbidden-ness’ in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Forbidden Spaces	Boundaries and restrictions placed on children by volunteers Boundaries and restrictions participants place on peers and volunteers	Austin acted as a coach or guide to his volunteer. He set up the game of bowling and gave his volunteer a run through of how to use the controller. As they progressed through the frames he directed his volunteer how to use the controller so she could move side to side on the lane to have a better aim at the remaining pins. (Roles)
	Roles	Children either self-select or unconsciously adopt roles, placing volunteers in a reciprocal role- keeping them out of certain roles and forcing them to adopt others	
Interviews	Roles	Experiences of children and volunteers/teachers limited by the other – each forbids the other from acting in certain ways	Pheonix’s teacher assigned her the role of helper and did not assign her other roles such as captain (Roles)

The theme of forbidden-ness was formed from my analysis of forbidden spaces and restricted behaviours within the data. I first recognized forbidden-ness in the

restrictions placed on children by volunteers, coordinators and teachers by way of placing rules, boundaries, and behavioural limits on children. When I took an alternative approach I recognized similar constraints were placed on adults in the movement context by children. 'Kid only' spaces were laid out by participants in APA programs where volunteer and coordinators were not welcome. Children also determined the relationship between themselves and their volunteers. Whether a volunteer became a participant's buddy, friend, match for the day, or enemy was up to the child to decide. Experiences of both children and adults in the movement contexts were shaped and in many ways restricted by the other.

3.7 Role development.

Instructions for reading Table 4.7: 'role development' was a central theme in the observation and interview data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category 'volunteer as a movement facilitator'. The example chosen to portray this theme from the interview data context is from the category of 'roles'.

Table 4.7 Locating the theme of 'role development' in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Roles	Participants consciously adopt roles within games Unconscious reciprocal role interaction between children and volunteers	Wesley did not require guidance or assistance from his volunteer so she sat back and acted as his support whenever he needed encouragement. (Volunteer as a Movement Facilitator)
	Volunteer as a Movement Facilitator	Roles unconsciously adopted by volunteers (i.e. guide, assistant, movement partner, etc)	
Interviews	Roles	Assigned role by teacher to fulfill duties/tasks	Pheonix's teacher assigns roles to each student in her class. Each student works to fulfill his or her role by completing certain tasks. (Roles)
	Volunteer as a Movement Facilitator	Roles are self-determined but restricted by expectations of coordinators and boundaries of children	

Participants were observed to adopt roles both consciously and unconsciously.

Roles were consciously adopted during the multimedia games when children acted out the on-screen characters. Participants used this opportunity to behave in attention seeking ways that would otherwise be less accepted. Roles were unconsciously adopted through interactions between children and volunteers- how one acted determined the other's role. Roles were assigned by Pheonix's school teacher, determining which tasks or duties she was responsible for. Volunteers also took on self-determined roles such as movement facilitator. Roles of volunteers were shaped by the expectations of coordinators and boundaries placed children. Multiple roles were adopted in the movement contexts consciously, unconsciously, or by assignment.

3.8 Metacognitive awareness.

Instructions for reading Table 4.8: ‘metacognitive awareness’ is a theme revealed by patterns which were identified in the observation and interview data contexts (listed in the first column). Patterns related to this theme were identified in the categories listed in the second column. The meaningfulness of this theme to each of the categories is displayed in the third column. The example chosen to portray this theme from the observation data context is from the category of ‘roles’. The example chosen to portray this theme from the interview data context is from the category ‘empathy for others’.

Table 4.8 Locating the theme of ‘metacognitive awareness’ in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Observations	Roles	Understanding of what is required to fulfill roles Adoption of recognizable roles	Brock adopted role in ‘Rockband’, behaving as though he was performing on stage for a crowd. Behaviours exhibited were typical of associated role. (Roles)
Interviews	Roles	Understand duties and tasks to be completed in order to fulfill role Recognize difference between roles and why certain children are assigned roles that others are not	Pheonix told me about another child in her class who has Autism and experiences difficulty in physical education. She said that he has more severe Autism than her and she feels badly that he cannot do the same things as other kids in their class. (Empathy for Others)
	Empathy for Others	Acknowledge other children having difficulty Aware of one’s own ability level and that others’ ability levels are variable	

Children with Autism have been said to lack metacognitive awareness, making it impossible for them to understand what is required of them to perform a task. The adoption and assignment of roles shows that participants, many of whom have Autism, are able to understand what is required of them in order to fulfill such a role. Children were able to recognize certain behaviours, tasks, and duties as being related to the roles in which they adopted.

Metacognitive awareness involves what individuals know about themselves and others as cognitive processors. This relates to participants' empathy for others. The heartfelt compassion that participants' expressed for their classmates and peers was very telling. These children are aware of their own and other children's ability levels and the variability between them.

3.9 Forced dichotomy of mind and body in education.

Instructions for reading Table 4.9: 'forced dichotomy of mind and body in education' is an essential theme which was identified in the document data (first column). The patterns leading to this theme were identified in the category of 'physical activity and disability' (second column). The meaningfulness of this theme to the category of 'physical activity and disability' is displayed in the third column. An example of the 'forced dichotomy of mind and body in education' is presented in the fourth column.

Table 4.9 Locating the theme of ‘forced dichotomy of mind and body in education’ in the data.

Data method	Pattern located in:	Meaningfulness	Example from data
Document Data	Physical Activity and Disability	Separation between mind and body in university curriculum.	Teacher education in special education focused on education of children with disabilities in general classroom, no mention of physical learning environment.

During the discourse analysis of the document data I discovered a dichotomy between mind and body in the examined university curriculum. Content designed to prepare individuals to work with children in a physical environment was completely separate from content on working with children with disabilities in a learning environment. Each of these strands is present in university curriculum, but there are minimal courses offered in Ontario universities that prepare future professionals to work with children with disabilities in a physical environment.

Disability studies programs emphasize disability rights, at times relating to education but never do they incorporate activity. Teacher education courses in the physical education stream are consumed with activity and include no mention of disability. Special education courses in teacher education programs are focused on the education of children with disabilities in the general classroom and disregard the physical learning environment. All Physical Education and Kinesiology programs include at least one course related to special populations; however in many instances these courses do not incorporate content on school-aged individuals with disabilities or the socio-cultural-political contexts of persons with disabilities. Numerous courses are treatment or corrective based in which case the majority of the content is dissonant with movement

programming or physical education. There are very few courses which include activity-based content for children and youth with disabilities which can be transferred into adapted physical activity or physical education settings. The absence of courses dedicated to the training of individuals to teach or program for children with disabilities in a physical learning environment in the document data reveals a forced dichotomy in university curriculum between mind and body in education in general and teacher education in particular.

4. Fourth reduction – indigenous typologies

In this level of analysis I discuss the unique findings from my study and how they are meaningful to the movement experiences of children with disabilities. Forbidden-ness within the movement experience in regards to space, behaviour, and relation will be discussed. I present the ways in which each member within the movement context exercises control over these aspects. The forced dichotomy between mind and body will be analyzed further to reveal its meaningfulness to children's movement experiences. I also reveal other dichotomies from the movement context and show how dichotomous thinking can affect the overall movement experiences of children with disabilities. This level of reduction concludes my analysis of data collected from all three sources, revealing two prevailing indigenous typologies of Forbidden-ness and Dichotomous Thinking.

4.1 Forbidden-ness.

The experiences of each individual within the movement context are controlled by the self and others. Children's experiences are shaped by their volunteers and teachers while children also have influence over the experiences of their peers, volunteers, and teachers. Specifically, there are certain spaces, behaviours, and interactions that are controlled by the each party. Themes which led to this typology include forbidden-ness, role development, push for autonomy and independence, and social experiences.

Forbidden spaces involve those where the volunteer keeps the kids out, children keep their peers out, and kids keep their volunteers or teachers out. In the multimedia room volunteers and coordinators always had to keep their eye on participants to ensure they stayed out of off-limit spaces such as the lockers, bathroom, and shower. This way of controlling where children could go in the room is similar to creating boundaries or restricting accessible spaces. Giving children certain spaces to work within and banning them from others may increase their curiosity as to why these spaces are forbidden. I witnessed this behaviour in the multimedia room on multiple occasions throughout the span of the SNAP program.

Participants were observed as restricting the space that could be used by their peers in the multimedia room. The area in front of the television screens were deemed as off-limits by some participants. Similar to when taking a photo or watching a live performance, others were expected to respect the ones engaged by walking around or waiting until the space was clear. Children can be observed staking out spaces in other aspects of their life as well. Whether it is by claiming the space as their own or

determining who is welcome into a space this practice can be seen often in children's social interaction during play and activity.

Children may also create their own spaces. Although this was not observed in the multimedia room my experience working at adapted physical activity programs has exposed me to the numerous ways in which children actively build enclosed spaces, keeping others – specifically their volunteers- out. Using large foam shapes and mats participants can build small spaces in which they can enter and prevent others from joining. The building of forts during childhood is related to this concept- the construction of a restricted space, under ownership by those who create it. These spaces –whether restricted or forbidden by children or adults- lend to the movement experiences of children with disabilities.

Forbidden-ness also exists in the relationships between participants and their volunteers. Children's behaviours were strongly influenced by their volunteers while there was a reciprocal participant-volunteer relationship with each member having influence over the other. The interactions between children and volunteers determined each person's role in the participant-volunteer relationship. Volunteers may place a child in a position which has less, equal or greater control than they have over the movement experience. The majority of volunteers took command over participants, controlling their experiences to an extent, much like a teacher in control of a class of students. Certain behaviours were forbidden while others were encouraged in an attempt to keep control over the participant. Some volunteers were open to a co-participatory relationship where they acted as movement partners to participants, involving themselves in activities alongside the children rather than holding a position of authority. From my observations and

interview narratives I found participants to be more open to adult volunteers or teachers if they were co-participants in the movement experience or were active by providing support and guidance. In contrast when adults approached children in a superior or imposing way they were more hesitant and defensive, much like Keenan from my observations.

During my observations participants determined which roles they adopted in the multimedia activities. Whether the adoption of the role was a conscious choice or assumed by associated behaviours each child had a self-described role within the activities. Participants clearly enjoyed acting out the roles they self-ascribed, putting forth an abundance of energy toward fulfilling each role. Children would dance, scream, pound on the drums, and roar in excitement during the activities, many children exhibiting behaviours that would otherwise be less acceptable. Although the participants from this study have appeared to challenge forbidden spaces, behaviours, or other forms of suppression they seemed to welcome or be excited by what was forbidden, almost as though what they were doing became more exciting once they discovered it was prohibited. When participants took on a role within the multimedia activities suddenly it became permissible to grunt, scream, and jump around wildly since they were no longer portrayed by other as doing something wrong but as fulfilling a role in which the behaviours they exhibited were acceptable. Since it appears that children value forbiddenness within movement contexts it should not be removed or lessened, rather children with disabilities should be provided the opportunity to explore these spaces and expressive behaviours during movement. Continual suppression of liberating actions may compromise the value and meaning of these children's movement experiences.

4.2 Dichotomous thinking.

Dichotomous thinking refers to an either/or mentality. A person with this mindset sees the extremes in a situation rather than considering more balanced alternatives. Examples of dichotomies include all or nothing, this or that, order or chaos. The dichotomies discovered throughout this project will be discussed in this section.

The reduction of data in my analysis resulted in my discovery of a forced dichotomy between mind and body in education. Disability studies programs offer analysis of human rights and social practices in regard to disability. Minimal content is focused on inclusive education of children with disability and activity is absent from these programs completely. University courses in special education focus on training future professionals to teach children with special educational needs in the general classroom. This content is based in mind, with no regard to activity or the body. Teacher education courses in health and physical education present educators in training with activity-based content, but do not appear to practice design and accommodation for students with disabilities. While this content is activity-based and practiced within a physical environment there is minimal if any content on disability.

Physical education and kinesiology programs across Ontario offer a variety of adapted physical activity courses designed to prepare university students for working with people with disabilities or older adults in diverse movement contexts. After an analysis of the courses offered by Ontario universities including population focus (children and youth, older adults), program focus (corrective, therapeutic, activity-based), and practicum requirements it is clear how few courses exist that provide future professionals with adequate training to program for children with disabilities in an

activity-based movement context. A total of only four schools require students to take a course that has activity-based content related to children and youth with mandatory practicum experience. These institutions include Brock University, Lakehead University, McMaster University, and Queen's University. If these courses are not offered or required in all programs then physical educators cannot be expected to know how to accommodate and adapt for children with disabilities when they do not have the background or training.

Although the separation of mind from body in education was the most obvious dichotomy discovered in this study, it is definitely not alone. Additional dichotomies revealed by this project include independent or supported and typical or atypical. As I discuss the dichotomy of independent or supported I will address the issues within children's search for autonomy and independence. The dichotomy of typical or atypical results from the strong importance placed on normalcy.

In the preceding analysis I shared stories from participants of the ways in which they received help from teachers in physical education and volunteers at their respective movement programs. Participants made it clear they were open to receiving guidance and support from their teachers and volunteers in the form of demonstration, direction, or encouragement. When they were offered- or forced into receiving- physical assistance during a task they were much less receptive. While participants distinguished between the different forms of help during activity it seems as though adults have a much harder time recognizing the distinction made by children. The dichotomy of independence or fully supported is representative of how it is assumed a child with a disability requires assistance when having difficulty performing a task. Rather than providing

encouragement or direction to complete the task independently, the individual is forced into receiving any and all help which may likely be rejected by the child in an attempt to maintain independence. Adults should be aware of the spectrum of support options and how extremes- all help or no help- may affect children's movement experiences.

Human behaviours are often characterized as typical or atypical, differing between what is expected and what may be startling. A typical behaviour is one you expect to see demonstrated by a young child such as playing in the sand or dirt. Pheonix's description of how she behaved when she was young would be characterized as atypical compared to the previous example:

The things I did when I was 3, I ate lots of bugs, I licked the tires, I licked the road, I lay on the road, I'm sensitive to touch which means I don't like anyone to touch me at all. I scream, I cry. (Pheonix)

Typically developing children would not be expected to act in this way; however Pheonix's diagnosis of Autism helped to explain why she behaved this way. A diagnosis of a disability suddenly makes behaviours which would otherwise be intolerable more acceptable. Whether a child is classified as typical or atypical determines how one is expected to behave, as though granting permission to children with disabilities to act in a way in which other children should not. While it may be beneficial for providing a diagnosis, accepting a dichotomy of typical or atypical resulting in lowered expectations for children with disabilities may lead to detrimental effects on their development.

The typologies revealed in this chapter will be revisited in the discussion chapter and considered for future research and practice in movement programming, physical education, and professional preparation.

Chapter V – Discussion

Summary of Problem and Methodology

Voices of children with disabilities have been largely underrepresented in previous research and literature. The opinions and experiences of teachers have been given more value and importance than those of students with disabilities (Fitzgerald, 2006). By using qualitative interviewing I reached out to these children and was enlightened as three young students with Autism spectrum disorder shared stories of their school physical education and physical activity experiences with me. Providing these participants with the opportunity to have their voices heard was- and still is- of great value to me as I share what they told me with others. I observed other children who experience disability at SNAP in the context of an adapted physical activity program. By doing this I was able to supplement what children told me about their movement experiences with what I observed at the program.

In previous research (Lieberman, Houston-Wilson & Rozub, 2002) teachers have attributed their inability to provide inclusive physical education classes to the lack of preparation provided by post-secondary education and additional qualification courses. I completed the document analysis of Ontario university course calendars in the fields of disability studies, teacher education, and physical education and kinesiology in order to find whether or not this gap still exists in the preparation of physical educators and movement professionals. Through doing this analysis I discovered how future professionals were being prepared as of the 2009-2010 academic year.

Review and Discussion of Findings

My review of the findings involves a discussion of the indigenous typologies as I relate these concepts to previous literature and make connections to related categorical and thematic findings. The typology of Dichotomous Thinking was illustrated by my explanation of various dichotomies which were discovered during the research process including: mind-body dichotomy in university education (primarily teacher education), independent or fully supported, and typical or atypical. It is not surprising that I identified a mind-body dichotomy within teacher education programs since numerous other dichotomies related to disability and education have been described in earlier literature. Mercer and Lane (1996) located a dichotomy in instructional practice of educators and the way generalist teachers and special education teachers were prepared in teacher education programs in the United States. While generalist teacher education was grounded in constructivist theory, special education courses were based on behavioural theory. Lindsay (2004) discovered a dichotomy between law and educational opportunities of students with disabilities in Australia. Even though there was legal regulation of disability discrimination in Australia students with disabilities was restricted access to mainstream education. In more recent literature, Tuvall and Orr (2009) identified a dichotomy between inclusion ideology of school education and the stratification discourse used by administrators and teachers to describe students with disabilities' placement in schools. Although professionals believed strongly that inclusion was key to students' success, the language they used to describe educational practices and classroom demographics was not representative of inclusive philosophy.

The restriction of learning about disability in specialized classes such as adapted physical activity and special education solidifies Linton's argument that universities have fallen behind social reform of disability (1998). While social systems for people with disabilities increase and improve, university curricula have failed to keep up with these changes. Rather than designing curriculum to include disability in all fields and courses, disability continues to be a specialized topic confined to the disciplines where it is directly applied and content is separated into specialty courses.

The mind-body dichotomy in university curriculum in regards to disability illustrates how very specialized these courses are. In order to learn about considerations to be taken for people with disabilities in a movement context one must take an adapted physical activity course with activity-based content. In order to learn about considerations to be taken for people with disabilities in the classroom one must take a special education course instead of the content being included in other education courses. The segregation of disability in university curriculum places disability outside of what general professionals are expected to know and the responsibility is placed on specialists. If universities continue to write disability into curriculum as specialized material disability will continue to be looked to as 'outside the norm'.

The incorporation of infusion curriculum has been suggested by numerous authors (Kowalski & Rizzo, 1996; Linton, 1998; Apache & Rizzo, 2005). Kowalski and Rizzo (1996) propose that instead of introducing additional specialized courses a restructuring of university curriculum must be done to include information and experiences of disability in all aspects of the curriculum. The goal is not to completely eliminate all specialized courses but to infuse information regarding disability across the curriculum to

improve attitudes and understanding of future professionals toward people with disabilities (Apache & Rizzo, 2005).

The typology of Forbidden-ness was expressed as the restriction of spaces and behaviours of participants by volunteers and teachers and also the limitations placed on volunteers and teachers by children. Cobb, Danby and Farrell (2005) related similar findings to Michel Foucault's theory of governance. The authors state "this notion of governance revolves around issues of power: how we manage others and ourselves, and how others manage us" (Cobb, Danby & Farrell, 2005, p. 15). I feel this quote is a sound overall depiction of what is also meant by Forbidden-ness.

Childhood spaces and behaviours are monitored and controlled much like how adults' lives are managed by policy and law. Cobb, Danby and Farrell (2005) state how adults exercise control over children out of fear and the belief that children are in need of protection. Children's opportunities are mediated by adults at home, at school and in play. Specifically, childhood spaces such as parks, neighbourhoods, and schools have been restricted by adults who believe the only way to ensure protection of children is to minimize their freedom to explore these spaces independently (Cobb, Danby & Farrell, 2005).

From birth to young-adulthood, behaviours are continuously (mis)managed by adults. Gracey (1975) recognized this many years ago when he took a critical stance in his analysis of kindergarten. Young students are immediately behaviour-managed and 'trained' how to be a student as soon as they enter the school system. The governance of children with disabilities' behaviours is similar to what Gracey described numerous years

ago. Although I found many other research articles related to governance of children with disability they were not based in education or physical activity.

While previous research findings (Cobb, Danby & Farrell, 2005; Rogers & Evans, 2007) discuss adults' governance of children's behaviours and spaces and children's ability to enact governance over their peers they did not attend to the governance of adults by children. Although this form of governance was less overtly recognizable in the various contexts of my research it was present in both the interview and observation data and therefore important to identify as an active form of governance which is meaningful to the movement experiences of children with disabilities.

Children with disabilities' ability to enact governance is another way in which they exercise metacognitive awareness, similar to the findings involving role adoption and empathizing with others. These are multiple ways in which children exemplified metacognitive awareness during this research. Take a moment and recall when Pheonix shared her description of what it was like to have autism:

I was diagnosed when I was three. I had it so badly. The things I did when I was three, I ate lots of bugs, I licked the tires, I licked the road, I lay on the road, I'm sensitive to touch which means I don't like anyone to touch me at all. I scream, I cry. I'm worse than *****. Really worse. (Pheonix)

Pheonix's statement shows that she is aware of her behaviours, characteristics, and abilities. In previous literature, children with autism have been said to have deficient executive functioning, resulting in a lack of metacognitive awareness (Gilotty, Kenworthy, Sirian, Black & Wagner, 2002; Ozonoff, 1997; Pennington & Ozonoff, 1996). This in turn affects their thinking, perceiving, and problem-solving abilities.

Findings from my research indicate that cognitive functioning involving awareness of behaviours and abilities are not unobtainable for this population. These findings correspond with Butera and Haywood's (1992) prediction that using a cognitive approach to teaching children with autism could help to improve their cognitive functioning resulting in heightened metacognitive awareness. The authors mentioned how the use of role play can allow for children with autism to model, practice, and acquire the cognitive processing skills necessary to relate better with others in social situations and have an increased understanding of social and emotional responses (Butera & Haywood, 1992). These findings are extremely meaningful to participants' experiences as it shows they are able to exhibit metacognition, which is contrary to previous research. Using a combined teaching or instructing style involving the traditional behavioural approach- which is most often used when working with children with autism- and the newly proposed cognitive approach may offer great benefits.

The continued involvement of participants in the multimedia room is a critical finding from the categorical reduction of observation data which I would like to discuss further. Numerous children each week stayed in the multimedia room for an extended time period or returned to use the activities a second, third or even fourth time. My description of Quinton in the categorical level of reduction is only one example of how children showed more interest in the multimedia activities than activities in the gym. For some the novelty of the 'Nintendo Wii' and 'Rockband' activities within the program may have made them exciting. Children who had participated in SNAP prior to Fall 2009 would have had the opportunity to participate in most other activities during their previous visits to the program. After reviewing the original data I was unable to find any

clear patterns to offer reasoning as to why these activities were more appealing to participants than the wide variety of movement tasks in the gym.

Although I cannot provide definitive reasoning I can offer my personal interpretation in regards to what made children continue participation in these activities. The simplest explanation would be to say children had enjoyable experiences in the multimedia room, making them want to continue or resume participation. So then to answer my research question as to what made these experiences meaningful I must determine which particular aspects of their experiences are those which made it fun. Two meaningful elements stood out to me during data collection and analysis including successful participation and contribution to movement environment.

Although transferable, the skills required to perform the multimedia activities are not equivalent to those necessary to partake in the lifesize version of each task. While lowering the demands of the task allows for increased success, I strongly believe children's ability to visualize their success is what made these experiences even more meaningful than achievement on its own. The visual feedback from 'Nintendo Wii' and 'Rockband' activities provided an indication of children's performance in the activities. Participants could see from the visual feedback how to improve their performance and successes were celebrated by cheers and phrases of encouragement appearing on screen.

Along with the onscreen feedback, the multimedia room was a very supportive environment. Participants were continually encouraged by their volunteers and peers during their performances. Constructive and positive feedback was emphasized as well. The support and encouragement exemplified in the multimedia room made it possible for participants to feel as though they were valuable contributors to the movement

experience. It is this feeling of contribution and participants' achievement which made their experiences with the multimedia activities meaningful.

Limitations of Research

There are a few major limitations which should be taken into consideration when reading this document. My ability to generalize the content is limited as people experience disability in very different ways. Although my observations sample was heterogeneous in regards to age, gender, and disability the data is representational of participants within a specific context at a certain time. My interview sample was heterogeneous by gender and location on the autism spectrum; however since all interview participants have autism and are in the same age group their experiences may be similar to other children with autism between the ages of 10 and 13.

Another limitation was the interview participants' ability to recall experiences. Although good detail was provided in response to most of my questions, there were points when each participant could not recall specific happenings. Looking back I believe it would have been more beneficial to complete two separate interviews with each participant: one after physical education and one after attending a movement program. Perhaps this would have helped the children recall specific details.

The document analysis offered great insight into the related courses offered at Ontario universities and requirements of each course. Since this analysis was completed only on Ontario university course calendars the findings cannot be generalized outside of the province. Also course descriptions should offer good insight into major content and themes within each course, however since I did not have access to all course syllabi and

did not take most of the courses, I cannot be sure that the course descriptions are an exact representation of the content provided.

The final limitation is my self-restraint throughout the writing process. I found myself holding back from releasing any specific details about the research participants in order to maintain confidentiality. I initially felt that any description of the children's behaviours or physical characteristics, especially of the interview participants, could reveal their identity. Therefore the robustness of descriptions of participants has been compromised in service of ethical constraints in place to protect the participants. The editing process has largely been focused on adding more detailed description to what I did, how I did it, and how I felt during the research process. Using an active voice in my writing has proven to be quite difficult. Since this is my first research project, claiming ownership over what has been done is completely new to me and tested my writing ability by forcing me to refrain from remaining passive in my writing.

Concluding Remarks and Recommendations

It is necessary for movement professionals and educators to maintain order within the movement context; however, they must be cautious not to overpower participants and students. Professionals should adopt a constructivist approach to lead by guided discovery, providing children with the freedom to fail, learn, and achieve autonomously. Although direction and help may be needed it will be up to the child's discretion when this assistance is to be received. As a suggestion for future research I would like to see an analysis of governance over children with disabilities using behavioural therapies or

intensive behavioural intervention. The research could focus on strategies of governance by adults and reception or resistance by children.

Dichotomous thinking can be extremely dangerous for professionals, especially educators. Try for a moment to imagine a world where people only ever believed in simple truths instead of variable interpretations. The restrictions that would be placed on thought, imagination and creativity are those which are currently entrenched upon people with disabilities. I enjoyed reading the perspective of Lloyd Yero (2001-2002) on dichotomous thinking:

Dichotomous thinking is an adaptive behaviour that is part of human nature. The wonder of the human mind is that we can change it. We don't have to behave habitually. We can actively choose to think in a different way. Human minds are enormously adaptable. Establishing different patterns of thought will take some effort, but once established, those new patterns will become as natural as the old ways of thinking (p.3).

Lloyd Yero makes a great point, once professionals and universities can appropriately move beyond current practices to adopt a more inclusive philosophy free of dichotomies, dichotomous thinking in regard to disability will exist 'outside the norm'.

Glossary of Terms

Disability

A generalized term used throughout this document to include impairment, disorder, disease, disability, social construction, or lived experience; how ever it may be experienced by each individual. 'People with disabilities' or 'children with disabilities' will be used to refer to any individual who identifies as experiencing impairment, disorder, disease, or disability which affects his or her ability to carry out every day tasks. Also included are individuals who may not identify as having a disability but have been diagnosed with a disorder, disease, disability, or impairment either by a medical or education professional. This categorization was chosen in order to include those individuals who have not received medical diagnosis but experience disability in their daily lives as well as individuals who do not self-identify as having a disability but have been categorized in this way by others, effecting their placement or instruction in educational settings. The medical, social, political, and personal implications that are connected to disability will be discussed in the following chapter.

Adapted Physical Activity (APA)

A set of activities, programs, and services, a prōfession, or a field of study (Hutzler & Sherrill, 2007). In this document APA is most often used to describe extra-curricular (outside of school) activities and programs for people with disabilities. When discussing the document analysis, the term adapted physical activity is used to describe a field of study in universities across Ontario within

physical education and kinesiology curriculum. Adapted physical activity empowers people with disabilities to participate in a variety of movement contexts including sports, dance, gymnastics, and physical therapy. Distinctions will be made between the different types of APA in the following chapters.

Inclusion

A philosophy which encourages educational or movement environments which bring children of all abilities together and provides them with equal opportunities for learning or development (Florian, 2008). This philosophy is based from the model of the least restrictive environment which aimed to place students in the optimal learning contexts suited to their specific needs (Rizzo & Lavay, 2000). When using an inclusive approach, children with disabilities have equal learning opportunities as their age-matched peers in the general classroom. In inclusive physical education, adapted physical education is taught in general physical education classes by both general and adapted physical educators creating a supportive and individualized physical education context for children of varying abilities (Rizzo & Lavay, 2000).

Movement Programs

Structured extra-curricular physical activity programs for children and youth. Specifically, these programs include activities such as games, dance, gymnastics, fitness, and creative movement. Activities are skill-based and individualized, allowing for participants to develop and improve upon previous skill sets at their

own pace. Movement programs are not corrective or treatment based. The emphasis of these programs is for children with varying abilities to have fun while being physical active. A movement education approach is used in this type of physical activity program, using Rudolph Laban's movement framework. Movement education uses a constructivist approach to learning as it places the students at the centre of the process, making them responsible for their own growth and development (Chen, 2002). Goals of movement education include fostering children's self-responsibilities, developing children's problem-solving skills, and promoting children's cooperative abilities (Chen, 2002).

Fully Inclusive Movement Program

Provides children with and without disabilities equal opportunity to have meaningful movement experiences. Children of all abilities are welcome to participate in this type of program.

Semi-inclusive Movement Program

Welcomes children with any type of disability. The only children who are left out of such programs are children without disabilities.

Specialized Movement Program

Only individuals who fit certain criteria are welcome to participate. Activities at these programs are usually focused toward certain disabilities or impairments, allowing for participants to build skill sets affected by their condition. Examples

include programs specifically designed for children with mobility impairments, Attention Hyperactivity Disorder, or Autism.

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APPENDICES

Appendix A-1

Ethics Approval

DATE: August 19, 2009

FROM: Michelle McGinn, Chair
Research Ethics Board (REB)

TO: Maureen Connolly, Physical Education & Kinesiology
Melanie Hedley

FILE: 08-358 CONNOLLY/HEDLEY
Masters Thesis/Project

TITLE: Lived experiences of children with disabilities in various movement contexts

The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: ACCEPTED AS CLARIFIED

This project has received ethics clearance for the period of **August 19, 2009 to July 31, 2010** subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance period may be extended upon request. *The study may now proceed.*

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and cleared by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to <http://www.brocku.ca/researchservices/forms> to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form *Continuing Review/Final Report* is required.

Please quote your REB file number on all future correspondence.

Appendix B-1

Child Assent Form

Date:

Project Title: **Lived experiences of children with disabilities in various movement contexts**

Principal Investigator:
Melanie Hedley, MA Candidate
Faculty of Applied Health Sciences
Brock University
mh04kb@brocku.ca

Faculty Supervisor:
Dr. Maureen Connolly
Department of Physical Education
Brock University
mconnolly@brocku.ca
(905) 688-5550 Ext. 4707

INVITATION

You are invited to take part in a research project. The purpose of this research is to understand what it is like for you to be active in a gym program or school setting. You will be able to tell stories about what happens during times when you are moving (in programs or in gym class), including how it feels for your body (examples: easy, difficult) and what feelings you get from being active or working with your peers, leaders, and teachers (examples: happy, excited, frustrated, lonely). We are interested in finding out which parts of an activity or class are fun or not fun for you. We want to know what you think should be done in order for you to have more good and fewer bad times when doing these activities.

WHAT WILL I HAVE TO DO?

If you say yes and take part in this study, you will be asked to sit down with a researcher who will ask you a list of questions. You will be asked to share your stories about what being active is like for you in gym programs and in gym class at school. The researcher can ask you more questions than the ones on the list but you do not have to answer any questions if you do not want to. The questions and answers will be tape recorded so the researcher can listen to what you said during our talk to make sure nothing you said is forgotten. Your parent or guardian will be in the room with you during the questions and answers. You and your parent will decide if you want to talk with me at home or somewhere else.

HOW LONG WILL THIS TAKE?

I ask that you spend 30-60 minutes (about the same time as lunchtime and recess) of your time to share your stories with me. You can take breaks to rest or have a snack. We will only talk for longer than 60 minutes if you and your parent/guardian would like to keep sharing your stories.

WHAT GOOD THINGS CAN HAPPEN TO ME BECAUSE OF THIS STUDY?

If you choose to share your stories with us, this study may make gym programs and gym class more fun for you. We can share the information you give us with people in charge of running gym programs and teaching gym class to make it better for you. In the past, studies have not asked what it is like for children with disabilities to move. We have invited you to be a part of this study because we think that what you have to say is important.

WHAT BAD THINGS CAN HAPPEN TO ME BECAUSE OF THIS STUDY?

When you tell us your stories, you may remember some bad times you had when you were moving. Thinking back to these bad times may make you feel embarrassed, nervous, angry or sad.

WILL WHAT I SAY BE KEPT SECRET?

What you tell us will be shared but nobody except the researchers will know it was you who told us. Anything that has your name or information will be hidden and locked up. Only the researchers for this study will be able to see this information. The tape recordings and paper copies of what you said will be kept only until we are done with the study. After we are done the papers will be shredded and the recordings will be given to you.

The only reason we will tell someone who you are and what you said is if you tell us about a time when you were hurt by someone. If this happens we have to tell people who can help to keep you safe and stop you from getting hurt again.

DO I HAVE TO TAKE PART IN THIS STUDY?

You do not have to take part in this study. At any time you can choose to stop taking part in the study and you will not have any problems. If at any time you feel uncomfortable with any questions asked by the researcher you do not have to give an answer.

WILL YOU SHARE WHAT YOU FIND WITH ME AND ANYONE ELSE?

At the end of this study you can ask to have what we find mailed to your home. What we find may also be shared with other people or published in writing such as a book.

IS THERE ANYTHING ELSE I SHOULD KNOW?

Please talk to your parent/guardian about taking part in this study. Any questions you have about the study can be answered by the researchers. Please ask your parent/guardian to call or email us with your questions. This study has been approved by the Research Ethics Board at Brock University (file # 08-358). If you have any questions about how you are kept safe and what you say is kept secret during this study, please have your parent/guardian call the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your help in this project.

This research project has been explained to you and you understand what is going to be done, and why. You have talked to your parent/guardian about this project and you have decided that you would like to be a part of it. You understand that your parent/guardian will be given a copy of this paper to keep. Please do not write your name on this paper if you do not understand this study.

Child's Printed Name

Signature

Date

Name of Parent(s) or Guardian(s)

Researcher obtaining assent

Printed Name

Signature

Date

Appendix B-2**Parental Consent Form**

Date:

Project Title: **Lived experiences of children with disabilities in various movement contexts**

Principal Investigator:

Melanie Hedley, MA Candidate
 Faculty of Applied Health Sciences
 Brock University
 mh04kb@brocku.ca

Faculty Supervisor:

Dr. Maureen Connolly
 Department of Physical Education
 Brock University
 mconnolly@brocku.ca
 (905) 688-5550 Ext. 4707

INVITATION

Your child is invited to participate in a study that involves research. The purpose of this study is to understand the experiences of children with disabilities in a movement context. This project will provide a means for children with disabilities to share their stories and experiences. We are interested in discovering which components of a movement context contribute to positive or negative experiences of children with disabilities. In addition, we look to find ways in which participants believe movement tasks and environments can be altered in order to foster more positive experiences.

WHAT'S INVOLVED

As a participant, your child will be asked to meet with the principal investigator to discuss his/her previous movement experiences in structured physical activity programs and physical education. The interview will consist of a set of structured questions pertaining to experiences in movement settings. Any additional questions will be asked in reaction to your child's responses to the structured questions and will directly relate to his/her movement experiences. The location can be decided upon by you and your child. The interview can be completed in a secure location on the Brock University campus or in the privacy of your home. The interview will be audio recorded in order to maintain your child's complete accounts of his/her movement experiences. As the parent/guardian you are asked to be present at the time of this interview. Participation will take approximately 30-60 minutes of your time. The interview will only exceed 60 minutes at the discretion of you and your child.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include potential for more positive experiences in physical activity programs and physical education through improved programming and professional development. This research will add to the body of research concerning movement programming and physical education for children with disabilities. Previous literature has included minimal studies of this kind which consider the experiences and opinions of children with disabilities as being of value and importance. There may be psychological risks associated with participation brought on by recollection of negative movement experiences including embarrassment, anxiety, and sadness.

CONFIDENTIALITY

Data collected during this study will be stored and locked in the faculty supervisor's office. Access to this data will be restricted to the principal investigator (Melanie Hedley) and the faculty supervisor (Maureen Connolly). Data will be kept only until analysis is complete, after which time all paper documents will be destroyed and audio tapes will be returned to the participants. Confidentiality is limited by laws which require the researcher to report any witnessed or alleged instances of abuse or assault of the participant. If such circumstances arise during data collection the researcher must inform authorities of all information and details regarding the incident.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If he/she wishes, your child may decline to answer any questions or participate in any component of the study. Further, you or your child may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which your child is entitled.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available upon request and will be mailed to participants. Feedback will be available after July 31, 2010. Please contact the principle investigator or faculty supervisor to receive this information.

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 (where applicable) using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University (file # 08-358). 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.

CONSENT FORM

I allow for my child 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 my child or I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Appendix B-3

SPECIAL NEEDS ACTIVITY PROGRAM

Brock University St.Catharines, Ontario Fax: (905) TBA-0000 Email:
snap@brocku.ca

September 15, 2009

WELCOME TO S.N.A.P. Fall Session 2009!

We are excited to announce that the Special Needs Activity Program (S.N.A.P.) is continuing to offer its ongoing Community Service Learning based program again this year. S.N.A.P. is set up for individuals with disabilities and provides them with unique movement experiences. The program includes a wide range of activities such as educational gymnastics, dance and movement education, games, and other activities of daily living. Activities can be modified to meet the needs and capabilities of the individual participating. S.N.A.P. is an excellent opportunity to experience developmentally appropriate physical activity, and places emphasis on the need and importance of physical activity in relation to the overall development of an individual. To make the experience as safe and beneficial as possible, each participant will be paired up with a volunteer for the duration of each weekly visit to S.N.A.P.

Due to an increasing demand on equipment needs, we have established a small fee for the program this year. The cost of the program is \$1.00 per child/per visit. **PLEASE bring this money on your scheduled S.N.A.P. date.** Please note that transportation to and from Brock University is *not* provided.

As a result of overwhelming interest and increasing numbers attending the program, the registration system is a call in process. Due to high demands for this program, schools will be given the opportunity to book **ONE** specific date. Based on your geographical area, schools can coordinate transportation needs with each other. On **TWO DATES IN SEPTEMBER TBA** you are asked to call in the following number (905) 688-5550 5400 between 8:30am – 4pm, and book the fall date that works for you. The dates for elementary schools are as follows: October TBA, TBA, TBA, November TBA, TBA. The high school S.N.A.P. session will be held on November, TBA. The call in system gives everyone a fair opportunity and provides instant verbal confirmation of booking. **Please have the following information ready when calling in: contact teacher's name, school, phone number, number of children attending, and school email address.** You may request an email or phone call to confirm your registration if you are unsure of the booking details.

The students' profiles must be filled out by the school and sent back to the S.N.A.P. program prior to the students' visit. Schools that do not return the student profiles will not be able to participate. This is so the Brock University Volunteers have proper knowledge of the students in order to prepare activity programs that are safe and enjoyable. Please fill out the attached forms and **fax to (905) TBA-TBAA Attn: Dr. Maureen Connolly one week prior** to your confirmed S.N.A.P. session.

We look forward to seeing you at S.N.A.P. If there are any questions or concerns please contact Dr. Maureen Connolly at (905) 688-5550 ex.tba or email snap@brocku.ca.

Sincerely,

The S.N.A.P. School Liaison Portfolio Group

SPECIAL NEEDS ACTIVITY PROGRAM

Brock University St.Catharines, Ontario Fax: (905) TBA-0000 Email:
 snap@brocku.ca

Student Profile

*****PLEASE COMPLETE ONE PROFILE FOR EACH CHILD THAT WILL BE ATTENDING S.N.A.P.**

STUDENT NAME: _____

SCHOOL ATTENDING: _____

GRADE: _____ AGE: _____

EMERGENCY CONTACT NAME/NUMBER: _____ () _____

PERSONAL INFORMATION:

DETAILS OF CHILD'S DISABILITY (PLEASE INCLUDE TYPE OF DISABILITY, CLASSIFICATION & ANY OTHER RELEVANT INFORMATION):

MEDICAL CONDITIONS (include any medication details we need to know)

ALLERGIES: (food, seasonal, face paint, etc):

SNAP ACTIVITIES: FINE MOTOR SKILLS, GAMES SKILLS, JUMPING AND LANDING, CLIMBING, USE OF APPARATUS AND IMPLEMENTS, VARIETY OF FITNESS ACTIVITIES.

NOTE: NEW AS OF 2009/10 SPEAKERS' CORNER (video and audio taping with follow up viewing) AND INTERACTIVE MEDIA (eg., karaoke, instrument simulations)

LIST ANY SPECIAL CONSIDERATIONS FOR THE CHILD ESPECIALLY PERTAINING TO THE ABOVE ACTIVITIES

PERMISSION FOR PHOTO TO BE TAKEN: _____ YES _____ NO

PERMISSION FOR CHILD TO PARTICIPATE IN SPEAKERS' CORNER: YES _____ NO _____

PERMISSION FOR CHILD TO PARTICIPATE IN INTERACTIVE MEDIA: YES _____ NO _____

SNAP is an ongoing site for research on teaching, learning, accommodation, adaptation and inclusive practices. All observational data (eg, Speakers' Corner, teaching and learning episodes) have the potential to be used for research purposes.

I (parent or guardian) Give permission for my child to attend the S.N.A.P. program at Brock University

provide signature (parent): _____

(child): _____

SPECIAL NEEDS ACTIVITY PROGRAM

Brock University St.Catharines, Ontario Fax: (905) TBA-0000 Email: snap@brocku.ca

PROGRAM INFORMATION

- ❖ S.N.A.P. will be held at Brock University, which is located at 500 Glenridge Avenue, St. Catharines, Ontario. The program will take place in the Physical Education Department, Walker Complex in the Field House. Drop off signage will be indicated on site.
- ❖ The cost of the program this year is \$1.00 per student / per visit, which you will **pay upon arrival** for your scheduled S.N.A.P. date.
- ❖ Please note that schools are responsible for their own transportation to and from Brock University. For those who wish to bring a vehicle, parking is available in **B LOT** on campus, and it will cost \$5.00 for the duration of S.N.A.P.
- ❖ **Please be aware your school will only be accepted on a day that you have been confirmed on.** You will receive a confirmation email or phone call if changes in your original booking date have occurred.
- ❖ Please also keep in mind that no street/black soled shoes are allowed in the gym. Only indoor shoes are allowed and teachers will be asked to remove their dress shoes if need be.
- ❖ If a child wishes to bring a lunch, it **must be peanut free**, as there are some children with several peanut allergies.
- ❖ Please arrive on time (between 9:30-10:00 am) for your S.N.A.P. Session. Do **not** arrive early as the gym will not be ready and the volunteer pairing with children takes place until approximately 10:00am. The program runs from 10:00am to 12:00pm.
- ❖ Please note that all **PROFILES** must be faxed to Brock University (905) TBA-0000, Attn: Dr. Maureen Connolly, one week prior to your S.N.A.P. session.
- ❖ As a public institution, Brock is under privacy legislation, **thus photography is limited to our official photographer** who will be on site at each SNAP. Schools wishing to access photos of their participants can expedite this process if all children wear a distinctive school T-shirt (if possible) and the contact teacher or EA contacts the photographer through the SNAP email.
- ❖ If a child must be accompanied on the floor by an EA or teacher, we need this information sent with the profiles or via email from the board office so we can prepare a floor pass. Children who require this level of support will not be assigned a student volunteer unless numbers allow, and the person accompanying the child must abide by the SNAP curriculum and safety guidelines.

*****Due to liability concerns students without a profile will not be permitted to participate*****

Appendix C-1

It's time to tell your story

Seeking participants for a research study interested in experiences of children with disabilities during physical activity

Project title: Lived experiences of children with disabilities in various movement contexts

Purpose: to understand what it is like for children with disabilities to be physically active in community programs and physical education

Who can participate? 10-13 year old children with a disability or impairment who participate in a physical activity program at Brock University (Autism Camp, Niagara Penguins, Children's Movement Program). Participants must be able to communicate verbally.

What's in it for you? Children are given the opportunity to share their stories about experiences during physical activity. Information gathered during the interviews will help to provide insight for educators and program coordinators looking to create more positive adapted movement environments

What's involved? 30-60 minute interview regarding experiences during physical activity in community programs and physical education

Contact information

Melanie Hedley, MA Candidate
Applied Health Sciences
Brock University
Mh04kb@brocku.ca

Maureen Connolly,
Supervisor
Physical Education
Brock University
mconnolly@brocku.ca
(905)688-5550 ext. 4707

This study has been approved by Brock Research Ethics: REB file # 08-358

Appendix C-2**LETTER OF INVITATION**

October 31, 2009

Title of Study: **Lived Experiences of Children with Disabilities in Various Movement Contexts**

Principal Student Investigator: Melanie Hedley, Bachelor of Physical Education (Honours), Master of Arts candidate
Faculty of Applied Health Sciences, Brock University

Faculty Supervisor: Dr. Maureen Connolly, Professor, Department of Physical Education, Brock University

I, Melanie Hedley, Master of Arts candidate, from the Faculty of Applied Health Sciences, Brock University, invite you to participate in a research project entitled *Lived Experiences of Children with Disabilities in Various Movement Contexts*.

The purpose of this research project is to understand the experiences of children with disabilities in movement settings. This project will provide a means for children with disabilities to share their stories and experiences about physical activity in structured programs. We are interested in discovering which components of a movement context contribute to positive or negative experiences of children with disabilities. In addition, we look to find ways in which participants believe movement tasks and environments can be altered in order to foster more positive experiences.

The expected duration of your involvement in this project is 30-60 minutes. Short breaks will be provided for you and your child during the interview. The duration of the interview will only surpass 60 minutes at your and your child's discretion.

Possible benefits of participation include potential for more positive experiences in physical activity programs and physical education through improved programming and professional development. This research will add to the body of literature concerning movement programming and physical education for children with disabilities. Previously, this literature has included minimal studies of this kind which consider the experiences and opinions of children with disabilities as being of value and importance. There may be psychological risks associated with participation brought on by recollection of negative movement experiences including embarrassment, anxiety, and sadness. A parent or guardian is required to be present at the time of the interview in order to maintain the best interests of the child.

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 questions, please feel free to contact me.

Thank you

Melanie Hedley
BPhEd (Honours), MA candidate
(905)650-9429
mh04kb@brocku.ca

Dr. Maureen Connolly
Professor, Department of Physical Education
(905)688-5550 ext. 4707
mconnolly@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board (file # 08-358)

Appendix D-2

Interview Guide

*Throughout guide, “(program)” refers to the physical activity program the participant attends. The proper name will be inserted during the interview.

Section 1. Demographics

1. How old are you?
2. Tell me a little bit about your disability.
3. Community Program – What physical activity program do you participate in? (Autism Camp, Children’s Movement Program, Niagara Penguins)
4. School
 - 4.1 - What grade level are you in school?
 - 4.2 – Tell me about your classroom at school.
 - 4.3 – Tell me about how you participate in P.E. class. (If child does participate in P.E. complete section 3 and skip section 4. If child does not participate in P.E. skip section 3 and complete section 4.)

Section 2. Physical Activity Program

1. Why did you start going to (program)?
2. Tell me about (program).
 - a. What sort of things do you do there? (ex. Dance, swim, lessons, games, etc)
 - b. What would I see if I came to (program)? (ex. Equipment, children playing/sitting down, coach/teacher/volunteers)
 - c. What would I hear from the kids if I came to (program)? (ex. Silence, talking about (program) as being good/bad, laughter)
 - d. What would I hear from the coordinator/volunteers if I came to (program)? (ex. Calling orders to kids, teaching lessons, encouragement)
3. Tell me what feelings you have when you go to (program).
 - a. How do you feel before you go to (program)?
 - b. How do you feel during (program)?
 - c. Tell me a story about a time you felt (each feeling listed by child experienced during program) at (program).
 - d. How do you feel differently after you go to (program) than you do before?
4. Are there things you cannot do the same as some of the other kids your age at (program)?
 - a. Tell me about activities that you found difficult or challenging.
 - b. Do you often find activities at (program) difficult?
 - c. What do the volunteers do to help when this happens?
 - d. Tell me a story about a time when you were not able to do something you had been working on.
 - e. How did you feel when this happened?

5. What do you do when you see that other kids are not able to do something they were working on at (program)?
 - a. How do you feel when this happens?
 - b. What do you do to help when this happens?
 - c. What do you think should be done by volunteers when this happens?
6. Tell me about a time when you have compared yourself to other children at (program).
7. Do you believe it is important to participate in a movement program like (program)?
 - a. What good things do you get out of going to (program)? (ex. Friends, physical activity, fun, things you learn)
 - Can you tell me a story about ... (each reward of program)
 - b. Are there any bad things about (program)? What are they?
 - Can you tell me a story about ... (each negative aspect of program)
 - c. What things could be added or taken away to make (program) more fun for you?

*** Provide break ***

Section 3. Physical Education (for children who participate in P.E.)

1. Tell me about your P.E. class.
 - a. What sort of things do you do there? (ex. Games, dance, gymnastics)
 - b. What would I see if I came to P.E. at your school? (ex. Equipment, children being active/sitting down, teachers)
 - c. What would I hear from the kids if I came to P.E. with you? (ex. Silence, talking about liking/disliking class, laughter)
 - d. What would I hear from the teacher if I came to your P.E. class? (ex. Calling orders to kids, teaching lessons, encouragement)
2. Tell me what feelings you have when you go to P.E.
 - a. How do you feel before you go to P.E.?
 - b. How do you feel during P.E.?
 - c. Tell me a story about a time you felt (each feeling listed by child) during P.E.
 - d. How do you feel differently after you go to P.E.?
3. Are there things you cannot do the same as some of the other kids your age in P.E.?
 - a. Tell me about activities that you find difficult or challenging in P.E.
 - b. Are there often activities in P.E. that you find too difficult?
 - c. What does the teacher do to help when this happens?
 - d. Tell me a story about a time when you were not able to do something that you had been working on in P.E.
 - e. How did you feel when this happened?
4. What do you do when you see that other kids are not able to do something they have been working on in P.E.?

- a. How do you feel when this happens?
 - b. What do you do to help when this happens?
 - c. What do you think should be done by the teacher when this happens?
- 5. Do you believe P.E. is important to have at school?
 - a. What good things do you get from P.E.? (ex. Friends, physical activity, fun, things you learn)
 - Tell me a story about ... (each reward of physical education)
 - b. Are there any bad things about P.E.? What are they?
 - Tell me a story about ... (each negative aspect of P.E.)
 - c. What do you believe should be changed to make P.E. better?

Section 4. Physical Education (for children who do not participate in P.E.)

- 1. Why do you not participate in P.E. at your school?
 - a. Who made this decision (ex. participant, parent, teacher, etc)
 - b. How is your safety at risk when participating in P.E.?
- 2. How do you feel about not being able to participate in P.E. at your school?
- 3. How do you feel about other children participating without you?
- 4. What could change to allow you to participate in P.E.?
 - a. What rules could be changed to make it possible for you to participate in P.E.?
 - b. How would the activities in P.E. need to change in order for you to participate?
 - c. What precautions could be taken to make P.E. safer for you to participate?

Section 5. Closing Questions

- 1. Tell me a question you wish I had asked.
- 2. (Ask question supplied by participant)
- 3. Feel free to share anything else about your experiences at (program) or P.E.

Notes:

Give a briefing about how the information gathered during the interview will be used and remind participant that he/she is free to withdraw from the study at any time.

Thank the interviewee and parent/guardian for their time.

Appendix E-2

Question	Participants		
	A	B	C
1.1.			
1.2.			
1.3.			
1.4.1.			
1.4.2.			
1.4.3.			

Appendix E-4**Disability Studies**

Institution	Course title	R/O	Year	Practicuum (Y/N)

Appendix E-5

Teacher Education

[illegible]

Appendix E-6

Body	Role (R)	
	Active involvement (A)	
	Strategy (S)	
	Challenge (C)	
Space	Positive Expression (PE)	
	Negative Expression (NE)	
	Participation = Success (P=S)	
Time	Forbidden Spaces	
Relation	Gathering Place	
	Continued Involvement (CI)	
Relation	Peer to Peer Interactions (IP)	
	Interaction with media (IM)	
Relation	Volunteer as Movement Facilitator (MF)	

Appendix E-7

Body	Positive expression	
	Negative expression	
	Challenge	
	Activities/ Movement	
	Role	
Space	Variable Physical Environments Classrooms	
Relation	Empathy for others	
	Help interactions	

Appendix E-8

Body	Positive expression	
	Negative expression	
	Challenge	
	Activities/ Movement	
Space	Variable Physical Environments	
Relation	Volunteer as Movement Facilitator	
	Building relationships	
	Help interactions	

Appendix E-9

Physical Education Programs Document Data			
Trend	Institution	Course Title	Course Description – relevant text
Individual Needs & Well- being			
Physical Activity & Disability			
Corrective/ Pathological			
Accessibility/ Adaptation/ Inclusion			
Disability Studies Programs Document Data			
Trend	Institution	Course Title	Course Descriptors
Individual Needs/ Well- being/ QOL			
Integration/ Inclusion/ Accessibility/ Social Justice			
Teacher Education Programs Document Data			
Trend	Institution	Course title	Course descriptors
Individual needs/ Special needs			
Inclusive/ Equity			

Appendix F-1

October 29, 2009

Age	Gender	Time	Activities	Disability	Notes
12	M	20+5	Wii Box, Bowl, Rockband	Unknown	Came in to play rockband, nobody else in room yet to he played Wii instead. "I'm not THIS good for REAL bowling". Has Wii at home, played with ease. Moved to rockband "Now... watch me lose at this game". Did not follow prompts, played much more actively this way.
?	M	5	WiiTennis	Unknown	Told volunteer he's pro, played with ease.
13	M	12+15+10	Rockband, Wii	ADHD	Followed along with prompts well and with care. Attention directed to game all throughout. Returned to play Wii again.
?	M	5	Rockband	Unknown	Hummed along in microphone, danced along with music.
6	M	8	Wii Bowl	Unknown	Played along with his volunteer and acted as 'coach'. "I upped him!" talking about volunteer to other participants.
?	M	5	Wii Bowl & Tennis	Unknown	Hopped right into game of bowling.
13	F	8+20	Rockband, Wii	Autism	Introduced herself to bandmates and appeared very excited to play. Was moved from drums to vocals because she cannot follow prompts. Very social personality and got right into different roles. Returned to play Wii bowl, bowled with assistance.
12	M	15	Rockband, B ox, Bball	Unknown	Helped partner use controls and taught him how to box. Used 'fighting/protective stance'. Fairly good technique. Returned to play Wii again.
10	M	25+10	Wii Box & Bball, Rockband	Unknown (ADHD?)	Highly active in boxing game, hits were a little wild. When choosing the next activity he replied with "No! baseball! Boxing takes a lot of energy!" Much better control in baseball. Returned to play rockband and he caught onto beat of song and followed along well. Returned to play Wii again.
11	M	15+12	Rockband & Wii	Unknown (High fct Overwght)	Set down on couch while playing. Stood during Wii. Returned to play Wii and rockband. Threatened to hit volunteer because she suggested they do something else. Tried to sit while boxing, volunteer encouraged him to stand.
9	M	5	Rockband	ODD, ADHD, intel delay	Played more actively than prompts required. Rockstar personality.
?	M	20	Wii Bowl, Rockband	Unknown	"Alright! I love this game!" Got really into game, interacted well with volunteer. Instant feedback great for him, lots of excitement. Very active and controlling member of band. "Who wanna be in my band?"

Appendix F-2

Question	Participants		
	A	B	C
1.1.	12	10	13
1.2.	Yes I do. I was diagnosed when I was 3. I had it so badly. The things I did when I was 3, I ate lots of bugs, I licked the tires, I licked the road, I lay on the road, I'm sensitive to touch which means I don't like anyone to touch me at all. I scream, I cry. I'm worse than Annie. Really worse.	Well I don't feel any different...but no I don't really feel any different at all.	Uhhh no.
1.3.	Autism Camp	CMP (Just a fun program for me to run around and do all kinds of stuff.), Autism Camp (2 nd round of Qs)	CMP
1.4.1.	Grade 7	Grade 5	Grade 8
1.4.2.	There are like 21 kids in my class, like one just, we got like 20, probably 21 I think. There are grade sixes in our class too.	Well I'm in a special class so it's not really any different now that I'm in grade five than when I was in grade four. No. It's all grades. Yeah it's... when I was in grade four it was integrated for science but not now not anymore.	Grade seven too. Just one teacher and one EA.
1.4.3.	(Has gym, with regular class and classroom teacher)	(has gym, with regular class and classroom teacher, 2 EAs)	(has gym, with regular class)

Appendix F-3

Physical Education & Kinesiology

Institution	Course title	R/O	Year	Practicuum (Y/N)	Population focus
Brock	Physical Activity & Aging	O	2&3	N	Older adults
	Foundations in Adapted PE & DS	R	3	Y	Various
	Therapeutic Applications of PA	O	4	N	Various
	Chronic Illnesses & Disability ATL	O	4	Y	Various
Lakehead	Adapted PA & Sport	R	3	Y	Various
	Systematic Instruction of Ppl w/ Dis	O	3	Y	Various
	Exercise Prescription	R	3	N	Various
	Cardiac Rehabilitation Apprent'ship	O	4	Y	Middle Age to OA
Laurentian	Adapted PE	R	4	Y	Various
McMaster	Physical Activity for Challenged Pop	O	3	Y	Various
	Human Aging: Biol'cal & Lifestyle Infl	O	4	N	Older adults
Nippising	Special Populations	R	2	N	Various
	Gerontology	O	3	N	Older adults
Queen's	Sport, Rec & Ex for Persons w/ Dis	R	3	Y	Various
	Physical Activity & Aging	O	3&4	N	Older adults
Guelph	Human Development & Aging	R	4	N	Older adults
	Special Populations: Nutrition & Exercise	R	4	N	Various
	Therapeutic Exercise for Special Populations	O	4	N	Various
Ottawa	Principles in Psychomotor Rehab	O	4	N	Various
Toronto	Aging, Health & Ex	O	4	N	Older adults
	Adapted PA	R	4	N	Various
	Diversity in PA	R	4	N	Various
Waterloo	Human Gait, Posture & Balance...	O	4	N	Older adults
Windsor	Human Mov't & Aging	O	3&4	N	Older adults
	PA for Special Populations	O	3&4	N	Various
Laurier	Intro to APA	R	3	N	Various
	Aging, PA & Health	O	4	N	Older adults
	Human Motor & Perceptuomotor Dis	O	4	N	Various
	Mov't Disorders & Clinical Aspects...	O	4	N	Various
	APA for Ind'ls w/ Developmental Dis	O	4	N	Children & Youth
York	PA, Health & Aging	O	3	N	Older adults
	Active Living & Aging	O	4	N	Older adults
Western	ST in Kin: Ergonomics & Aging	O	4	N	Older adults
	ST in MS: Ex for Specific Pop	O	2	N	Preg'y, OA, C&Y
	ST in MS: Functional Activity...	O	3	N	Older adults
	PA & Ex Guidelines for Older Adults	O	4	N	Older adults

Appendix F-4**Disability Studies**

Institution	Course title	R/O	Year	Practicuum (Y/N)
Brock	see program description			
York	Pedagogy & Empowerment	O	5	N
	Social Inclusion...	O	6	N
Ryerson	see program description			
Windsor	see program description			

Appendix F-5

Teacher Education			
Institution	Course title	R/O	Focus
Brock	<i>Diversity Issues in Schooling</i>	O	ST
	Health & PE: I/S	O	
	<i>Current Trends & Issues in Spec Ed</i>	R	PT
	J/I Health & PE	R*	
	P/J Health & PE	R*	
Nippising	<i>Education & Schooling... Spec Ed</i>	R	ST
Lakehead	Curriculum & Instruction in PHE: P/J	R*	
	Curriculum & Instruction in PHE: J	R*	
	Curriculum & Instruction in PHE: I	O	
	Curriculum & Instruction in PHE: I/S	O	
	<i>Educ'l Psych/Teaching Exceptional S</i>	R	ST
York	<i>Teaching and Learning for Inclusive Classrooms</i>	R	ST
	Teaching and Curriculum in P/J Division	R	
	Teaching PE in the Intermediate Division	R	
	Teaching PE in the Intermediate Senior Division	R*	
	Teaching Dance in the Intermediate Division	O	
	Teaching Dance in the Intermediate Senior Division	O	
	<i>Inclusive Education</i>	O	PT
Toronto	<i>Teacher Education Seminar</i>	R	ST
	Elementary Health & PE	R	
	Secondary Health & PE	R*	
Windsor	<i>Differentiated Instruction for S w/ SN</i>	R	PT
	HPE Methodology: P/J	R	
	HPE Methodology: J/I	R	
	HPE Methodology: I	O	
	HPE: Senior level	R*	
Western	<i>Ed Psych & Spec Ed</i>	R	ST
	Cur & Ped in Elem HPE	R	
	<i>Teaching for Equity & Social Justice...</i>	R*	ST
	Health Education	O	
	Cur & Ped in IS HPE	R*	
Queen's	HPE: P/J	R	
	HPE: I/S	R*	
	HPE: I/S	R*	
	<i>Exceptional Children & Adolescents</i>	R	PT
Trent	<i>Supporting Lit & Learners w/ SN</i>	R	PT
	PE & Dance in Elem Classroom	R	
	HPE: I/S	R*	
UOIT	HPE: P/J	R*	
	<i>Individual Needs & Diversity</i>	R	ST
Ottawa	Personal & Social Studies in HPE	R	

	<i>Ed of Exceptional Students</i>	R	PT
	<i>Equity in Ed: Theory & Practice</i>	O	ST
	Social Studies & HPE	R	
	Teaching HPE: I	R*	
	Teaching HPE: S	R*	
Laurier	<i>Teaching for Equity & Diversity</i>	R	PT
	HPE	R	
	Teaching Methods: HPE	O	
Laurentian	<i>Ed Psych & Spec Ed</i>	R	ST
	Music, PE&H, Visual Arts: P/J	R	
	Music, PE&H, Visual Arts: J/I	R	
	Intermediate HPE	R*	

Courses with content in special education and diversity are in italics

R* - required for pre-service teachers with HPE teachable

Focus

PT - content related to students with special needs is the primary focus of the course

ST - content related to students with special needs is a secondary topic in the course

Appendix F-6

Body	Role (R)	Took leadership role in rockband (7,M,unknown)
		Acted like a rockstar playing guitar backwards, behind his back and over his head (8,M,Autism)
		Acted as coach to his volunteer, showing her how to play the game (6,M,unknown) *SLD*
		Got right into different roles of band (13,F,Autism)
		Rockstar personality (9,M,ODD,ADHD,intellectual delay)
		Rockstar persona (5,M,unknown)
		danced around and 'jammed' on guitar (13,M,Down syndrome)
		Twirled sticks and moved body with music. Played to and interacted with others in room as his audience (11,M,dev delay)
		Flipped guitar behind back, got into role very well (HS,M,behaviour)
		In room to cheer on friend, acting as a fan (HS,F,Down syndrome)
		Tried all roles of band in one song. "I'm a rock star! Let's Party!" (12,F,Autism)
		Was on vocals and switched to drums but didn't actually play (11,F,Autism)
		When on vocals he spun around, made noises into microphone, jumped around as though he was performing on stage (7,M,Autism) *Brock*
		Jumped up and took a wide stance "jamming" on guitar (9,M,Autism,epilepsy,hypertension)
		On vocals she sang and moved along to music (HS,F,Down syndrome)
		Tried all roles of band (HS,F,unknown)
		Directed his volunteer during game. "I rock this joint" (HS,M,unknown) *SLD*
		"I wanna be drums!" Shoved chair back and stood, began drumming more aggressively (8,M,OCD,ADHD,behavioural,Dev delay)
		Mimicked moves of a guitarist (11,M,unknown)
		"Sing it!" he yelled to everyone as though leading the band (10,M,Dev delay)
		Used moves of a rockstar, jumping and flipping guitar (7,M,Williams syndrome)
		Counted down into song like he was performing on stage (12,M,Asbergers,hearing impairment)
		Made opera like, screaming, barking sounds into microphone (9,M,frontal lobe damage)

		Made drumming movements typical of a rockstar (16,M,Down syndrome)
		Flipped up guitar (9,M,PDD)
		Played all instruments in band (6,M,Global dev delay)
		Took directions very well to catch onto game right away. Volunteer engaged and asked child to teach him how to play. (10,M,Dev delay)
		Played along with his volunteer and acted as 'coach' (6,M,unknown)
		Helped volunteer use controls (HS,F,unknown)
		Directed his volunteer during game, showed excitement when he or volunteer did well "Yeah! Strike! Look at this... watch that! Boom!" (HS,M,unknown) *Austin*
	Active involvement (A)	Moved around a lot during boxing (10,F,Dev delay)
		Highly active in boxing game, hits were a little wild (10,M,unknown)
		Played more actively than prompts required (9,M,ODD,ADHD,intellectual delay)
		Actively played and used foot pedal (13,M,Down syndrome)
		Highly active during game (6,M,speech&intellectual delay)
		Actively and aggressively played (4,M,ADHD)
		Multitasker – wanted to play guitar and sing, sing and play drums (11,M,dev delay)
		Had a good boxing match against his opponent, moving around a lot (15,M,Asbergers)
		Played drums using sticks when not required in game (HS,M,dev delay)
		Continually strummed along on guitar more than necessary for prompts (HS,M,Autism)
		Played on the drums with a lot of emphasis, moved body along to music (HS,F,Down syndrome) *Deanna*
		Continually moved controllers back and forth (HS,M,unknown)
		Used full bowling motion when playing on Wii (HS,M,Dev delay)
		Continual hits forward for entire match (HS,M,Dev delay)
		Spun around and jumped around when he was on vocals (7,M,Autism)
		Used continuous hitting motion while boxing (7,M,PDD)

	Continually hit opponent, very active throughout game (11,F,unknown)
	Very active throughout game (?,M,unknown)
	Played actively on guitar and followed prompts periodically (9,M,Autism,epilepsy,hypertension)
	Played more actively than prompts, continually strummed on guitar (12,M,unknown)
	Played very actively on drums (12,F,Dev delay)
	Shuffled around on feet during boxing, made steady and continuous hitting motion (?,M,unknown) *Colin*
	On drums she sang along and kept foot on pedal and used drum sticks when prompts did not require (HS,F,Down syndrome)
	Rested foot on pedal and drummed along using sticks very actively (HS,M,unknown)
	Used continuous hitting motion during boxing (HS,M,unknown)
	High energy in boxing, moved around a lot (HS,M,unknown)
	Started playing very actively when song tempo picked up even when prompts remained the same (HS,F,unknown)
	Played actively and moved to music (HS,M,unknown)
	Used continual hitting motion (HS,M,Autism)
	Played more actively than necessary with 'cool'/relaxed attitude (HS,M,unknown)
	Played guitar actively (HS,M,unknown)
	Played much more actively than required by prompts (HS,M,unknown)
	Continuous hitting motion (HS,M,unknown)
	Played more actively than necessary still hit prompts (?,F,unknown)
	Played more actively than necessary but hit prompts (8,M,OCD,ADHD,behavioural,Dev delay)
	Played controlled, hitting all prompts and played more actively than necessary (11,F,ADD,Dev delay)
	Kept up with highly energetic song (11,M,unknown)
	Played with good control, more actively than necessary (10,M,unknown)
	Played very aggressively, used foot pedal for prompts and sticks for fun (12,F,unknown)
	Played drums actively (10,M,Dev delay)
	Made continual hitting motion, using intervals of fast and slow and controlled (9,M,ADHD,PDD)

		Aggressively hit drums (11,M,unknown)
		Played aggressively on drums (7,M,Williams syndrome)
		Played more actively than necessary but still hit most prompts (7,M,unknown)
		High energy on drums, hit most prompts due to active playing (7,M,unknown)
		Played more actively than necessary (9,M,FAS)
		Appeared tired from playing drums (?,M,unknown)
	Strategy (S)	Used fighting/protective stance (12,M,unknown)
		Used strategy, fighting stance, used strong quick hits (8,M,Autism)
		Used strategy (protective stance) (15,M,Asbergers)
		Used controls to strategize and was very successful in game (HS,M,dev delay)
		Used more strategized hits in boxing game than opponent, also used varied levels and protective stance while staying light on his feet (HS,M,Autism) *Frankie*
		He held the guitar with appropriate technique (7,M,PDD)
		Pitched underhand for more control (9,M,Dev delay)
		Blocked coming hits by protecting face (?,M,unknown)
		Used controls to move around and aim at different pins (?,M,unknown)
		Shuffled around on feet during boxing to avoid hits from opponent, used controls to aim at remaining pins (?,M,unknown)
		Used strategy to move side to side on bowling lane using controller (HS,M,unknown) *Evan*
		Used variety of strategies while pitching (HS,M,unknown)
		Moving around back and forth toward screen (9,M,ADHD,PDD)
		Used controls to direct ball to leftover pins (11,F,ADHD,hypotonia)
	Challenge (C)	Could not catch on to tennis, chose another game after other participant left (6,M,delayed motor skills)
		Couldn't follow prompts on screen for drums (13,F,Autism)
		"No! baseball! Boxing takes a lot of energy!" (10,M,unknown) *Gordie*
		Tried to play Wii bowl but couldn't, coordination level too high (10,M,unknown)
		Difficulty with coordinated movements (HS,M,ADD)
		Came in to sing but didn't, likely wouldn't have been

		able to follow along with words on screen (HS,M,Autism)
		Followed prompts on screen on a medium level (12,M,ADHD, Dev delay)
		Followed prompts on easy level but could've played on a more difficult level (13,M,unknown)
		Tried to follow volunteer's verbal prompts to swing bat at right time (7,M,PDD) *Hayden*
		Played without any help of volunteers, couldn't get timing right for batting (9,M,unknown)
		Participant indicated that game was very tiring (11,F,unknown)
		Participant indicated that game was very tiring (?,M,unknown)
		Needed some assistance to know when to release ball (?,M,unknown)
		Had trouble batting (12,M,CP)
		"I can't do any of this... it's too hard" (?,M,unknown)
Positive Expression (PE)		Expressed fulfillment and excitement: "wicked!" "YEAH!" "Who's the man!" "I rock!" (5,M,unknown) *Ivan*
		Appeared excited by rockband (7,M,unknown)
		Showed pride in her success (?,F,Down syndrome)
		Appeared to enjoy herself and was successful in game (10,F,Dev delay)
		Smiling as she moved along in her wheelchair (?,F,cerebral palsy)
		Excited by games (10,M,Down syndrome)
		When bowling he appeared to enjoy himself, smiling (6,M,delayed motor skills)
		"I'm not THIS good for REAL bowling" (12,M,unknown)
		Appeared very excited to play rockband (13,F,Autism)
		"Alright! I love this game!" Lots of excitement (?,M,unknown)
		Showed pride in his individual successes (10,M,ADHD)
		Enjoyed playing with instruments (5,M,unknown)
		Visual feedback led to expression of excitement, participant jumped up and yelled "YEAH!" when he knocked out opponent in boxing (8,M,Autism)
		Played very well and cheered each time he got a point (6,M,Autism)
		Very talkative and excited to play. "You can play drums too?" (volunteer) "Yeah I can do anything" (20,M,dev delay)

	<p>Appeared to enjoy herself. "Let's let our singer pick the song so she knows the song" (volunteer) "I know all these songs" (18,F,physical delay, low muscle tone) *CONFIDENCE*</p>
	<p>Appeared to enjoy playing game (HS,M,ADD)</p>
	<p>Fist pumped when he did well in game (HS,M,Autism)</p>
	<p>Cheered when he got strikes (HS,M,Dev delay)</p>
	<p>Very excited by game (HS,M,CP, epilepsy, vision & hearing impaired)</p>
	<p>Obviously enjoying himself, smiling as he played (HS,M,ADHD)</p>
	<p>Yelled out "I got a point!" when playing tennis, while pitching he proclaimed "I'm gonna get home runs" (9, M, Dev delay) *CONFIDENCE*</p>
	<p>He showed a lot of excitement when he almost got a spare (12,M,heart condition)</p>
	<p>Gave a little smile when he got a strike (?,M,unknown)</p>
	<p>Showed excitement when he got a spare (?,M,unknown)</p>
	<p>Vocalized feelings of disappointment, excitement, joy, pride. "Yeah! Strike! Look at this... watch that! Boom!" Jumped up in excitement when he or volunteer did well (HS,M,unknown)</p>
	<p>Showed a little excitement when he continually bowled strikes, just smiled (HS,M,unknown)</p>
	<p>Showed excitement and pride in facial expressions (HS,M,unknown)</p>
	<p>Didn't want to leave to go back to the gym (HS,M,Autism)</p>
	<p>Appeared to enjoy himself (HS,M,unknown)</p>
	<p>Appeared to enjoy herself (HS,F,unknown)</p>
	<p>Showed a lot of excitement when he found out he won (HS,M,Autism)</p>
	<p>"I told you I'm a pro!" after getting a spare (12,F,unknown) *CONFIDENCE*</p>
	<p>Yelled out "oh yeah!" with a surprised look on her face when she got a strike (12,F,unknown) *Jaycee*</p>
	<p>Jumped up and screamed "Wahoo!" when he scored a point (12,M,CP)</p>
	<p>"Let's get the party started!" (7,M,Williams syndrome)</p>
	<p>"Strike!" "Yeah! One left... spare!" Excited whenever he got a strike (8,M,unknown)</p>
	<p>Thrilled when he got ball in hole during golf (?,M,unknown)</p>
	<p>"I told you I'm really good at this" (11,F,unknown)</p>
	<p>"Yes! We rock!" (14,M,Autism)</p>

		Great enthusiasm (9,M,frontal lobe damage)
		Excitement fuelled by visual feedback (16,M,unknown)
		Positive reactions to visual feedback during game (16,M,Down syndrome)
		"I'm good! I have Wii at home" (5,M,unknown)
		Always wanted to play in rockband (6,M,Global dev delay)
		Had a lot of excitement and interest in the game (? ,M,unknown)
	Negative Expression (NE)	Voiced frustration with media when commands acted in a way in which he did not intend, also when people tried to give him help or direction. Threatened to throw the controller across the room. (10,M,Autism) *Keenan*
		Sat nervously. Left before he got a chance to play (? ,M,unknown)
		Became bored with game (12,M,behaviour)
		Looked sad and fearful during tennis and interaction with other participant (6,M,delayed motor skills)
	Participation = Success (P=S)	Didn't really follow prompts on screen but since game was set to 'no fail' she was highly involved and continued moving and playing along (10,F,Dev delay)
		Moved along with music in wheelchair (? ,F,cerebral palsy)
		Played drums but didn't follow prompts on screen, instead followed volunteer's directions (12,F,Autism)
		Played drums but did not follow prompts (10,M,unknown)
		Didn't follow prompts throughout game (11,M,unknown)
		Didn't follow prompts, played much more actively this way (12,M,unknown)
		Not very interested in following along in game but enjoyed using instruments (5,M,unknown) *Lucas*
		Didn't follow prompts but played very actively (4,M,ADHD)
		Continually moved controllers back and forth, ended up winning game even though no strategy was used (HS,M,unknown)
		Continually stroking drums without actually following prompts (HS,M,traits of Autism,OCD,anxiety)
		Didn't follow prompts to start, half way through song he started using pedal on beat. Used sticks even though he didn't need to (HS,M,unknown)
		Flailed arms rather than controlled hitting motion (HS,M,Down syndrome)

		When on drums he used sticks to drum along to music and used foot pedal periodically (9,M,Dev delay)
		Sat and listened to music while volunteer played (? ,F,unknown)
		Didn't follow prompts but continually strummed on guitar and played more actively than necessary on drums (12,M,unknown)
		Played actively but didn't follow prompts (12,F,Dev delay)
		Made drumming motions but didn't follow prompts (? ,F,unknown)
		Used one stick to drum along while singing (HS,F,unknown)
		Tapped sticks together and drums but not along to song or prompts (HS,M,unknown)
		Sang quietly into microphone (12,F,Asthma)
		Hit drums not really paying attention to prompts (11,F,ADHD,hypotonia)
		Went through motions of game, didn't really show excitement (? ,M,unknown)
		Strummed along on guitar, looking around room and at screen periodically (? ,M,unknown)
		Mostly looking around room and hitting drums continuously (? ,F,unknown)
		Participant did not seem to care so much about getting ball in hole as much as he was with other accomplishments – getting ball out of sand, on fairway, near hole (? ,M,unknown) *Martin*
		Didn't follow along with prompts but drummed along to song (5,F,sensory impairment)
		Not highly successful in game but maintained interest (10,M,ADHD,hyperactive)
		Sang into microphone but not to vocals of song. Hit most prompts on drums due to active playing (7,M,unknown)
		Continuously strummed along on guitar, not concerned with prompts (5,M,unknown)
		Didn't follow along with lyrics but made noise into microphone (6,M,unknown)
		When shown he could use sticks to hit prompts he tried and resorted back to foot pedal (? ,M,unknown)
		Didn't sing but made noises into microphone when on vocals (HS,F,Down syndrome)
Space	Forbidden Spaces	Frustrated with another child in room getting in way of game, guarded space in front of game

		(10,M,ADHD) *Oren*
		Tried to get into shower and play in bathroom (12,F,Autism)
		Insisted on using bathroom in multimedia room rather than the main restroom next door. Volunteers guarded door so nobody could see underneath.
		(?,F,unknown) *Naomi*
		Many children were curious about the shower, bathroom, and lockers. While only two participants made it into these spaces, many others attempted but were redirected by their volunteers.
	Gathering Place	Sat down on couch, tried working with volunteer to get him off couch and into chair to sing (HS,M,Autism)
		Left guitar to go sit on couch, watched other children play activities and then left (5,M,unknown)
		Sat on couch, watched others play games but didn't play (?,M,unknown)
		Sat on couch, read book and watched other children play activities (?,M,unknown)
		Volunteer had a lot of trouble getting him to leave (13,M,Down syndrome)
		In room to cheer on a friend from school, very social personality (HS,F,Down syndrome) *Patti*
Time	Continued Involvement (CI)	Returned to play rockband for second time (15+15) (5,M,unknown)
		Returned to play Wii baseball for second time (8+5) (8,M,unknown)
		Returned to play Wii and rockband again (15+15) (8,M,Autism)
		Returned to play rockband for a second time (15+5) (10,F,Dev delay)
		Stayed to play for 20 min (10,M,Dev delay)
		Tried all roles of the band (9,M,behaviour)
		Stayed to play each role of band (6,M,ADHD,OCD)
		Tried all roles of the band (10,M,Down syndrome)
		Stayed to play for 20 min (6,M,delayed motor skills)
		Stayed to play each role in band, 20 min stay (11,M,unknown)
		Stayed to play for 20 min, returned for additional 5 min (12,M,unknown)
		Returned to play Wii again for second and third time (12+15+10) (13,M,ADHD)
		Returned to play Wii bowl (8+20) (13,F,Autism)
		Returned to play Wii (15+?) (12,M,unknown)
		Returned to play rockband, returned again to play Wii (25+10+?) (10,M,unknown)

		Returned to play Wii and rockband (15+12) (11,M,unknown)
		Stayed to play for 20 min (?,M,unknown)
		Stayed to play for 25 min (13,M,Down syndrome) *Quinton*
		Returned to play guitar on rockband (5+10) (6,M,Autism)
		Returned to play drums on rockband and stayed in room to sing (5+12) (HS,F,ADHD)
		Returned twice to play rockband (15+5+10) (7,M,Autism)
		Returned twice to play Wii and rockband (15+5+15) (7,M,PDD)
		Stayed to play for 25 min (?,M,unknown)
		Returned and left without playing, returned again to play drums (5+5+5) (HS,F,PDD)
		Returned to play Wii again (8+5) (HS,M,unknown)
		Returned to sing again (15+10) (HS,F,unknown)
		Returned to play guitar (8+10) (HS,M,unknown)
		Returned to sing (10+5) (HS,F,unknown)
		Stayed to play for 30 min (HS,M,unknown)
		Returned to play again (5+5) (HS,M,unknown)
		Returned to sing (5+5) (?,F,unknown)
		Returned to sing (5+5) (11,F,ADD,Dev delay)
		Returned to play guitar (5+10) (12,F,Asthma)
		Returned to play drums (10+5) (12,F,unknown)
		Stayed for 25 min (12,M,CP)
		Returned to play drums (5+5) (12,F,hearing impairment)
		Returned to play drums (20+10) (9,M,frontal lobe damage)
		Returned to play guitar in rockband (12+10) (10,M,ADHD)
		Returned to play drums in rockband (12+10) (10,M,ADHD,hyperactive)
		Returned to sing and play guitar (5+5) (5,M,unknown)
		Returned to play Wii (5+10) (12,F,Autism)
		Stayed to play for 20 min (5,M,unknown)
		Stayed to play for 30 min (6,M,Autism)
		Stayed to play for 30 min (6,M,Global dev delay)
Relation	Peer to Peer Interactions (IP) *Negative social interaction -dominant *D*	Took control of game (?,F,Down syndrome) *D*
		Waited his turn. Played guitar while he waited his turn to sing. (9,M,Behavioural, "me first") *P*
		Interacted well with all people in the room (10,M,Down syndrome) *C*

	-inability to share/ participate with others *I* *Positive social interaction -patience/ courtesy *P* -highly cooperative *C*	Let another participant take a turn between bowling games (10,M,Autism) *P*
		Told another player “come on, it’s just like regular tennis!” and continued to dominate game (12,M,behaviour) *D* *Rory*
		Introduced herself to bandmates, very social personality (13,F,Autism) *C*
		Helped partner use controls and taught him how to box (12,M,unknown) *C* *Thomas*
		Very active and controlling member of band. “Who wanna be in my band?” (?,M,unknown) *D*
		Waited patiently with volunteer while there were other people playing in a very loud and full room (4,M,ADHD) *P*
		Lots of interaction with other participants (20,M,dev delay) *C*
		Conflict with volunteer when he was encouraged to let other participants try the game (HS,M,behaviour) *I*
		Turned to look to at his opponent after he took his turn as to say “What you got?” *D*
		Kept trying to get on drums while others were playing, volunteer encouraged him to wait his turn (7,M,Autism) *I* *Brock*
		Played a good rally and Talked “smack” to his opponent/schoolmate (11,M,Dev delay) *D*
		Played a good rally against schoolmate (?,M,unknown) *C*
		He had trouble taking turns and sharing the Wii controls (?,M,unknown) *I*
		Patiently waited his turn to play rockband while actively dancing to music (HS,M,Down syndrome) *P* *Scott*
		Let another participant have a turn in the middle of a song (HS,M,unknown) *P*
		Rallied in tennis against another participant (12,M,CP) *C*
		Frustrated with another child in room getting in way of game (10,M,ADHD) *I*
		Played friendly game of Wii baseball with schoolmate (10,M,ADHD,hyperactive) *C*
	Interaction with media (IM)	Rarely gave other participants a change to play (6,M,Global dev delay) *I*
		Visual feedback led to vocalization of disappointment, excitement, joy, pride. He yelled out “Yeah! Strike! Look at this... watch that! Boom!” during an instant replay of bowling.

		(HS,M,unknown) *Austin*
		‘Taken’ by game, disregarded other people in room while playing. Did not interact with others, only game (8,M,unknown) *Eugene*
		Engaged in rockband by watching (?,F,cerebral palsy)
		Very concentrated on game (13,M,Autism)
		Focused on game (6,M,ADHD,OCD)
		Highly engaged and focused during rockband (11,M,unknown)
		Attention directed to game all throughout (13,M,ADHD)
		Got really into game, instant feedback great for him (?,M,unknown)
		Instant feedback gives him sense of accomplishment (10,M,ADHD)
		Visual results “knock out” and “down” led to expression of excitement (8,M,Autism)
		Focused on game, not much interaction with others in room (HS,M,unknown)
		Focused on game, very little interaction with others (HS,M,unknown)
		Concentrated on game (HS,M,behaviour)
		Concentrated on game, minimal interaction with others (HS,M,unknown)
		Concentrated closely on game (HS,M,unknown)
		Visual feedback helped him to see when he did well during the game (HS,M,Autism)
		Concentrated on screen (HS,M,traits of Autism,OCD,anxiety)
		Spoke to bowling ball on screen “Go, go, go, go” “Go down, go down, go down” (HS,M,CP, epilepsy, vision & hearing impaired)
		Concentrated on game (HS,M,ADHD)
		Concentrated on game, minimal interaction with others (HS,M,ADHD)
		Was focused during song (12,M,Autism, Dev delay)
		He concentrated well on drums and followed prompts (13,M,Asbergers)
		Concentrated well on guitar (13,M,Dev delay)
		Concentrated on game and followed prompts (?,F,unknown)
		Concentrated well while playing guitar (12,M,PDD)
		Concentrated on game (12,M,unknown)
		Visual feedback led to vocalization of internal feelings of excitement and pride (HS,M,unknown)

		Highly concentrated on game (HS,F,unknown)
		Visual feedback gave him indication of his performance (HS,M,unknown)
		Focused on game (HS,M,Down syndrome)
		Closely concentrated on game (HS,F,unknown)
		Focused on game (HS,M,unknown)
		Focused intently on game (HS,M,unknown)
		Focused on activity (?,F,unknown)
		Not so much focused on playing game as he was just playing with the drums themselves (8,M,OCD,ADHD,Behavioural,Dev delay)
		Attention directed completely toward game and not other people in room (11,F,ADD,Dev delay)
		Focused on prompts (12,F,Asthma)
		Focused intently on game (11,M,unknown)
		Focusing on where he was hitting and looking at screen (10,M,Dev delay)
		Focused on screen (?,M,unknown)
		Focused closely on game (9,M,ADHD,PDD)
		Focused on screen and where he was hitting (11,M,ADHD,hypotonia)
		Focused on prompts and followed along (13,M,Autism)
		Focused on prompts, attentive to game. Minimal reaction with others in room (13,M,learning,reading,social)
		Immediate visual feedback great for him (8,M,unknown)
		"You rock!" appeared on screen and he said "Yeah you rock wahoo!" He read and repeated, but had minimal conversation with others. Sang along with vocals, got him away from repeating (14,M,Autism)
		Visual prompts and feedback highly effective (9,M,frontal lobe damage)
		Visual feedback on Wii (16,M,unknown)
		Visual feedback led to positive reactions from the participant (16,M,Down syndrome)
		Focused throughout song (9,M,PDD)
		Followed along with prompts (9,M,FAS)
		Paying attention to prompts on drums (6,M,Global dev delay)
		Visual feedback fuelled his excitement and interest in the game (?,M,unknown)
	Volunteer as Movement Facilitator (MF)	Played with assistance. Attempted alone but insisted on being assisted. (5,M,unknown) *A*
		Wanted volunteers to show him game (?,M,unknown)

<p>*Roles that fit under the umbrella of "volunteer as movement facilitator":</p> <p>*E/P* - encouragement/praise</p> <p>*D/G* - direction/guidance</p> <p>*A* - assistance</p> <p>*MP* - movement partner</p>	*A*
	Followed volunteers directions of what to do (12,F,Autism)*D/G*
	Looked to his volunteer for encouragement and praise (6,M,ADHD,OCD) *E/P*
	Able to follow directions given by volunteers (10,M,unknown) *D/G*
	Bowled with assistance (13,F,Autism) *A*
	Volunteer encouraged him to stand when he tried to sit while boxing (11,M,unknown) *E/P*
	Might've had more success with more direction (13,M,Down syndrome) *D/G*
	Volunteer directed him to move more effectively during boxing (6,M,speech&intellectual delay) *D/G*
	Played boxing with help of volunteer (10,M,unknown) *A*
	Played against volunteer who obviously let him have advantage when he didn't need it. Played guitar with assistance of volunteer (6,M,Autism) *MP* *A*
	Not very aggressive without encouragement (15,M,Asbergers) *E/P*
	Played with help of volunteer (18,M,Autism) *A*
	Directed by volunteer to follow prompts, asked if he wanted help and she assisted him to play (HS,M,unknown) *D/G* *A*
	Played with help of volunteer (HS,M,unknown) *A*
	Didn't incorporate foot pedal until I prompted her to follow beat on pedal (HS,F,ADHD) *D/G*
	All volunteers in room sang along and cheered, danced with volunteer (HS,F,FAS) *E/P* *MP*
	Volunteer showed him how to use controls, he followed directions well and played without assistance (HS,M,unknown) *D/G* *Vernon*
	Played with volunteer on Wii, coordinators and volunteers cheered him on (7,M,Autism) *MP* *E/P*
	Tried to follow volunteer's verbal prompts to swing bat at right time, received praise for his guitar playing abilities (7,M,PDD) *D/G* *E/P*
	Played baseball trouble free against volunteer, received praise the second time he played drums (13,M,Asbergers) *MP* *E/P*
	Volunteers tried singing along to get him involved. I asked if he could see the screen and he said no so he moved forward to see clearly (?,M,unknown) *D/G*
	He set up the game himself with the help of his volunteer, followed motions as directed by volunteer

	(12,M,heart condition) *A* *D/G*
	Played with minimal prompts from volunteer (11,F,Autism) *D/G*
	Sat and listened while volunteer played drums (?,F,unknown) *MP*
	Everyone cheered when he got a strike (?,M,unknown) *E/P*
	Needed some guidance to know when to release ball (?,M,unknown) *D/G*
	Played drums with volunteer, each person holding a stick (HS,F,PDD) *MP*
	Sang along to song with volunteer on vocals. On guitar she strummed along with encouragement of volunteer. Continuously drummed with encouragement of volunteer (HS,F,unknown) *MP* *E/P*
	Played against volunteer, helped volunteer use controls (HS,F,unknown) *MP*
	Volunteer showed him how to play/hold controller (HS,M,unknown) *D/G*
	Played well against volunteer (HS,M,unknown) *MP*
	Followed direction of volunteers (HS,M,unknown) *D/G*
	Listened to encouragement and direction of volunteers (HS,M,Autism) *E/P* *D/G*
	Played against volunteer (HS,M,unknown) *MP*
	Received lots of cheers from audience (HS,M,Down syndrome) *E/P*
	Played Wii with volunteer (8,M,OCD,ADHD,Behavioural,Dev delay) *MP*
	Sang along with coordinator, clapping (13,F,ADD) *MP*
	Volunteer instructed him how to play (12,M,Asbergers) *D/G*
	Volunteer encouraged him to continue and he did (12,M,unknown) *E/P*
	Continually strummed on guitar with assistance of volunteer (7,M,unknown) *A*
	Sang along with encouragement of coordinator (16,M,Down syndrome) *E/P*
	Looked to volunteer for encouragement. Coordinator got him to follow vocals in some parts of song (9,M,FAS) *E/P* *Wesley*
	Played rockband with encouragement of volunteer. Played Wii with assistance of volunteer (12,F,Autism) *E/P* *A*

		Volunteer got him refocused when he lost concentration. Went through cycle of losing focus and volunteer refocusing (6,M,Autism) *D/G*
		Started using sticks when encouraged by coordinator (? ,M,Dev delay) *E/P*
		Sang along with coordinator to Nirvana – his pick (10,M,unknown) *MP*
		When shown he could use sticks to hit prompts he tried and resorted back to foot pedal (? ,M,unknown) *D/G*
		Played with direction of volunteer (? ,F,unknown) *D/G*
		Wanted volunteers to show him game (? ,M,unknown) *D/G*

Appendix F-7

Body	Positive expression “excitement, fun, feeling good”	Yeah we like the gym (Wolverine)
		Really excited for gym. I love gym but it's only once a week. (Storm)
		Likes going to gym class *Excited before gym* (Wolverine)
		I feel good, energetic. (Storm)
		Energized but a little bit tired at the same time. (Pheonix)
		Fitness, makes you healthy (Pheonix)
		Energy and exercise a good amount of exercise. The majority of the time everyone has fun. (Storm)
		Fitness. *Fun and makes him feel good* (Wolverine)
		The only thing that I could think of as a good change has already been done. That they like with the volleyball letting it... making it easier for everyone. (Storm)
		Kids are laughing, talking to each other (Storm)
		Kids talk about what they're doing, enjoying themselves (Pheonix)
	Negative expression “tiring, frustrating”	Well I feel like sometimes I don't like phys ed because it's gonna make me have stitches. Yeah it hurts, it causes me to slow down. I'm like a car except it doesn't last really long. (Pheonix)
		We get to do things that I don't like to do and that causes me to sit down and rest. (Pheonix)
		Frustrated, upset (Wolverine)
		*Volleyball, she's not good at volleyball it's boring and not fun for her (Pheonix)
		Yeah it's just umm I don't like I just don't like it. *Volleyball* (Wolverine)
		I try and like duck I try and do something so it doesn't hit me. I'm not scared of it it's just that... it's just that I don't wanna be hit. (Wolverine)
		She feels frustrated and sometimes angry when she has trouble with volleyball (Pheonix)
		Makes you tired, sometimes the things you do aren't fun (Pheonix)
		One of the kids gets mad yes so bad things can come from it but it's not that often. When he is out of the game. Yes in dodgeball, ship to shore. (Int: How could you change the games in PE so kids aren't eliminated) I really don't think it can. (Storm)

	Challenge “difficulty”	*Volleyball* It’s a little too hard I have trouble concentrating. (Pheonix)
		The most least fair thing is we have to do jumping jacks. And that makes me tired. It causes me to stop. (Pheonix)
		Volleyball, she’s not good at volleyball it’s boring and not fun for her (Pheonix)
		Volleyball (Storm)
		Volleyball (Wolverine)
		With a volleyball. With spongeballs it was easy but with a volleyball it was hard. Brand new hard volleyballs. No we tried with actual volleyballs at the end. (Storm)
		I always try but I just don’t like it. No it’s... it’s just that it takes harder for me to do it. (Wolverine)
	Activities/ Movement -sports -games -fitness *Special Ed class -> P.E. includes instruction via DVD media -> most recalled activities were elimination games	Dodgeball, a lot of dodgeball. Our warmup is uhh just a lot of stretching and movement. We also sometimes do laps but sometimes most of the time they have this dvd... music along with kids doing these exercise things and we try and follow what they’re doing. (Storm)
		More like sports (Wolverine)
		When they do some gym exercises we have to follow them along and then they announce us how many laps we have to do. (Pheonix)
		We usually don’t have equipment but we have volleyball equipment in case we play a little bit of volleyball. (Pheonix)
		Many many many balls. Every kind of ball. (Storm)
		Just playing games the whole time. (Wolverine)
		We would be running and getting balls out and taking mats down sometimes. But if you come in late we’re probably playing ship to shore or dodgeball. (Storm)
		They’re running around doing laps and after they do them or they get too tired we get to switch into squads. (Pheonix)
		One time last summer we got to play this game outside and we placed pylons all along the soccer nets. We had to try to run across the field, try not to get touched and we’d pick up a pylon and run across and the people who are on the other side can’t touch you if you’re carrying a pylon. And whoever gets the most pylons will win. It’s really fun. It was like we were protecting a princess from invaders from the other side just like from Narnia. (Pheonix)

	<p>Role</p> <p>*students are assigned roles and must complete certain duties</p>	<p>Like first when we get there anybody who's been chosen to be captain means we have to do, like when they do some gym exercises we have to follow them along and then they announce us how many laps we have to do. We get to be chosen every week. Every week a kid will be chosen to do one of the jobs like I was once chosen to be the helper, means I get to hand out sheets and stuff like that. I usually don't do the boards cause that's usually for kids who don't take the bus and I take the bus. *hasn't been captain* *doesn't get to be captain* *each kid gets their own job* That happened the same thing in grade six. We'd get different jobs each week. Once we do the chairs, then we'd get to be captain, we hand out sheets. (Pheonix)</p>
		<p>I'd rather wear my gym clothes than do lines. On days one and four if I don't bring my gym clothes then I have to do lines. (Wolverine)</p>
		<p>I'm a DPA leader and sometimes I get stitches when we do things like that. We're DPA leaders to the grade one and two class. (Pheonix)</p>
Space	<p>Variable Physical Environments</p> <p>Classrooms</p> <p>-6/7 split, general, 1 teacher</p> <p>-7/8 split, general, 1 teacher, 1 EA</p> <p>-special ed class, 1 teacher, 2 EAs</p>	<p>There are grade sixes in our class too (Pheonix)</p>
		<p>There are 21 kids in my class (Pheonix)</p>
		<p>I'm in a special class so it's not really any different now that I'm in grade five than when I was in grade four...it's all grades (Storm)</p>
		<p>When I was in grade four it was integrated for science but not now not anymore (Storm)</p>
		<p>Grade seven too. Just one teacher and one EA (Wolverine)</p>
		<p>*Has gym with regular class and classroom teacher* (Pheonix)</p>
		<p>*Has gym with regular class and classroom teacher and two EAs* (Storm)</p>
		<p>*Has gym with regular class* (Wolverine)</p>
		<p>There's this sign in the gym and it tells you the rules. Like for example if you hear the whistle blowing please stop and listen. (Pheonix)</p>
		<p>One time last summer we got to play this game outside and we placed pylons all along the soccer nets. We had to try to run across the field, try not to get touched and we'd pick up a pylon and run across and the people who are on the other side can't touch you if you're carrying a pylon. And whoever gets the most pylons will win. It's really fun. It was like we were protecting a princess from invaders from the other side</p>

		just like from Narnia. (Pheonix)
Relation	Empathy for others	*A boy in A's class who has more severe Autism has a difficult time during gym and A feels badly because he cannot do the same things as the other kids* (Pheonix)
		Sometimes. *Notices other kids having difficulty* I just wish they enjoyed it more. (Storm)
	Help interactions -help from teacher/EAs *T* -help from/to other students *S*	*The teacher sometimes tries to help* (Pheonix) *T*
		Teachers and EAs try to help when he's having difficulties (Wolverine) *T*
		Teacher tries to help when Wolverine has trouble during volleyball *Teacher shows Wolverin how to play volleyball* Uhh she shows me how to do it. No she shows me. *It helps when she shows Wolverine how to do it* *This makes Wolverine feel better* (Wolverine) *T*
		*other kids never try to help or encourage Wolverine * (Wolverine) *S*
		A boy in Pheonix's class who has more severe Autism than Pheonix has a difficult time during gym and Pheonix feels badly because he cannot do the same things as the other kids and Pheonix wants to help him *Pheonix tries to help him but sometimes it's hard for him* *The teacher tries to help him but sometimes teachers don't know what to do to help* (Pheonix) *S*
		Storm doesn't help kids when he sees they're having difficulty (Storm) *S*
		The teachers will go and help, try and help (Storm) *T*

Appendix F-8

Body	Positive expression “happy, excited, energetic, fun”	I think it was good cause it was so fun you get to take us everywhere (Pheonix)
		Go Karts was really fun! (Pheonix)
		Kind of excited but not a lot. (Storm)
		I feel happy and okay and safe. It's fun extremely fun! (Pheonix)
		I feel energetic at first! But then by free time... but it's still a lot of fun! (Storm)
		Good. A little bit energized... (Wolverine)
		I feel happy and I just wish I brought my diary and write all these things down so I can remember them. (Pheonix)
		I don't know but I liked it. On that horse thing. (Wolverine)
		I'm sad it was over so fast. (Pheonix)
		Important Because it's always fun and then you don't have to stay home all day (Pheonix)
		Important Umm a little bit (Storm)
		Important Yeah (Wolverine)
		Well I always feel good after I feel like I have a lot of energy after. I feel like I had my exercise for the day. (Storm)
		A lot of laughing and happy yelling, excited yelling. (Pheonix)
		I was always really excited about going go karting. I was excited that I might get a chance to drive and I did. (Storm)
		Energy, happiness, excitement (Storm)
	Negative expression “nervousness”	When I first started going I was a bit nervous about it but not anymore. I don't think I get nervous about anything there anymore. Well it hasn't really been happening often anymore but if someone was bugging me or something but that's actually never happened. (Storm)
		Upset yes but I don't think I get nervous about anything there anymore. (Storm)
	Challenge “difficulty, things I'm not good at”	I hate putting my head under the water and cause water goes in my lungs and I don't like that I can't even try to plug my nose. (Pheonix)
		There's skipping too and I'm not good at skipping. (Pheonix)
		The most difficult thing that happened is we walked in the forest and I mean you're really tired. (Pheonix)

		Climbing the rope you're not able to hold your weight on the rope right? (parent) That's because I'm larger and it's not my fault it's gravity's. Cause of gravity... (Wolverine)
		Well I keep losing. I keep not getting good at them. (Wolverine)
		I noticed a lot of them had trouble with the bus. They didn't like the bus... at all. Especially the bus to MarineLand. That was another place that we went. Cause it was a long drive and had a lot of bus trouble on MarineLand day. *Didn't notice kids having trouble while at Brock* (Storm)
	Activities/ Movement -structured movement activities -gymnastics -dance -low organizational games -freedom for creative movement -fitness & fitness-like activities such as swimming, hiking -A.C. fine motor activities	We play with balls, speedbags, obstacle courses, climbing, swinging on ropes, all sorts...everything (Storm)
		A bunch of activities...whatever the theme is (Wolverine)
		Go swimming in the pool. Sometimes we get to swim alone. We play some games, like we play with the ball and we get to ride around on scooters and then after awhile we go upstairs and we play upstairs of the gym for a bit. There's these blocks piled up and then you jump on them and get to pop off we get to fall onto big blue mats. There are trampolines there too... after snack we go for a walk in the forest and then we go back in and we do these activities on the floor next to the room where we played earlier. There are puzzles and papers to colour and then we go on our field trip. (Pheonix)
		Pretty much the same activities ropes, crash mat, swinging like bars to climb on. Well I think half of it is organized games and half of it you just do whatever you want. (Storm)
		They have a horse thing that looks like a horse. Yeah I more like riding it like it's a horse than what you're supposed to do. You're supposed to do it with your feet. (Wolverine)
		We would go swimming. Uhh go karting. Uhh we did a lot of games in the gym. It was the same as our gym games. Oh yeah for this Brock camp we did trampolines, those big foam shapes one year but not last year we didn't have them last year, crash mats... board games. Puzzles. (Storm)

Space	Variable Physical Environments Autism Camp -variable spaces and places offer more movement options	The most memorable moment that they ever took us to was MarineLand and I went to Port Dalhousie... I get up on the carousel... we played on the beach (Pheonix)
		We go to the community centre, the YMCA community centre... we go swimming in the pool (Pheonix)
		Field trips was basically Happy Ralph's...uhh we been to... Go Karts! Go Karts was really fun! It was like Mario Kart but a little different (Pheonix)
		Uhh at MarineLand on this one... they have this big ride that's a swing that goes around in circles and I liked it a lot. (Storm)
		This year we didn't have those big foam shapes and I know those are a favourite so I would bring those back. But the games room was a lot of fun too. Yeah board games and puzzles. (Storm)
	CMP -Brock gym only	They have this horse thing that looks like a horse. Yeah I more like riding it like it's a horse than what you're supposed to do. You're supposed to do it with your feet. (Wolverine)
Relation	Volunteer as Movement Facilitator	No build like umm something like umm way better. Some fitness gym with a swimming pool. And a running place. Yeah and umm like a track, a swimming pool and some machines. Stepper umm treadmill, stuff like that. (Wolverine)
		Yeah they do things like that (give encouragement) (Pheonix)
		They're probably telling us that there's something we should... we're not doing right or that we're doing that we shouldn't be doing or if we're doing something really good. Yeah encouragement and pointing out things that might be a problem. (Storm)
		They'd be telling me what to do. (Wolverine)
		My counselor keeps asking me to go down the waterslide at the YMCA community centre cause I was scared while I was up there (Pheonix)
		Well they encourage me a little but I'm thinking they were trying to frustrate me. (Pheonix)
		Yeah sometimes umm I don't know at first but then after I know it. I'm alright if I umm look what they're doing. (Wolverine)
Relation	Volunteer as Movement Facilitator	Talking to us, encour... well yeah encouragement. (Storm)

Building relationships -with volunteers and other participants	***** was the volunteer that was working with him and he had a really good connection with him. (Wolverine)
	I like the partner that I'm with ****. He's really fun to be with. (Storm)
	Excited because it would just be like ***** and ***** cause they're both Autistic. (Pheonix)
	Yeah sometimes like that (makes new friends) but there are other other kids in there I already knew like **** and *****. Yeah, like ***** goes to this Cave Springs camp, have you heard of that camp? Like it's so fun you get to stay there all week long. I was in a cabin with eight girls, some of them were mean to me, but some were nice and ***** was there. He loves that place. Places that he goes is gonna cause me for me to go there. And he was, like... I went to three camps this summer. He always went me with them, like at the St. Theresa's school. I think he's following me every Brock camp I go. (Pheonix)
Help interactions -coordinator *C* -volunteers *V* -peers *P*	Some kids are really bad off. Some can't talk or probably can't control themselves... so they're gonna need someone who needs to help them. (Pheonix) *V*
	Well they keep helping me. They keep showing me what to do. They show me different tricks I never done before. (Pheonix) *V*
	Well I showed them things like to **** and ***. (Pheonix) *P*
	Yeah like ***** does it (helps kids who are having a difficult time) Yeah other counselors do that too. (Storm) *C**V*

Appendix F-9

Physical Education Programs Document Data			
Trend	Institution	Course Title	Course Description – relevant text
Individual Needs & Well-being	Brock	Foundations in APE & DS	“Life conditions and needs of persons who require individualized physical activity”
	Brock	Chronic Illnesses & Disability Across the Lifespan	“impact of physical activity on the quality of life of persons with a chronic illness or disability”
	Guelph	Therapeutic Ex for Special Populations	“meet the particular needs of these special populations”
	Laurentian	APE	“suitable to the needs of the special population”
	McMaster	PA for Challenged Populations	“to become aware of the unique needs of special populations, and how individualized physical activity programmes can attend to those needs” “gain experience in adapting physical activity to the specific needs of certain populations”
	Nippissing	Special Populations	“addresses the physical activity needs of special populations”
	Queen’s	Sport, Rec & Ex for Persons with Dis’s	“physical activity and recreation needs of individuals with disabilities”
	Toronto	APA	“to adopt the active living lifestyle of greatest interest to them”
	Windsor	PA for Special Populations	“emphasis will be placed on defining the characteristics of the population, the needs and strengths of each population, and matching the strengths with the appropriate physical activities”
	Wilfred Laurier	Intro to APA	“meeting the needs of people with physical and developmental disabilities”
Physical Activity & Disability	Brock	Foundations in APE & DS	“individualized physical activity”
	Brock	Therapeutic Applications of PA	“Activity programs in therapeutic contexts. Exercise assessment and prescription”

	Brock	Chronic Illnesses and Disability Across the Lifespan	"impact of physical activity on the quality of life"
	Guelph	Special Populations: Nutrition & Ex	"address the roles that nutrition and exercise can play"
	Guelph	Therapeutic Ex for Special Populations	"identify health conditions that will influence exercise program development and to analyze and modify fitness program variables"
	Lakehead	APA & Sport	"introduction to adapted physical activity and sport programs for persons with disability"
	Lakehead	Systematic Instruction of People with Dis's	"prescribe, implement and evaluate a physical activity program for a person with a developmental disability"
	Lakehead	Exercise Prescription	"exercise prescription for apparently healthy individuals and those with controlled disease"
	Laurentian	APE	"programs of physical activities suitable to the needs of the special population"
	McMaster	PA for Challenged Populations	"adaptation for physical activity" "adapting activity programs to individuals with special needs" "individualized physical activity programmes" "assist in the design and implementation of physical activity programming for special populations in the community"
	Nippising	Special Populations	"physical activity needs"
	Queen's	Sport, Rec & Ex for Persons with Dis's	"successful participation in physical, recreational and leisure activities" "recreational and competitive sport opportunities" "examine physical activity and recreational needs of individuals"
	Toronto	APA	"effective ways of providing physical activity opportunities to individuals with a wide range of abilities. Attention will be paid to the physical, psychological and social supports that enable people with disabilities to adopt the active living lifestyle of greatest interest to them. The ability of physical activity professionals to

			include individuals with different abilities will be examined across a wide variety of physical activity settings (e.g., school physical education, community recreation, fitness training, coaching, etc.)”
	Toronto	Diversity in PA	“adapted games on land and water”
	Windsor	PA for Special Populations	“matching strengths with appropriate physical activities”
	Wilfred Laurier	Intro to APA	“physical activity and sport as it relates to people with disabilities” “the role of adapted physical activities”
	Wilfred Laurier	APA for Ind’d with Developmental Disabilities	“focus on adapted physical activity for children/youth with developmental disabilities”
Corrective / Pathological	Brock	Chronic Illness & Disability Across the Lifespan	“examination of the pathology of specific diseases”
	Guelph	Special Populations: Nutrition & Exercise	“the roles that nutrition and exercise can play in preventing, lessening or delaying the onset of specific diseases and/or ill health states. Disease states and injuries to the body can dramatically a) compromise the ability of the body to exercise or to respond to nutrition and b) result in special needs for the body”
	Lakehead	Exercise Prescription	“exercise prescription for apparently healthy individuals and those with controlled disease”
	Ottawa	Principles in Psychomotor Rehabilitation	“Implications for rehabilitation are discussed”
	Wilfred Laurier	Human Motor & Perceptuomotor Disorders	“An examination of the etiology, epidemiology and neuropathology or various neuropsychological disorders, focusing primarily on motor disorders”

	Wilfred Laurier	Movement Disorders & Clinical Aspects of Neural Control	"underlying mechanisms, symptoms, causes and treatments/rehabilitative approaches"
Accessibility/ Adaptation/ Inclusion	Lakehead	APA & Sport	"topics will include integration, accessibility, and advocacy; motor skill development and learning characteristics; program needs and adaptations"
	McMaster	PA for Challenged Populations	"adaptation for physical activity" "integration issues, programming approaches and teaching considerations in adapting activity programs" "adapting physical activity to the specific needs of certain populations"
	Queen's	Sport, Rec & Ex for Persons with Disabilities	"students will be introduced to fundamental principles such as inclusion, accessibility, barriers, empowerment and advocacy" "methods for planning inclusive adapted and individualized programs"
	Toronto	APA	"ability of physical activity professionals to include individuals with different abilities will be examined across a wide variety of physical activity settings"
	Windsor	PA for Special Populations	"issues of integration, programming, and environmental adaptation will also be considered"

Disability Studies Programs Document Data

Trend	Institution	Course Title	Course Descriptors
Individual Needs/ Well-being/ QOL	Brock	Program Mission Statement	"ADS is designed to contribute to the betterment of the lives of persons with disabilities"
	York	Program Mission Statement	"monitor human rights issues relating to people with disabilities"
	Windsor	Program Mission Statement	"as (the program philosophy) reflects the rights and anti-oppressive needs of people with disabilities"
Integration/ Inclusion/ Accessibility/ Social Justice	York	Social Inclusion: Theory and Practice in Education and Social Policy	"the rhetoric of integration, inclusion, unjustifiable hardship and educational disablement are analyzed" "examine the physical and pedagogical accessibility of schools as well as look at how

			the complicated issues related to inclusion are framed in law and policy” “critically examines the international discourses of special education, inclusion and integration”
	York	Pedagogy & Empowerment	“models of democratic and inclusive education”
	Windsor	Program Mission Statement	“based on the social model of disability, essential to the program philosophy, as it reflects the rights and anti-oppressive needs of people with disabilities” “commitment to social justice and accessibility” “Nothing about us, without us”
Teacher Education Programs Document Data			
Trend	Institution	Course title	Course descriptors
Individual needs/ Special needs	Nippising	Education and Schooling/ Educational Psychology, Special Education	“a study of the needs of exceptional students”
	Windsor	Differentiated Instruction for Students with Special Needs	“address diverse learning needs in inclusive classrooms”
	Trent	Supporting Literacy and Learners with Special Needs	“theory and best practices in special needs and reading instruction for learners with special needs”
	Windsor	Differentiated Instruction for Students with Special Needs	“an introduction to the field of special education...to address diverse learning needs in inclusive classrooms. This course surveys the learning needs of children and adolescents with both high and low incidence exceptionalities, and highlights methods of differentiating classroom instruction to meet their individual needs”
	Queen’s	Exceptional Children and Adolescents	“exceptional children and adolescents in the regular classroom, including their identification, inclusion and teaching. Candidates consider

			how students learn, how teachers can help exceptional students to learn in the classroom, and how teachers can collaborate with parents and other professionals to enhance learning. A range of exceptionalities are considered including students with giftedness, intellectual disabilities, learning disabilities, and behaviour exceptionalities.
	Ottawa	Education of Exceptional Students	"emphasis is on strategies to assist teachers in addressing the special education needs of pupils in the regular classroom"
Inclusive/ Equity	Brock	J/I HPE	"Fundamental movement skills, active participation, concepts of healthy living, appropriate teaching methods and a philosophical orientation which fosters learning by all"
	Brock	P/J HPE	"Fundamental movement skills, active participation, concepts of healthy living, appropriate teaching methods and a philosophical orientation which fosters learning by all"
	Brock	Diversity Issues in Schooling	"Issues and directions in a diverse society and their impact in the classroom; includes classism, racism, multiculturalism, ablism and sexism; roles and strategies leading to the goal of equity"
	Toronto	Inclusive Education	"focuses on the inclusion of children with exceptionalities in the general education classroom"
	Toronto	Teacher Education Seminar	"Special Education; Diversity, equity & social justice"
	York	Inclusive Education	"inclusion of children with exceptionalities in the general education"

		classroom” “As a group, we define inclusion, identify the stakeholders in inclusion, address the roles of the stakeholders, and explore accommodations and modifications.”
York	Teaching and Learning for Inclusive Classrooms	“Within a framework of equity, diversity, social justice and teaching for sustainability”
Windsor	Differentiated Instruction for Students with Special Needs	“an introduction to the field of special education...to address diverse learning needs in inclusive classrooms. This course surveys the learning needs of children and adolescents with both high and low incidence exceptionalities, and highlights methods of differentiating classroom instruction to meet their individual needs, as well as approaches for remedial assistance for specific learning difficulties.”
Western	Teaching for Equity and Social Justice: A Focus on Inclusive Curriculum	“critically examine current school curriculum, policy and classroom practices and develop strategies for an equitable and inclusive curriculum”
Queen’s	Exceptional Children and Adolescents	“an overview of exceptional children and adolescents in the regular classroom, including their identification, inclusion and teaching”
Trent	Supporting Literacy and Learners with Special Needs	“Inclusion and individualized instruction are explored with emphasis on legal responsibilities, program modification, and classroom accommodation”
Laurentian	Educational Psychology/ Special Education	“consider ways of providing an inclusive classroom environment”
Western	Teaching for Equity and	“A focus on issues of equity...

		Social Justice: A Focus on Inclusive Curriculum	disability in education” *disability included in course description but not in aims/goals/objectives/outcomes or list of major themes*
	Ottawa	Equity in Education: Theory and Practice	“Examination of the theories and practices of educational equity in relation to sexism, racism, and other social inequalities”