

The socialization of teachers who teach young students experiencing physical disability
in physical education

by

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Abstract

The purpose of this study was to explore the socialization of teachers in physical education, with a focus on their experiences of teaching and learning to teach children living with physical disabilities. Data were collected using qualitative interviews and through analysis of program calendars for publicly-funded institutions offering pre-service teacher education programs. Despite being largely viewed as the least effective form of socialization, pre-service teacher education has the potential to influence a teacher's confidence and performance in the classroom. Results of this study indicate that the socialization experiences of teachers continue to be strong indicators of performance, and that both specialist and generalist teachers lack positive socialization experiences that include students with physical disabilities in physical education. This limits the experience, knowledge and skills they have to draw on in their physical education teaching practice. Coupled with a lack of resources and expertise available, teachers are left under-prepared and without enough resources to provide high quality physical education to children living with physical disabilities.

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Chapter I - INTRODUCTION

Introduction

In Canada, it is estimated that about 4.6 per cent of children experience some form of physical disability (Statistics Canada, 2006). With the introduction of Bill 82 in 1980, or the *Education Amendment Act* (Ontario Ministry of Education, 1980), the Ontario government mandated that all children with a disability must receive equal opportunity for education as their “typically-developing” peers. These “special needs” encompass a wide variety of circumstances, including (but not limited to): mobility disabilities, learning disabilities, and autism spectrum disorder. The Ontario Ministry of Education uses the term “exceptionalities”, and broadly categorizes these into behavioural, communicational, intellectual, physical, and multiple “exceptionalities”. In 2013, 17 per cent of Ontario’s elementary school students were categorized as having one type of “exceptionality”, in that they received some form of special education resource, with an additional 34 per cent of schools reporting students who needed, but were not receiving, supports (People for Education, 2013).

One means of providing support for students who are identified as “exceptional” in Ontario schools is through the requirement of having an Individual Education Plan (IEP) written for them. Contained in this IEP is information on the student, their needs, and the plan to modify the curriculum, accommodate the student within the mainstream curriculum and/or classroom, or to provide an alternative curriculum or learning environment. In addition to whatever “special education” preparation teachers receive in their pre-service teaching program, the Ontario Ministry of Education (2004) provides a resource guide for developing the IEP for teachers. There are three sample IEPs at the end of the guide, however, due to the diversity of

exceptionalities, these samples are limited. For example, none of them include a student with a physical disability. Of the three samples, only the high school example addresses physical education specifically, and even then only identifies learning strategies for the health portions of the learning expectations (Ontario Ministry of Education, 2004). The lack of specific examples in planning and guidance documents does little to emphasize the importance of having a plan for the success of an exceptional student in physical education classes.

According to many researchers, elementary teachers do not typically receive adequate training in including children with exceptionalities in physical education (DeCorby, Halas, Dixon, Wintrup & Janzen, 2005; Faulkner et al., 2008; Fletcher & Mandigo, 2012; Morgan & Hansen 2008a, 2008b; Tsangaridou, 2012). With the rise in diagnoses of Autism Spectrum Disorder, more research is being focused in that area. However, this has resulted in a widening of the gap in terms of research being conducted for children with other exceptionalities. The current study addresses this gap by focusing on the issue of quality physical education specifically in relation to children with physical disabilities. With new provincial legislation in Ontario, it is more important than ever to investigate ways in which teachers can be supported in implementing quality physical education for their students with physical disabilities. In addition to a recent overhaul of Ontario's Health and Physical Education curriculum, the Accessibility for Ontarians with Disabilities Act (AODA; 2005) is set to be fully implemented by 2025. Both of these documents highlight the need to provide quality education to students with disabilities and signal the need for all Ontario organizations to be equipped to provide accessible services for all the people whom they serve.

The importance of elementary physical education for children with physical disabilities

In order to ensure children continue to participate in meaningful physical activity across the lifespan, they must learn the building blocks, known as fundamental movement skills (Lloyd & Legg, 2009). Fundamental movement skills are most often taught in physical education, where students practice skills like running, jumping, and throwing (Lloyd & Legg, 2009). Children with physical disabilities often miss out on the opportunity to develop these skills for variety of reasons, often due to low-quality physical education experiences (Higgs et al., 2011). This is exacerbated in schools where a specialist physical education teacher is not available, which at least partially explains why only as few as three per cent of children experiencing disability are participating in daily physical activity outside the classroom (Active Healthy Kids, 2009). As a result, many of these students lack the fundamental movement skills they need to competently participate in the classroom and beyond.

The Ontario Teachers Federation provides a website called the “Teachers’ Gateway to Special Education” to address the gap in teacher preparation for students with disabilities. The website provides resources on disabilities, key practices of inclusive teachers, and teaching strategies and resources. Specific to physical education for students with physical disabilities, suggested teaching strategies include reducing demonstration expectations for assessment, and modifying expectations and focusing more on knowledge (Teacher’s Gateway, n.d). While these suggestions could be used in some circumstances, they do little to value the contributions students with physical disabilities can make in the physical education classroom, nor do they emphasize the importance of ensuring these students are equipped with the fundamental movement and physical literacy skills that are necessary for current and future participation for health and well-being.

With upwards of 17 per cent of students requiring additional support in the classroom (People for Education, 2013), resources and supports (e.g., human, expert, literature) are vital to teachers' success in providing an inclusive learning environment. In addition to support provided on an ongoing basis, the initial preparation teachers receive for teaching students with disabilities can impact their performance and subsequently the outcomes their students attain (Jobling, Forlin, Tait, Carroll, 1999; Jordan, Schwartz, & McGhie-Richmond, 2009; Loreman, 2007). However, there is evidence to suggest that those who teach children with disabilities in physical education feel decidedly un- or under-prepared to offer inclusive learning environments. This applies to both specialists in physical education or generalist elementary teachers (Coates, 2012; DeCorby et al., 2005; Faulkner et al., 2008; Fletcher & Mandigo, 2012; Morgan & Hansen 2008a, 2008b; Tsangaridou, 2012; Vickerman, 2007). As most research on the teaching of children with physical disabilities has focused on secondary physical education (e.g., Coates, 2012; Hodge, Ammah, Casebolt, Lamaster & O'Sullivan, 2004; Smith & Green, 2004), there is a need to consider the types of programs and practices offered to children with disabilities in elementary physical education.

The elementary school years have been identified as a critical period for all children to develop the skills, knowledge, and attitudes necessary for lifelong physical activity participation (Kirk, 2005). Yet, in Ontario, two major problems exist in relation to high quality learning experiences for children with disabilities in elementary physical education classes. First, there are a large number of generalist teachers who are teaching physical education to their students (Faulkner, et al., 2008; Block, 1999). In 2013, only 55 per cent of Ontario schools reported hiring a physical education specialist, but over half of these schools were only employing them on a part-time basis (People for Education, 2013). Second, and related to the first point, is the low

levels of preparation teachers in general are receiving to include students with physical disabilities in their classrooms. Although “special education” Additional Qualifications were attended by some, none of the teachers interviewed for this study could recall any mention of physical education and “special education” together during their additional qualification courses.

Purpose of the Study. The overarching purpose of this study is to examine the socialization experiences of elementary school teachers who teach physical education to children with a physical disability. The field of scholarship dedicated to understanding the processes through which individuals are initiated as participating members into the society of teachers and profession of teaching is referred to as teach socialization, a branch of occupational socialization (Danziger, 1971). Given the reported lack of preparation elementary teachers have been reported to receive for inclusive physical education, and the small amount of research that addresses the province of Ontario specifically, this study will investigate the pre-service and professional education experiences of teachers, specifically in relation to teaching children with a physical disability in the physical education classroom.

The participating teachers are a combination of specialist and generalist teachers who are teaching or have taught a child experiencing a physical disability in the primary grades (Grades 1-3) in Ontario. Most research that has been conducted on this topic has gained the perspectives of specialist physical education teachers, typically based in secondary schools. However, in many contexts, particularly in Ontario elementary schools, it is the generalist classroom teacher who is responsible for teaching physical education (Faulkner et al. 2008; Marshall & Hardman, 2000; People for Education, 2013). Thus, a key objective of this research is to examine the nature and level of perceived confidence that both specialist and generalist teachers have in adapting physical and health education classes to include a child with a physical disability, and

how this affects the teacher's perceived effectiveness in teaching the child developmentally appropriate physical activity skills. The research also aims to explore how the teacher's perceived confidence was influenced by their socialization experiences, including university and professional education, hands-on experience, and access to support services and resources.

Examining the socialization experiences of teachers who currently teach children with physical disabilities in elementary schools in Ontario will enable insight into the teaching practices of this population. Based on the findings I will provide recommendations to improve the physical education experience for both teachers and their students with physical disabilities. This research is significant because it will provide organizations responsible for educating teachers (such as universities, colleges, school boards, and independent consultants) with evidence regarding the nature and extent of teachers' knowledge and socialization experiences of teaching children with physical disabilities. Moreover, recommendations may be made to improve programs that certify or prepare prospective teachers of physical education, a need made more urgent by the impending 2025 deadline of the AODA (2005).

Research Questions. The research is guided by the following main question and related sub-questions:

- *How does the socialization of teachers prepare them for teaching a student living with a physical disability? Specifically, how and where do teachers gain their experience, knowledge and skills about teaching children living with physical disabilities in physical education?*
- *To what extent are specialist and generalist teachers who teach physical education equipped with sufficient knowledge and experiences to effectively include a child living with a physical disability in a physical education class?*

- *What resources and supports are available to teachers and to what extent does their socialization prepare them to access these resources (during pre-service teacher education, through professional development education, literature, colleagues, service organizations, and so on)?*
- *How do available resources and support influence teachers' confidence in facilitating successful inclusion of a child living with a physical disability in the physical education classroom?*

My Role as a Researcher

To conduct this study and competently address the research questions, I used a qualitative approach. In qualitative research, the researcher is the main instrument through which data is collected, analyzed, and interpreted (Bogdan & Biklen, 2007). This means that in order to understand my interest in this topic and how I came to form my research questions, I must acknowledge and address my motivations, biases, and experiences in the subject area of adapted physical education. In short, because the researcher is the main data gathering and analytic instrument, I must position myself in relation to the research.

This topic is important to me as a researcher because in my experience, children with physical disabilities are frequently excluded from physical education classrooms. Sometimes this is done intentionally through their IEP where physical education has been replaced with an alternative, such as physiotherapy, or sometimes adapted extra-curricular activity that is not provided at the school. More often, however, the exclusion is unintentional, or sometimes even done unknowingly, a result of poorly adapted lesson plans or a belief that inclusion happens naturally when the student is present in the environment.

My experience working with children with physical disabilities has been ongoing for about a decade, during which time I have noticed patterns in the levels of physical activity in this population. In my experience, children with physical disabilities are often battling being overweight or obese along with limited mobility. In addition, they frequently perform physical literacy skills at a level well below that of their typically-developing peers, or below what is appropriate for their cognitive ability. Even for children who are sports fanatics, their ability to participate in physical activity is usually limited more by their skill development than by their disability. When talking to peers my own age with disabilities about their physical education experiences, I have encountered more eye-rolling and scoffing than any other reaction, usually as a result of their experiences with teachers who did not understand their abilities or resilience. In my experience, children experiencing physical disability are not enjoying, nor benefiting from, inclusive physical education.

In fact, despite hearing from every teacher who participated in this study that removing a student from physical education because of a physical disability was not done, I know for a fact that this is the case for some students. Not one, but two of the young wheelchair basketball athletes I am currently coaching have encountered complete exclusion from physical education. The first, a young woman who is a feisty competitor on the court, incredibly coachable, a quick learner, and independently ambulatory off the court, hated her physical education experience so much that she fought to not have to do it anymore. A similarly aged young man on my team was actually offered by his school to give him credit in another area, which his mother refused, insisting that he was capable of participating if they provided an inclusive environment. Both of these young people are physically behind the level of their peers in skills such as object

manipulation and tracking. One might infer that the poor quality of their physical education experiences is at least partially to blame.

This topic is important to me for those two young players, and every other person who has been denied the opportunity to be physically active through a lack of quality physical education. This issue is much bigger than one research study is going to solve, but by considering how teachers' socialization influences their confidence and competence to teach children with a physical disability in physical education, I hope to provide some foundation to take steps in the right direction, for myself and other providers of physical activity.

As I analyzed the data for this study, I took steps to consider my bias. The first step was to identify and acknowledge it (Bogdan & Biklen, 2007). I reflected on my beliefs about the topic and the numerous children and adults I know whose physical education experiences were less than inclusive, and tried to examine the problem from other perspectives where experience in this field was limited. By identifying this bias, it was easier to reflect on my reactions and reasoning for the way I coded the transcripts and interpreted their meanings. I also reviewed the transcripts of the interviews through two lenses. First, I analysed transcripts through the lens of a pre-service teacher who had never met a child with a disability in a social setting (but maybe had students with disabilities in their school). Second, I analyzed transcripts through the lens of an older adult, who would have gone to school when children with disabilities were still institutionalized and therefore never encountered a peer experiencing disability. Finally, I tried to put myself in the shoes of someone like my mother, who believes everyone deserves opportunities, but who experienced children with disabilities in the healthcare setting, where the clinical perspective paints a small part of the bigger picture of the everyday lives of a healthy child living with a physical disability.

Definitions of Central Terms

To help the reader understand the perspective from which this paper was written, I have provided a summary of the definitions of some of the key terms used throughout. The language I use throughout this document is reflective of my views on disability, which is that disability and impairment are not necessarily causal. This is why “person-first language” is not used in every instance, because a person with a disability can also be a “disabled person”, or can “experience disability” by virtue of their social or built environment.

Adapted physical activity. Evolving from adapted physical education, adapted physical activity refers to any physical activity that is adapted or modified. It does not necessarily have to include a person with a disability, but rather facilitates physical activity across a variety of individuals (Reid, 2003).

Adapted physical education. The term adapted physical education originated in the United States in 1952 (Committee on Adapted Physical Education, 1952). Adapted physical education generally refers to any time the physical education environment, equipment, or rules must be modified to better include a child. In the US, adapted physical education refers to classes in schools, often as a separate subject from physical education, while in Canada, the term is usually used as a descriptor of a more inclusive physical education class (Sherrill, 2004).

Disability/impairment. There are many ways of measuring disability, the most commonly used being a biomedical perspective, whereby the child is identified as having a disability by a medical professional. However, the label of the disability does not dictate the child’s ability to participate in physical education classroom activities. Due to the wide variety of interpretations and social constructions of disability (Block, 1999; Reid, 2003), this study will focus on teachers who have taught children whose physical abilities differ from most of their

peers in such a way that inclusion was accomplished through teacher-led planning for adaptation. In most cases, this is due to the use of a mobility device (such as those used to assist or replace ambulation) not used by the other children in the class.

Exceptionalities. The Ontario Ministry of Education uses the term *exceptionalities* to describe any student who is considered by a committee to require placement in a special education program (Ontario Ministry of Education, 2004). Usually, the students' optimal learning environment requires supplementation within or removal from a traditional classroom. The exceptionalities are divided into five categories, with many of the categories sub-divided further. The five categories are Behaviour, Communication, Intellectual, Physical, and Multiple. The physical category is further broken down into physical disability, and blind/low vision.

Generalist primary teacher. A generalist primary teacher is a teacher who does not hold additional qualification to teach a particular subject, and rather teaches as many subjects as the individual school sees fit. Depending on the staffing at a school, generalist teachers may or may not teach subjects such as music, art, or physical education. While this study focused on teachers in the primary grades (Grade 1 to Grade 3), a teacher may be a generalist teacher through the junior and intermediate grades as well (up to grade eight or nine). As I experienced in this study, a teacher may hold the title of specialist at their school without actually holding the additional qualifications offered in that area. High school teachers in Ontario are required to hold specialist designation in two subject areas (Ontario College of Teachers, n.d. p.3).

Inclusion. Inclusion is the philosophy of supporting the educational needs of students with disabilities in the general education classroom setting (Block & Obrusnikova, 2007). Goodwin, Gustafson and Hamilton (2006) explain that inclusion has been described and discussed as a philosophy, placement, attitude, lifestyle and a process. Inclusion has many

meanings and is interpreted differently by each individual who practices it. This has caused a number of challenges even within individual schools as there is no simple definition that can be completely applied to every situation (Block, 1999). Upon careful reading of all the definitions for inclusive physical education, Goodwin et al. (2006) identify several key ideas for inclusive physical education: participation in the regular programming; willingness by all students to be involved; a sense of social belonging; the need for adaptation or physical support; and a match between the outcome of inclusion and the goals of physical education.

Inclusion requires physical educators to have total buy-in to modifying and adapting lessons and/or the delivery of lessons to ensure all children are included and able to access physical education (Coates, 2012). However, in order to translate strategies for inclusion, physical education teachers must first understand and value inclusive education, and have the skills and knowledge to adapt programming appropriately. When integration was first introduced, children with disabilities were sent to mainstream schools and expected to adapt, with the belief that any problems that arose resided within the child. Proper inclusion, on the other hand, takes a more social theory approach, aiming for barrier-free participation in school activities (Morley, Bailey, Tan & Cooke, 2005).

Parasport. The term “Paralympic” is used to describe sports that are “parallel” to Olympic sports. Specifically, the term is used to identify sports that are on the Paralympic programme. Parasports are sports that are participated in by persons with a disability but do not necessarily appear on the Paralympic programme.

Physical disability. Physical disability, by definition of the province of Ontario Ministry of Education (2004) for the purposes of “special education”, is defined as:

A condition of such severe physical limitation or deficiency as to require special assistance in learning situations to provide the opportunity for educational achievement equivalent to that of pupils without exceptionalities who are of the same age or development level (p. A20).

However, the researcher identifies that it is possible there are children in the education system who have a physical disability but do not meet this definition of requiring special assistance, and therefore teachers may come across students with physical disabilities who do not receive (or need) assistance to participate in most classroom activities. An example of this might be a child with a single below-knee amputation, which should not require special assistance in order to facilitate educational achievement equivalent to other pupils. For the purposes of this study, physical disability is the term used to describe any physical difference that limits a child's ability to participate specifically in physical education at the same pace and stamina, using the same rules, as a non-disabled child receiving quality physical education.

Physical Literacy. The purpose of physical education can be summed up succinctly with the term Physical Literacy – just like numeracy and literacy, physical literacy is vital to quality of life through the ability to move in a variety of ways. (Mandigo, Francis, Lodewyk, & Lopez, 2009). Physically literate individuals can move with confidence, competence, creativity, and grace through a variety of mediums, including air, land, water, and ice. Providing children with the building blocks of physical literacy (and fundamental movement skills) in the physical education classroom is the beginning of their future health and wellness (Mandigo et al., 2009).

Pre-service teacher. A pre-service teacher is someone who is enrolled in post-graduate studies directed towards meeting the minimum qualification for registration with the Ontario

College of Teachers. A pre-service teacher may also be known as a student-teacher, but throughout the thesis I refer to this population as pre-service teachers.

Special education. The words “special education” have long been associated with the learning environment of or adaptations/modifications provided to students with disabilities. “Special Education” can be used to encompass all exceptionalities, particular ones such as the Intellectual or Multiple categories, pupils removed from the mainstream classroom, or pupils receiving support within a mainstream classroom. I place the words in quotations when necessary to identify the vague definition and many different interpretations and uses of the term.

Organization of the Thesis

In this chapter I provided an overview of the topic of the socialization of elementary teachers to teach children with physical disabilities. I provided a background on why I am studying this topic, and situated the purpose of the thesis and its research question within existing gaps in the literature.

In the following chapter (Chapter Two) I will review the literature as it relates to the socialization of teachers, physical education, and children living with physical disabilities. First in the literature review I will provide an overview of the literature on teacher socialization, considering the theoretical stages and changes over time. Next I will review generalist teacher confidence in teaching physical education, followed by a comparison of specialist and generalist teachers in physical education, and in adapted physical education specifically. Since this research took place in Ontario, Canada, I will also provide a summary of pre-service teacher education in the province.

Following the review of literature, I will detail the methods used to collect and interpret the data for this study (Chapter Three). The chapter will cover the participant recruitment, interview process, steps taken during interpretation, as well as the ethics details. Chapter Four will address findings from both the interview process and the analysis of teacher education programs. The interview findings were coded and categorized, and presented in relation to teacher socialization. Finally, the discussion and conclusions chapter (Chapter Five) will present a summary of the data and its relevance, as well as implications of the study for stakeholders in physical education for children with physical disabilities.

Chapter Summary

In order to understand why only as few as three per cent of children experiencing disability are participating in daily physical activity outside the classroom (Active Healthy Kids, 2009), we must first understand their participation in the physical education classroom. Although research on teacher training and attitudes has been conducted in countries with similar publicly-funded education systems, the topic has remained almost completely unexplored in Canada, where, in Ontario, “universal access” laws within education have existed since 1980 (Ontario Ministry of Education, 1980). Despite these laws existing for the past 35 years, Ontario has identified an issue within the province and is set to implement an even more rigorous Act that will hold organizations more accountable to standards of compliance (AODA, 2005). This research will seek to begin to examine the experiences of the elementary school teacher in including children living with a physical disability in physical education classes. In the following chapter I review the literature on teacher socialization, with a particular focus on the socialization of elementary teachers of physical education.

Chapter II – REVIEW OF LITERATURE

Introduction

Children with physical disabilities often lack opportunities for fundamental movement skill development, which can influence their physical literacy (Lloyd & Legg, 2009). This leads to the population being even more sedentary than their non-disabled peers (Active Healthy Kids Canada, 2013). Since school-based physical education represents some of the first and most basic foundational physical activity instruction a child receives (Balyi, Way, Norris, Cardinal & Higgs, 2005), it is important to understand the types and nature of physical education that children with physical disabilities typically experience. Because teachers are one of the most important factors in establishing the quality of a child's physical education experience (Balyi et al. 2005), this research focuses on the formal and informal preparation teachers receive to teach physical education throughout their lives and careers, and how these experiences affect their confidence in adapting curricula to include students with physical disabilities. Occupational socialization theory (Lawson, 1983a) is used as the theoretical framework. Briefly, occupational socialization theory considers the processes by which teachers acquire their knowledge and become integrated as members of the teaching profession, processes that stretch throughout an individual's lifespan (Lawson, 1983a).

In this chapter, I review two main bodies of literature. First, I provide an overview of occupational socialization theory as it applies to teachers, describing how it serves as a basis and structure for the methods and analysis of the research. Second, I review the literature on teachers of physical education, paying particular attention to their socialization. Specifically, I focus on the attitudes and confidence of generalist and specialist teachers teaching physical education and

adapted physical education, and the formal preparation teachers experience in these subjects in Ontario.

Teacher Socialization

Teacher socialization, a branch of occupational socialization, is a field of scholarship dedicated to understanding the processes through which individuals are initiated as participating members into the society of teachers and profession of teaching (Danziger, 1971). A hallmark publication on teacher socialization was Dan Lortie's (1975) *Schoolteacher: A Sociological Study*. Lortie's text lays the foundation for many studies on the subject, including the application of teacher socialization theories to physical educators. Along with Templin (1979), Lawson (1983a, 1983b) was one of the first scholars in physical education to apply Lortie's theorizing to physical education, attempting to synthesize findings in socialization research aimed towards physical education teachers. Beginning with the assumption that teacher socialization is a life-time, dialectical and two-way process, Lawson (1983a, 1983b) goes on to identify three types of socialization a physical education teacher will undergo through their career: acculturation, professional socialization, and organizational socialization. These three types of socialization provide a frame for the following sections of the chapter. In this section and the related subsections, I provide an introductory description of important concepts in teacher socialization theory, using brief examples to help explain how those concepts can be used to understand teachers' experiences.

Acculturation. The first stage of teacher socialization, acculturation, begins at birth and continues throughout life as the person learns the social norms, expectations and acceptable beliefs and behaviours associated with their various communities (Lawson, 1983a). This includes interest in sport and physical activity that begins prior to schooling, nurtured by parents or

siblings (Curtner-Smith, Hastie & Kinchin, 2008). It also includes the subjective warrant, the term used to describe the beliefs formed about the characteristics of a good teacher (Lortie, 1975). In addition, prospective teachers tend to have particular strategies they use when teaching physical education, usually described as a teaching or a coaching orientation (Lawson, 1983a; 1983b) All of these beliefs guide the values and actions, and therefore professional conduct of people who eventually choose to become teachers (Pike & Fletcher, 2014; Richards, Templin & Graber, 2014).

Curtner-Smith (1999) conducted a study of the influence of acculturation on teaching practice and found that teachers' experiences of school physical education from the time they were students had a profound effect on their teaching styles, and their interpretations of the British national curriculum. He found that teachers who had experienced more "traditional" physical education, consisting mainly of sport at schools where competitive performance was highly valued, were likely to hold custodial values of teaching, meaning they were more likely to replicate traditional approaches they had experienced themselves. On the other hand, the teachers in his study who held more innovative values were the teachers with a more well-rounded, broad range of physical education lessons, as well as less emphasis on their schools' sports teams and more on intramural and non-competitive forms of physical activity (Curtner-Smith, 1999).

While Curtner-Smith's (1999) study sheds light on ways in which acculturation influences physical education teachers' practice, there is scant mention of acculturation in the context of adapted physical education and inclusion in current literature. This gap in the literature is important to recognize because the presence (or lack thereof), treatment, and participation of peers and community members who deviate from social norms has an impact on acculturation from as early as 4 years of age (Favazza & Odom, 1997). Favazza and Odom

(1997) found that for non-disabled children, any (even passive) contact with children who have a disability had a positive effect on the attitudes the children were forming towards people with a disability. They found that a higher level of structured introduction (through storybooks and discussion) had a significant positive impact on these attitudes. The more frequent the contact the children had with people with a disability, literature, and media, the more they tended to have positive attitudes towards them. The research by Favazza and Odom (1997) suggests that understanding how physical education teachers were introduced to and interacted with individuals with disabilities in their early years of life (that is, during their acculturation) may help understand how and why they interact with students with physical disabilities as teachers.

The socializing processes that prospective teachers experience have guided a substantial portion of the research agenda around socialization and educators, leading to a focus on teachers' early experiences as school students and the role these experiences play on decisions to become a teacher (Pike & Fletcher, 2014; Richards et al., 2014). Although often solidified through post-secondary education, this stage begins and is largely influenced by teachers' own experiences as students in school; a process Lortie (1975) refers to as the *apprenticeship of observation*.

Apprenticeship of observation. Lortie (1975) used the term *apprenticeship of observation* to describe the means by which pre-service teachers' experiences of teachers and teaching shape their perceptions of the field of education and their beliefs of teachers' roles and responsibilities. Lortie (1975) identifies that school students have an extended and broad contact with teachers at work – far more than any other occupational group. In fact, Lortie estimates school students have around 13,000 hours of invested contact with classroom teachers by the time they graduate high school (Lortie, 1975). Since socialization is a subjective process that takes place as a person moves through structured experiences, this extensive period of observing

teachers at work begins the process of occupational socialization into the teaching profession at a young age (Lortie, 1975).

Yet, even before their pre-service teacher education, teachers form particular beliefs about the characteristics and traits a good teacher possesses. The term *subjective warrant* is used to describe these beliefs (Lortie, 1975). A person choosing an occupation will evaluate what they consider to be the strengths of someone successful in a particular career and judge this evaluation against their own strengths to determine a fit. For example, using their subjective warrant, a person may determine that steady hands and dexterity are vital for consideration to enter surgical fields (Lortie, 1975), and so they may assess their own hands to serve as an indicator of their perceived likelihood to be a successful surgeon. For physical education teachers, a love of or propensity for physical activity, and observation of the character traits, skills, and qualities of their own physical educators may be used as indicators for the decision to become physical education teachers (Lawson, 1983a).

Professional socialization. The second type of socialization is professional socialization, the processes through which the values of physical education and its educators are established and understood by the new teacher (Lortie, 1975). The stability of the *apprenticeship of observation* and *subjective warrant* can be challenging for those who work in pre-service teacher education programs. While pre-service teachers have developed their own subjective understanding of what it means to be a physical education teacher, they often have limited insight into the culture of teaching (Richards et al., 2014). Grossman (1991) discusses the importance of pre-service teachers being made aware of the impact their past experiences have on their teaching. She describes an English methods course where the instructor prompted the university students to be critical of their experiences, and to begin to use language reflective of

the profession, rather than of a students' perspective. Grossman's (1991) article offers an example of ways a pre-service course can successfully challenge its students to think critically about their experiences and unpack the effect of the apprenticeship of observation, including overcorrecting with extreme examples of innovation in the hopes the teacher will settle somewhere between the two ends of the spectrum.

Organizational socialization. The third type of socialization discussed by Lawson (1983a) is organizational socialization. Organizational socialization is the process through which teachers learn the bureaucracies, institutions, and routines of the profession (Lawson, 1983a). Organizational socialization begins to occur once an individual is inducted into a profession, and continues throughout the remainder of their professional life. Lortie (1975) identifies the transition from college student to teacher as an abrupt one, with experience being their principal teacher. Although innovative new teachers may attempt to increase the quality of physical education programs (Lawson, 1983b), Zeichner and Tabachnik (1981) indicated that new teachers could also revert to the culture of a conservative school, essentially "washing out" their pre-service teacher training. Lawson (1983b) hypothesized that new teachers who were placed in schools where the structure was more informal, where they were allowed to be independent, and where they were encouraged to be innovative, were more likely to teach as their pre-service training had instructed. In contrast, teachers in conservative environments who were mentored and discouraged from new ideas or practices were likely to comply with their senior colleagues.

Schempp, Tan, Sparkes and Templin (1996) state that teachers perceive "their induction to be highly individualistic and personal", and that they "succeed or fail alone" (p. 69). The authors found that teachers experience mixed messages between their pre-service education and what is lived in their initial teaching experiences, leading to a cooperative attitude and little effort

to challenge the status quo. Schempp et al. (1996) specifically mention the cultural attitudes towards the value of physical education. They found that as teachers begin their careers, they see a shift in beliefs from motor skill learning to classroom management and a belief that if the student failed it was due to factors beyond the teacher's control, such as a lack of effort or motivation (Schempp et al., 1996), an example of shift towards a coaching orientation.

In the sections above, I provided an introduction to important concepts in teacher socialization theory. Although I have provided several examples from the literature to help illustrate these concepts, there is still a need to more thoroughly review the literature on physical education teacher socialization. This is done in the following section.

Physical Education Teacher Socialization in the 21st century

Recent research indicates that the socialization of physical education teachers has changed in the three decades since Templin's (1979) and Lawson's (1983a, 1983b) seminal work. For example, Bain and Wendt's (1983) study indicated that undergraduate physical education students saw no difference between the role of teacher and coach. However, McCullick, Lux, Belcher and Davies (2012) published a more recent portrait of pre-service teachers that showed that physical education teachers believe that the two roles (coaching versus teaching) are distinct, which is supported by comprehensive reviews of the literature since 2000 (Pike & Fletcher, 2014; Richards et al., 2014). In this section, I consider the three stages of socialization identified by Lawson (1983a) and discussed in the previous section; however, I pay closer attention to findings from empirical research in physical education since 2000. The reason for this is to provide a more current perspective on the ways that physical education teachers in today's schools are shaped by their socialization and to consider how this may influence their experiences of working with children with physical disabilities.

Acculturation. Curtner-Smith et al. (2008) propose that acculturation is the “most potent type of socialization experienced by physical education teachers” (p. 99). Noting the effect of socialization on teachers’ styles and as part of a study that aimed to understand the beliefs and perspectives of today’s physical education preservice teachers, McCullick et al. (2012) analyzed teachers’ own understanding of teaching physical education versus coaching. Although the shift in perception of the role of physical educator versus coach indicates substantive change in the culture of physical education teachers, McCullick et al. (2012) concluded that there is a shallow understanding of what makes the two professions (coaching and teaching) distinct. The teachers surveyed were unable to compare and contrast coaching with teaching, and McCullick et al. (2012) posited that this was due to the teachers being socialized to believe the two professions are different (and not due to their own critical analysis).

Richards et al.’s (2014) review of the literature surrounding physical education teachers’ socialization indicates that teachers tend to fall onto a spectrum between a coaching orientation and a teaching orientation. New teachers tend to be somewhere between only wanting to teach physical education, and entering physical education teacher education for the purpose of acquiring a career in coaching (Richards & Templin, 2012). Lawson (1983a) stated that new teachers who were coaching-oriented and unaffected by their pre-service training (or encouraged in their beliefs) were unlikely to use effective teaching practices. These teachers would be considered custodial, or concerned with maintaining the norms of their environment, which continues in the 21st century (Richards et al., 2014). Currently, most new recruits, however, lean more heavily towards a teaching orientation than in the past (McCullick et al., 2012; Pike & Fletcher, 2014), although there is a gender bias with females tending towards more teaching orientations and males towards the coaching orientation (Curtner-Smith, 2007). Once again,

there is little mention of acculturation for teaching children living with physical disabilities in the literature surrounding pre-service teacher education.

Professional socialization. Teacher education programs continue to be weak in terms of socializing pre-service physical education teachers into a teaching orientation (Curtner-Smith & Sofo, 2004). Pre-service education programs face difficult challenges in overcoming challenging aspects of the socialization that has taken place through acculturation and the apprenticeship of observation. These programs are frequently unsuccessful in challenging beliefs and meeting the needs of pre-service teachers, and as such, the institutions that prepare teachers are regarded as among the weakest form of socialization (Korthagen, Loughran & Russell, 2006; Richards, Templin & Gaudreault, 2013; Stran & Curtner-Smith, 2009).

In terms of addressing negative forms of socialization, Dowling (2011) claimed that pre-service teacher education programs do little to interrupt the ideas formed through the apprenticeship of observation. Participants in her study held an individualistic view of the field of physical education, focusing on personal career development and desire to work with high-achieving pupils, despite the content of their pre-service curriculum including social diversity of pupils and more complex theoretical concepts (Dowling, 2011). However, despite the inclusion of pedagogy courses and competencies, Dowling (2011) acknowledges that the structure of the pre-service teacher education did not push for changes in beliefs or culture among the pre-service teachers. In this way, it is as much the structure of the programs as it is the views of the recruits that is in need of change. This may be a cause for concern, particularly when a main aim of physical education programs is to provide inclusive and high quality learning experiences for all students.

Studies on the effect of a critical orientation in pre-service teacher education in physical education for elementary generalist teachers have shown a positive impact on a teachers' ability to set goals and improve their understanding of the curricula and pedagogy of physical education (Curtner-Smith, 2007, Curtner-Smith & Sofo, 2004). These studies showed a small shift in views, behaviours and values as a result of the evolving norms and expectations of the field of physical education. However, Curtner-Smith (2007) emphasizes that while there were positive aspects to the influence of critical pedagogy on recruits' beliefs, overall the pre-service physical education program that was delivered was unsuccessful in challenging the underlying beliefs of the pre-service teachers.

Organizational socialization. When teachers leave their pre-service program and enter the school environment, they must navigate the social norms of their institution. Schools tend to hold custodial values and seek to maintain the status quo (Lawson, 1983b). It can be difficult for a new teacher to hold an innovative orientation in a custodial environment, particularly when aspects of their professional future are at stake (Richards et al., 2014). The teachers will engage one of a number of different social strategies to cope with the new environment if it conflicts with their values and what they were taught during their pre-service education. They may comply with the norms despite internal reservations, adjust their beliefs and behaviours to fit in, or in rare cases, they may attempt to change the status quo to align with their beliefs and knowledge about teaching (Richards et al., 2014). Richards et al. (2014) suggest that pre-service physical education teacher education programs can begin the process of organizational socialization by helping students understand the politics and bureaucracies of the education system. This may ease the transition into organizational socialization, but new teachers do not enter this phase until they secure jobs teaching in schools.

It is important to note that any new learning or critically developed beliefs a pre-service teacher may have gained through their post-secondary education are at risk of disappearing when they begin their organizational socialization, or induction into teaching (Blankenship & Coleman, 2009). This phenomenon, known as “wash-out”, can be a result of workplace factors, the subculture of the students, and/or the value of and attitude towards physical education within the institutions community (Blankenship & Coleman, 2009, Zeichner & Tabachnick, 1981). Depending on the beliefs of the staff and mentors within the new teachers’ school, the inductee may revert back to teaching strategies and curricula interpretations (more of a coaching orientation) if the institution is very custodial of physical education, or they may retain their pre-service education if placed in an environment supportive of innovative teaching (Curtner-Smith et al., 2008).

In this section I provided an introduction to important concepts in teacher socialization theory as they relate to specialist teachers in physical education. However, in Ontario, most elementary school students are taught physical education by generalist teachers (Faulkner, et al., 2008); this necessitates an understanding and review of that literature. In the following section, I will address the socialization of generalist teachers, this time in relation to teaching physical education.

Socialization and the Generalist Teacher of Physical Education

Since pre-service education does not appear to impact heavily on teachers’ underlying beliefs, their underlying attitudes and beliefs regarding teaching subjects and students that they have held since they were school students will likely impact how they teach (Jordan et al., 2009). While the literature reviewed above has considered primarily the ways in which prospective physical education teachers are socialized, this does not address the fact that currently in many

contexts, specialists do not teach physical education (People for Education, 2013). In particular, elementary physical education is often taught by the classroom teachers, a group of teachers referred to as “generalists” (Faulkner et al., 2008). As with all teachers, generalists’ socialization experiences strongly influence their confidence, interest, knowledge, and overall effectiveness in teaching physical education.

Generalist and specialist teachers alike tend to have overall positive attitudes towards the subject of physical education (DeCorby et al., 2005). Even those for whom physical education experiences were less positive experience are still able to see the benefit of physical education, although it is sometimes misplaced as a way for children to release energy rather than develop skills, knowledge, and attitudes (Morgan & Bourke, 2008). However, despite positive attitudes, generalist teachers tend to feel underprepared for teaching physical education (DeCorby et al., 2005; Faulkner et al., 2008; Fletcher & Mandigo, 2012; Morgan & Hansen 2008a, b; Tsangaridou, 2012), and neither generalist nor specialist teachers feel well prepared to adapt lessons to include a variety of physical abilities (Coates, 2012; Vickerman, 2007).

Elementary teachers who have received specialist training in physical education are more likely than their generalist counterparts to teach a global curriculum with confidence and accuracy (DeCorby et al., 2005; Simpson, Tucker & van Zandvoort, 2011). Faulkner et al. (2008) performed an analysis of perceived barriers and the quantity of physical education students receive in Ontario. They found that having a specialist or generalist teacher showed little difference in student time spent in physical education, but elementary schools with specialist teachers had higher participation rates in intramural and extra-curricular activities. Although having a specialist teacher does not automatically guarantee quality physical education, the teacher’s background in the field, confidence and enjoyment in teaching, and likelihood to have

the time and energy to initiate extra-curricular activities are all arguments supporting the benefits of having specialist physical education teachers (DeCorby et al., 2005).

Although in many cases classroom teachers see the benefits and importance of quality physical education, their preparation, training, and lack of knowledge are significant barriers to their ability to deliver a quality physical education program to their students (DeCorby et al., 2005; Faulkner et al., 2008; Morgan & Hansen, 2008a, b). In addition, generalist teachers often perceive institutional factors beyond their control (such as infrastructure, value placed on physical education by the school community) to be the largest barriers to providing quality physical education (Dwyer et al., 2003; Morgan & Hansen, 2008a).

In Ontario, pre-service elementary level teachers generally receive one credit (and often fewer), dedicated to teaching physical education. Despite Morgan and Hansen's (2008b) descriptions of feelings of incompetence and general negative experience in physical education of classroom teachers, the teachers in their study had overall positive attitudes towards physical education and its importance. However, they still felt their preparation for teaching physical education was both too short and emphasized team sports over fundamental motor skills. Fletcher (2012) had similar results interviewing two generalist teachers in Ontario, whom he had chosen based upon their negative physical education experiences as pupils. He found that the teacher education programs helped the pre-service teachers understand teaching physical education as similar to teaching other subjects, but that they still felt under-prepared to teach physical education (Fletcher, 2012). Morgan and Hansen (2008b)'s participants were able to identify the outcomes and value of physical education programming, but again were less confident in the effectiveness of their teaching.

Fletcher, Mandigo and Kosnik (2013), studied the effects of a physical education teacher education programme included in a generalist teacher education programme at a large Canadian university. In their quantitative analysis, they found that the largest positive change in mean was in the way pre-service teachers identified as “the sort of teacher who teaches PE” (Fletcher et al., 2013). The researchers then conducted interviews with a small sample of the respondents and revealed that the reason for this change may have been the challenge to their socialized ideas of what it means to be a physical education teacher. The generalist pre-service teachers’ reflections indicated that their newfound or increased comfort with the idea of teaching physical education largely stemmed from a change in their idea of what is taught in and the type of person who teaches physical education. Overall, although generalist teachers tend to hold a positive attitude towards physical education, their own lower confidence and preparation results in a lower quality of physical education programming (Morgan & Hansen, 2008b), which in turn affects the students’ learning.

With the majority of Canadian elementary students being taught physical education by generalist teachers (Active Healthy Kids, 2009; Faulkner et al., 2008; People for Education, 2013), the challenges that exist reach beyond the teachers’ ability to adapt and include students with physical disabilities in physical activity. Ontario’s lack of physical education specialists in its elementary schools (People for Education, 2013) suggests that the teachers who are expected to adapt programs and instruction for these students are often unprepared to teach physical education to a small class of non-disabled students, let alone a large group that includes a student who requires adaptations to activities or modifications to their curriculum. These teachers will thus tend to rely on their own socializing experiences as physical education students to fill in

knowledge gaps, resulting in moderate levels of confidence, with more negative experiences correlating to even lower levels of confidence (Morgan & Hansen, 2008b).

In this section I provided a review of the literature in relation to the socialization of generalist teachers teaching physical education. Since teachers' (specialists and generalists) socialization often does not include children with physical disabilities, the following section will address the socialization of all teachers in relation to adapted physical education.

Generalist and Specialist Teachers and Adapted Physical Education

The pre-service experience of elementary school teachers (or professional socialization) – both generalists and subject specialists – is an important factor in thinking about inclusive experiences, both in schools and in the community. Inclusion has become a social responsibility, and the teacher's role is to facilitate the student's participation in school activities, rather than simply giving the student the opportunity to be present in the space (Morley et al., 2005). As much as generalist teachers often feel ill-equipped to teach physical education (Coates, 2012; Fletcher, 2012; Fletcher et al., 2013; Morgan & Bourke, 2008; Morgan & Hansen, 2008a, 2008b; Hodge et al., 2009; Vickerman, 2007; Vickerman & Coates, 2009), they are likely even less prepared to adapt their physical education classes to include a student with a mobility impairment. This assumption stems from research suggesting specialist teachers often have no training or experience in this area either (See Table 2). As a result, adapted physical education tends to be poorly developed in school systems in Canada (Higgs et al., 2011). Although legislation is in place to legally support them, students with physical disabilities are often marginalized in the physical education classroom (Cairney et al., 2007).

Acculturation. According to Favazza and Odom (1997), the more a person interacts with a person with a disability, the more likely they are to be comfortable and develop a positive

attitude generally towards people with disabilities. Pugach (1992) suggests, however, that teachers generally do not have the types of experiences during their apprenticeship of observation that give them a sense of what it is like to work in “special education”, or to work with students with a disability in their classrooms. It is therefore important to ask where and how teachers are forming their preconceptions and gathering their information (Pugach, 1992). While the absence of a strong apprenticeship of observation can be beneficial (because it does not leave an overly custodial impression of “special education” on the recruit), the current nature of pre-service “special education” does little to take advantage of this unique situation by providing a positive experience that may contribute to the formation of an apprenticeship of observation.

Professional Socialization. Studies have consistently shown that a practical, “hands-on” approach to adapted physical activity education has a significant effect on teacher confidence, attitude towards, and efficacy in teaching students with disabilities (Conderman, Johnston-Rodriguez, Hartman & Walker, 2013, Sokal, Woloshyn & Funk-Unrau, 2014). For example, an Irish study of 64 pre-service teachers participating in a 10-week, hands-on physical activity program for children with disabilities found all but one teacher reported increased confidence and positive attitude changes (Tindall, MacDonald, Carroll & Moody, 2015). Although these types of programs exist and flourish on several Canadian university campuses (for example, Acadia University’s S.M.I.L.E Program, Brock University’s S.N.A.P. program, Memorial University of Newfoundland’s P.L.E. program, and Mount Royal’s CAPA program), participation by pre-service teachers is not compulsory.

Some reasons for the discomfort in adapting physical education may include a lack of or incomplete teacher training for adequate adapted physical education (Coates, 2012; Vickerman, 2007), negative attitudes towards inclusion in physical education (Folsom-Meek & Rizzo, 2002;

Hodge et al., 2009; Jerlinder, Danermark & Gill, 2010; Loreman, 2007; Sharma, Forlin, Loreman & Earle, 2006), a lack of confidence or feeling of ill-preparedness (Coates, 2012; Hodge et al., 2009; Vickerman, 2007; Vickerman & Coates, 2009), poor resource and funding access (Hodge, et al., 2009; LaMaster, Gall, Kinchin & Siedentop, 1998; Morley et al., 2005; Vickerman & Coates, 2009), or accessibility factors (Arbour-Nicitopoulous & Martin Ginis, 2011; Morley et al., 2005). In short, unpacking the professional socialization of teachers who work with children with disabilities is of primary importance in understanding their comfort and confidence to work with children from this population.

Despite the wide gaps in many Canadian teachers' abilities to teach children with disabilities in the best ways possible, Canadian pre-service teachers have significantly more contact with children with disabilities during their socialization (over double the next highest country) compared to those in Australia, Hong Kong and Singapore (Sharma et al., 2006). For example, in Alberta, inclusion is prioritized in programs for pre-service primary teachers in the province, which may be a contributing factor to the generally positive attitude towards inclusive education displayed by pre-service teachers there (Sharma, et al., 2006). The general acceptance of inclusion by the culture, coupled with the experiences of the pre-service teachers as students in inclusive settings themselves likely plays a significant role in forming their attitudes (Sharma et al., 2006). However, despite the overall positive attitude and high contact, 81% of Albertan pre-service teachers in Sharma et al's (2006) study indicated that they had average, low, or very low level of confidence teaching students with disabilities. This may be a result of the type of contact, and the difference between a child living with a disability attending their school (where a peer may know their name and that they have a disability but little else), and the child living with a disability being a highly included member of the classroom or social group where students

were able to interact with each other socially. This level of confidence supports Pugach's (1992) suggestion that teachers do not really have an apprenticeship of observation to draw from when it comes to teaching students living with a disability.

In examining the preparation of physical education teachers to teach inclusively, Coates (2012) indicated that 67 per cent of pre-service physical education students were confident in adapting their lesson plans to facilitate inclusion, yet only 42 per cent stated that the training they received in their respective program was responsible for this confidence. This supports the claims of Jordan et al. (2009) that the relationship between inclusive practice and effective teaching may depend on teachers' underlying epistemological beliefs, along with teacher socialization and the *apprenticeship of observation* (Lortie, 1975). In addition, these studies focused on pre-service physical education teachers, who are typically comfortable and knowledgeable in a variety of physical education content areas and are aware of options for modifying activities to be inclusive across a wide variety of abilities (Jordan et al., 2009). Their lack of confidence in teaching children with disabilities suggests that pre-service generalist teachers who lack similar comfort and knowledge of physical education will have significant struggles in working with and adapting activities to meet the needs of all children whom they teach. Given Jordan et al's (2009) statement about the important role of teachers' beliefs about teaching students with disabilities, it is worth considering this in more detail, which I do in the following section.

Teacher Attitudes and Beliefs. In studying pre-service teachers' underlying epistemological beliefs and their effect on learning, Jordan et al. (2009) asked what might be done to change teachers' beliefs in order to increase the effectiveness of their teaching practices. They found that the more effective teachers were devoting time to all students (including those

with “special education needs”), and were better at eliciting higher-order thinking in students. The better time management and effective use of instructional time resulted in students receiving more instructional time from the pre-service teacher, leading to effective teaching of all students, regardless of whether they were labeled with a disability or not (Jordan et al., 2009). This indicates that inclusion strategies benefit all students and can lead to more effective teaching, better use of instructional time, and increased inclusion of exceptional children, including in physical education.

The strongest predictor of a positive attitude towards inclusion in Jerlinder et al.’s (2010) study of Swedish physical education teachers was the teachers’ pre-service or professional development training related to inclusion, adaptation, or addressing pedagogical challenges in inclusion, which may indicate that pre-service training can be effective in challenging previous socialization of pre-service teachers. Again, this supports Pugach’s (1992) assertion that their experiences as students do not constitute an apprenticeship of observation, meaning the pre-service education does not need to overcome a strong bias or underlying belief based on years of observation. A rejection of the insinuation that inclusion is stressful or takes time away from other students was the second highest indicator, with support from the school management (including in-service opportunities and physical accessibility of buildings) also impacting attitudes towards inclusion in physical education teachers (Jerlinder et al., 2010). Despite their already positive attitudes and motivation to teach children with physical disabilities in physical education, the participants in Hodge et al.’s (2009) study were simultaneously concerned by a perceived lack of preparation, knowledge, and ability to ensure the students experienced success. Since these teachers were physical education specialists, it is likely they already held positive

attitudes towards physical education, but could be socialized through pre-service education to hold value in inclusion practices as well.

The development of positive attitudes in educators is vital to the accomplishment of inclusive education (Jobling et al., 1999; Loreman, 2007, Morgan & Hansen, 2008b). Teachers need to be given the opportunity to experience success working in an inclusive environment, which naturally leads to increased confidence and more positive attitudes (Loreman, 2007). Negative attitudes towards inclusive education have been correlated with low expectations for the achievement of children with disabilities, which in turn has a negative impact on student performance (Jobling et al., 1999; Loreman, 2007).

The comfort and confidence with which a teacher leads a physical education class that includes a child with a physical disability is largely impacted by their professional socialization. Pugach (1992) suggests that teachers (and people in general) have very little exposure during their apprenticeship of observation to adapted programming, leaving the university-specific period of professional socialization with a large gap to fill. Research suggests that, to some extent, this gap can be filled successfully through hands-on programs (Conderman et al., 2013; Loreman, 2007; Sokal et al., 2014; Tindall et al., 2015), and by challenging teachers' attitudes and beliefs (Jerlinder et al. 2010; Jordan et al., 2009); however, how teachers are placed to do this in Ontario remains largely unknown. In the following section, I provide an overview of the extent of pre-service teacher education in physical education and "special education" in Ontario.

Elementary Physical Education and Special Education Teacher Education in Ontario

Teachers who have completed their teacher education (usually a Bachelor of Education) at an institution accredited by the Ontario Teachers College are eligible to teach in Ontario. Accreditation standards include the length of the program, number of practical days, and an

outline of knowledge areas teachers must possess (Ontario College of Teachers, n.d). The teachers are required to be familiar with curricula and policies applicable to their areas of study, which includes specialist classroom/generalist teachers, physical educators, and “special education” specialists.

The Ontario College of Teachers does not require teachers in the elementary school grades to carry a specialist designation, although they are offered through additional qualification courses and experiences (Ontario College of Teachers, n.d). A generalist elementary school teacher’s preparation prior to September 1, 2015 included: 40 per cent of one year on teaching methods, 20 per cent of one year on education foundations (history, philosophy and psychology of education), 20 per cent of one year on any other area of education, and the remaining time in practice teaching environments (Ontario College of Teachers, n.d. p. 1)

In the province, each individual elementary school is responsible for the hiring and placement of their own teachers. In 2013, 45 per cent of schools did not have access to a physical education specialist (People for Education, 2013). With many physical education teachers at schools being hired in a part-time capacity, this statistic does not reflect the number of students receiving physical education instruction from a specialist teacher (People for Education, 2013). However, it should also be noted that although a specialist designation is available, it is up to the individual school principal to determine the specialist training they require, if any, of their physical education teachers (People for Education, 2013). This opens the door to the potential that a teacher with no physical education specialty courses can be hired as a physical education teacher at an elementary school.

Although specialist pre-service teacher education and professional development courses are available in both Physical Education and in Special Education, the two subjects do not appear

to cross paths, at least with any specific intention. “Special education” covers a huge variety of learners, learning styles, behaviour modifications, and so on, but does not address adaptations or modifications within a physical education context. Likewise, physical education specialist courses cover a wide variety of subject matter, but do little to develop knowledge or sometimes even awareness of adaptations and modifications for a student with a physical disability (Coates, 2012; Vickerman, 2007).

Despite a number of different available resources, both with and without cost (Physical and Health Education Canada’s [PHE Canada]’s *FUNdamental Movement Skills* (Lloyd & Legg, 2009) and related series, community wheelchair sports organizations), there are many pitfalls in the field of adapted physical education in Ontario. There is variation across standards for adapted physical education between the national level, provincial levels and school board levels (Morrison, 2014). Morrison’s (2014) recent research on constructing resources for adapted physical activity suggests that they are most effective when interactive, include specific and realistic scenarios, and give opportunities for experiential education, problem-solving, and observing children in action. Although the resources available are a good start for teachers looking for ideas, the most beneficial resources in the field of adapted physical education tend to include some form of face-to-face, interactive learning (Morrison, 2014). This presents obvious logistical challenges to providing assistance to and improving the confidence of teachers teaching physical education to students with physical disabilities.

Chapter Summary

In this chapter, I have described how socialization theory can be used to understand the experiences of generalist teachers, physical educators, and both populations in relation to attitudes towards children living with a disability. Acculturation describes the process,

beginning at birth, which socializes a person to their culture and its norms. Professional socialization, occurs throughout a child's schooling as they observe the methods and strategies through which their teachers teach. Because of the duration and resulting strength of the apprenticeship of observation in forming beliefs, pre-service teacher education must overcome its effects by challenging students to think critically about their beliefs and behaviours.

Organizational socialization and the induction into teaching again challenges new teachers, this time to maintain the beliefs they have formed through critical thinking.

Although the attitudes of teachers towards physical education are generally quite positive, those with no formal training in physical education feel underprepared to teach the subject. The same can be said about teacher attitudes towards adapted physical education for students with physical disabilities. The lack of experience observing adapted physical education in action leaves teachers with little experience to rely on when needing to adapt a physical education curriculum to ensure a student with a mobility disability is learning at an appropriate developmental level. Pre-service teacher education can be improved to further challenge engrained beliefs established during acculturation and professional socialization in new teachers, but further instruction in physical education and its adaptations is required to improve the effective teaching of physical education for students with physical disabilities.

In the next chapter I outline and justify the methodology and methods for conducting the research. A focus is given to the protocols I followed to collect and analyze data to enable me to address the research questions.

Chapter III – METHODOLOGY & METHODS

Introduction

In this chapter I describe the methodology and outline the methods used to collect and analyze data. As such, the purpose of the chapter is to justify the methodology and methods in relation to the research questions. This chapter has five sections. In the first section, I will discuss the research design and the qualitative methods employed, along with the characteristics of such research and my role as a researcher. The second section gives the context of the research, including a summary of the participants and settings in which the study was conducted. In the third and fourth sections the methods for data collection are discussed, and then procedures for data analysis are detailed, respectively. The chapter will conclude with the fifth section, where I outline the ethical considerations made in conducting the research.

Research Approach and Research Questions

This study employed an interpretive, qualitative approach, which Bogdan and Biklen (2007) describe as commonly including some combination of the following five features.

Specifically, qualitative research:

- Is naturalistic. It has actual environments as the source of data and uses the researcher as the data gathering instrument,
- Has a focus on meaning and the participants' perspectives,
- Is descriptive, using words and/or pictures (rather than numbers) to illustrate the data,
- Is concerned with process, asking “how” instead of focusing strictly on outcomes and/or,
- Is inductive, finding new meaning from the data, generally not looking to prove or disprove hypotheses.

Bogdan and Biklen (2007) state that qualitative research may not include all five of these features, and that the features that are included in a qualitative research project will vary in degree. However, these guidelines provide a frame of reference to describe this research, which is guided by the following research question and sub-questions.

- *How does the socialization of teachers prepare them for teaching a student living with a physical disability? Specifically, how and where do teachers gain their experience, knowledge and skills about teaching children living with physical disabilities in physical education?*
- *To what extent are specialist and generalist teachers who teach physical education equipped with sufficient knowledge and experiences to effectively include a child living with a physical disability in a physical education class?*
- *What resources and supports are available to teachers and to what extent does their socialization prepare them to access these resources (during pre-service teacher education, through professional development education, literature, colleagues, service organizations, and so on)?*
- *How do available resources and support influence teachers' confidence in facilitating successful inclusion of a child living with a physical disability in the physical education classroom?*

In order to address the research questions comprehensively, it required me to look at the settings and experiences of primary level teachers of physical education (taken from the naturalistic settings in which they work), and rely on their perspectives to tell the story of student inclusion in their physical education classes (meaning). The research is descriptive and interpretive, drawing mainly from interview transcripts and field notes to describe and interpret

the experience of physical educators in primary grades teaching students with physical disabilities (Bogdan & Biklen, 2007). It is also concerned with process, including how teachers' socialization helps to form their expectations of students with disabilities, and how they are prepared to include students with physical disabilities in their teaching and in their physical education classes. This study also looks at what resources, support, and professional development opportunities are available and how they influence teachers' comfort and confidence designing an inclusive environment for students with physical disabilities. In addition to including the first four features of Bogdan and Biklen's (2007) description of qualitative research, the data were analyzed using inductive methods to allow for new interpretations not specifically drawn using deductive methods informed by socialization theory.

The research seeks to better understand the experiences of teachers who teach physical education to one or more students living with a physical disability, identifying themes and categories rather than confirming hypotheses (Gratton & Jones, 2010). The findings of this study are not generalizable to the experiences of all physical education teachers who teach children with physical disabilities; rather, the aim is to provide a deeper understanding of the circumstances of the teachers interviewed. The detailed naturalistic accounts provided a rich description of the experiences of these teachers as they navigate the teaching of physical education in Ontario. In turn, it is anticipated that readers of this research will find situations that resonate with their own, so there may be some transferability as readers find insight from the description and interpretation of the experiences of others, and apply them to certain situations in their own contexts (Patton, 2002).

My Role as a Researcher. In qualitative research, the researcher is the instrument through which data is generated, collected, analyzed, and interpreted (Bogdan & Biklen, 2007).

This means that in order to understand my interest in this topic and how I came to form my research questions, I must acknowledge and address my motivations, biases, and experiences in the subject area of adapted physical education. This will also provide a window into understanding how my experiences will shape how I interpret the data. Although I provided a brief description of the reasons why I came to this particular study in Chapter One, in the following section I will provide a more specific account of personal experiences that possibly inform biases I have in designing the research, and collecting, analyzing, and interpreting data.

As the daughter of a pediatric nurse with an incredible compassion for children who had experienced the healthcare system, I was encouraged even as a young child to ensure I was respectful of and tried to include, peers who may be seen as different. Whether this was a coincidental or guiding factor, my exposure to and interaction with persons living with a disability prior to postsecondary education was abundant, and increased as I began volunteering and later working as a “special needs” swimming instructor. My high school was the home of a “Functional Life Skills” (FLS) program for students with cognitive or more severe physical disabilities, and I experienced there some wonderful physical education teachers who were friendly and encouraging towards all students, especially those in the FLS program. Yet, on reflection, I never received any exposure to parasport, and aside from occasional use of the weight room, never witnessed these students participate with their peers in traditional physical education. In fact, I often saw some of these students simply walk around the perimeter of the gym with their peer support leader (an elective course for “mainstreamed” students) while the rest of the students played a sport separately.

As my understanding of disability and adapted physical activity grew through courses in my undergraduate degree at Acadia University, I became more and more interested in the

physical activity of children with physical disabilities. I participated extensively in the SMILE (Sensory Motor Instructional Leadership Experience) Program, a physical activity-based program for children with any special need. This led to my employment at a summer camp for children with physical disabilities, and to coaching the sport of wheelchair basketball, both of which have been vital to the development of the research questions in this study.

Through these two activities, I have discovered that the many young adults with physical disabilities seem to have one thing in common – physical education is a touchy subject. Out of curiosity I often asked why, and more often than not the children who were more sport-inclined (and would therefore likely enjoy physical education if they were able-bodied) complained of not being allowed to participate for safety concerns, or that their teacher didn't know how to include them in the activities the rest of the class was doing.

All of this led me to reflect on why teachers were uncomfortable making adaptations and what might help them increase their confidence when it comes to making adaptations to their classroom in order to include a child who used mobility equipment or who struggle with fundamental movement skills compared to their peers. These experiences foster biases that I have to keep in mind in my everyday life when I encounter people with no positive exposure to persons with a disability. For the purposes of the completion of this study I was conscious of my bias, and tried to place myself in the position of a new teacher with no previous exposure to adapted physical activity. In performing data analysis, I took into account the type of language participants were using, as well as the years and eras they spent teaching to try to limit the bias of my own beliefs regarding physical activity. That said, my biases cannot be ignored and for the purposes of this study, my experiences working with children with disabilities and consciousness

of the limited exposure to physical activity that many of these children often receive, my experiences suggest I may be able to garner unique insights into the research problem.

Context

Since 1980 and the introduction of Bill 82, publicly funded school boards in Ontario have been responsible for providing students with special needs appropriate programming in their schools. Despite the legislation, elementary school teachers are not required to carry a subject specialization, although specialist qualifications in Physical Education and Special Education (distinctly separate subject areas) are available through Additional Qualification courses and some Bachelor of Education programs. However, a 2008 study of over 500 Ontario elementary schools showed only 14 per cent of schools had a full time specialist physical education teacher (Faulkner et al. 2008). In 2013, a survey of 1,000 elementary and secondary schools indicated that Physical Education specialist teachers were employed in 45% of Ontario publicly funded elementary schools, with the vast majority being part-time (People for Education, 2013). This is the highest percentage of schools employing a physical education specialist in at least 14 years, with the Greater Toronto Area bringing up the average considerably with over 70 per cent of their schools employing a physical education specialist (People for Education, 2014).

In order to adequately address the research questions, the participants in this study needed to be elementary school teachers in the primary grades (Grade 1 to Grade 3). All of the participants in this study should also have taught a student diagnosed with a physical disability in the primary grades in Southwestern Ontario, Canada. The primary grades were selected as the focus, in part, to coincide with the emphasis currently being given to early learning experience in the Canadian Sport for Life's Long Term Athlete Development Model (Balyi et al. 2005; Higgs et al., 2011; Lloyd & Legg, 2009). Children in the primary grades fall approximately into the

FUNDamental stage, during which children should be learning fundamental motor skills as the foundation to pursuing sport skills. This usually occurs during or is supplemented by physical education. This stage was chosen because young children typically do not possess adequate levels of many of the fundamental movement skills required to perform the basic skills of sport (Balyi, et al., 2005).

Participants. Teachers were selected using purposeful sampling (Bogdan & Biklen, 2007), whereby participants with specific backgrounds and experiences were selected “to facilitate the expansion of the developing theory” (p. 73). The participant selection criteria were purposely kept as broad as possible in the initial stages of the research in order to recruit an appropriate number of participants while still meeting the key components of having taught a child with a physical disability in primary-grade physical education. As such, the participants ranged in length of teaching experience, post-secondary education (type of undergraduate degree, specialty in Bachelor of Education program if applicable), and number and type of physical disability their student(s) experienced. The participants also included a combination of subject specialists (either Physical Education or Special Education) and generalist teachers, allowing the researcher to identify and describe any differences in confidence and socializing experiences based on the amount of training the teacher had in the physical education of young students. Although teachers were not required to have any Additional Qualification training (a professional development option for teachers in Ontario), probe questions were asked if they identified that they had participated in these professional development opportunities in either Special Education or Physical Education.

Contacts previously known to the researcher within a convenient geographic area (that is, approximately one hour driving distance from the researcher’s home) were used as the primary

source of participants, followed by a snowball sampling technique, whereby the identified participants were used as a point of contact for further recruitment (Bogdan & Biklen, 2007). The snowball sampling technique was used to find teachers who expanded the range of teacher education, teaching experience, types of students taught, congregated and mainstreamed environments, and gender of teachers, as well as providing a mix of both specialist and generalist teachers. This was done to expand the depth and variety of experiences of the teachers, and to describe further subjective differences in the teachers' practice.

The Southwestern Ontario area was selected to maintain the feasibility of the study, as the researcher was living in the region at the time the research was conducted. However, the large population of the area also lent itself to a level of diversity not found in smaller regions, meaning teachers in the area are exposed to a much broader range of students. Five of the teachers were employees of the same school board, and the sixth teacher was from a second board in the area.

Of the six participants, four were female and two were male. Two of the teachers have been teaching for fewer than five years, three for between 23 and 26 years, and one was recently retired, having taught for 31 years. The number of students living with a physical disability the teachers had taught ranged from approximately four to over 200. A descriptive summary of participants' demographic characteristics (including years and nature of teaching experience) is presented in Table 1. To protect participants' rights to anonymity, pseudonyms are used when referring to individuals or institutions (such as schools or school boards).

Table 1

Participant Demographic Information

<u>Participant</u>	<u>Margaret</u>	<u>Patrick</u>	<u>Sheila</u>	<u>Colleen</u>	<u>Joanna</u>	<u>William</u>
Experience	25 years	31 years	25 years	5 years	3 years	23 years
Undergraduate Degree ¹	BA	BA	BPE	BASc	BAH	BHK
Other Post- Secondary Education	-	Diploma Recreation	-	Diploma ECE ²	MA (Child Study)	MHK
Education Degree	BEd	Bed	BEd	BEd	ECQ	BEd
Special Education AQ ³	Part 1, 2, Specialist	None	None	Part of DHH ⁴	Part 1	None
Physical Education AQ	None	Part 1, 2	AQ Instructor	None	None	None
Specialized Training	N/A	N/A	APE Course (Undergraduate)	ASL	N/A	CP ⁵ Athletics Coach
Number of students with PD	200+	4	<6	24+	24+	100+

Table 1 - Demographic data for study participants.

¹ BA/BAH: Bachelor of Arts/with Honours; BPE: Bachelor of Physical Education; BASc: Bachelor of Arts and Sciences; BHK: Bachelor of Human Kinetics, BEd: Bachelor of Education, ECQ: Elementary Certification of Qualification

² Early Childhood Education

³ Additional Qualification Course/s

⁴ Deaf and Hard of Hearing

⁵ Cerebral Palsy

In considering the participant demographic information presented in Table 1, Margaret, Colleen, and Joanna all teach in some form of a “congregated setting”, which is a specialized program used in some school boards in Ontario. The congregated schools or classrooms are segregated environments designed to meet the needs of a particular group of students identified by the “special education” system, for example, students who are diagnosed on the Autism Spectrum or students with Fetal Alcohol Syndrome. A school-wide congregated setting is one in which all of the students at the school have similar needs, while a congregated classroom would include one or more classes specifically for an identified group of students within a mainstream school. For example, Margaret’s school population is entirely comprised of students with complex physical disabilities, while Colleen teaches in a congregated classroom for Deaf students within a mainstream school. Although by traditional definition the students’ hearing impairment or Deafness does not necessarily fit into physical disability categories, as mentioned above, this study defines physical disability in relation to physical education, including the modification of rules to accommodate a student’s needs. In addition, some of Colleen’s students have accompanying physical disabilities, and Colleen regularly identified areas in which all of her students struggle with physical activity skills. Joanna teaches in a unique classroom environment that practices integration within a ‘congregated’ school. Some of Joanna’s students attend the school to receive intensive therapy for their physical disability, while others she describes as “typically-developing” (they do not experience any identified disability). Those children in her class are the only “typically-developing” children in the school.

Margaret has been teaching for 25 years and completed her “Special Education Specialist” designation through Additional Qualification courses available to teachers and regulated by the Ontario College of Teachers. Joanna and Colleen are newer teachers with 3 and

5 years of experience, respectively. Both are considered generalist teachers; that is, they teach physical education in addition to most other elementary subject areas to the same students. Joanna completed Part 1 (of 3) Special Education Additional Qualification during her post-secondary education, while Colleen is currently enrolled in her Additional Qualification for teaching students who are Deaf and hard of hearing.

Sheila, William, and Patrick all teach in mainstream schools, where the vast majority of students are not diagnosed with physical or intellectual disabilities. Sheila has been teaching for 23 years as a specialist physical education teacher in elementary schools in the downtown core area of a large city. She is also an Additional Qualification instructor (that is she instructs ongoing professional development courses in physical education to practicing teachers). Patrick recently retired from teaching after 31 years, having started as a generalist teacher before completing his Physical Education Specialist designation, also through Additional Qualification courses. The majority of his teaching was in physical education. William has been a teacher for 23 years, and taught many students with disabilities in mainstream classes (including physical education) as a generalist elementary school teacher. He is now a school principal, and provides guidance to his staff on inclusion of students with disabilities or differences.

Of the six teachers, only Margaret, Colleen and Joanna hold any form of Special Education Additional Qualification. Patrick and Sheila were the only participants to formally hold Physical Education specialist designations, although Margaret taught physical education exclusively at her school for 10 years, and William worked extensively with athletes with physical disabilities before pursuing his Bachelor of Education.

Data Collection Methods

Three types of qualitative data were collected for this study to offer insights into the participants' experiences. First, the data were comprised primarily of first-person reflections on teaching experience guided by a semi-structured interview. Second, field notes were used to assist with triangulation of the data. Third, the interview and field note data were supplemented by a document analysis of course calendars from the 13 publicly-funded Ontario universities offering Bachelor of Education programs (see Table 2). The purpose of reviewing all sources of data was to better triangulate the findings by understanding the different pathways and preparation requirements of Ontario teachers during their qualifying education, specifically in the areas of physical education and general special education.

Interviews. There were two phases of interview data collection in this study. Two interviews were conducted to allow for reflection and processing in between meetings by the participants, and to allow the researcher time to develop and refine phase two interview items.

Semi-structured interviews were selected over structured or unstructured interviews to allow me to direct the conversation without limiting the topics to the prepared questions (Patton, 2002). This strategy gave the participants specific areas to reflect on, while also giving rise to new situations or evidence not included in the original script. The semi-structured interviews began with a set of specific, open-ended questions, and I then asked specific questions related to their experiences, knowledge, and skills for teaching students with physical disabilities. I employed probe questions throughout the interviews to gather additional information or expand on a participant's statement (Bogdan & Biklen, 2007). The semi-structured approach gives confidence in the ability to compare data across subjects, while still collecting the information in the participants' own words (Bogdan & Biklen, 2007).

The first interview phase explored participants' backgrounds concerning working with children with physical disabilities. The interview began with the collection of demographic information (much of which is presented in Table 1), including how long the subjects have been teaching, how many students with physical disabilities they have taught in physical education, where and what they studied for their post-secondary education, and how they felt their post-secondary education had prepared them for creating inclusive lesson plans.

Following the gathering of demographic and background information, Phase One questions were divided into three main categories: experience of adapted physical activity prior to teaching, accessibility and inclusion experiences, and progression of confidence teaching children with physical disabilities. Questions were intentionally worded to be open-ended, and to provide opportunities for teachers to speak both specifically and generally about their experiences. See Appendix A for a complete list of the pre-formed questions. Each interview lasted approximately one hour. Participants were asked to recall their experiences as children and adolescents while interacting with (or observing others interacting with) peers with a disability, and then to follow these lived experiences through the participants' education in schools and university.

The second phase of data collection involved a second similar-length interview, this time covering four categories. Specifically, teachers were asked about their personal experiences teaching children with physical disabilities, accessing resources and information, equipment availability and use, and support systems that they experienced or had in place. During the second phase, the focus was on their perceived confidence in teaching the children fundamental motor and sport skills, as well as the availability of confidence-building or supplementary

resources that could be accessed and used by the teacher. See Appendix B for the pre-formed questions used in the second phase of data collection.

The interviews were audio-recorded using the iPad application SoundNote, which allows the user to make notes within the program that bookmark and link to that moment in the audio file. Recording the interview gave subjects the ability to speak freely while allowing me to make notes without interrupting the flow of the interview. I transcribed all interviews verbatim in preparation for analysis.

Field Notes. Field notes can be broken down into two types, descriptive field notes, and reflective field notes. Descriptive field notes provide settings and actions, and seek to paint a picture of people and events. Reflective field notes are made from the perspective of the observer and their experiences, and may include ideas or concerns about the participant's statements (Bogdan & Biklen, 2007). In this study, field notes were mainly reflective, and were used to refine the interview questions, and formulate probe questions. Descriptive field notes were also used when a teacher demonstrated or showed a piece of equipment or particular room in their school.

Analysis of Initial Teacher Education. All of the teachers interviewed completed their initial teacher education program in the province of Ontario. To better understand the preparation teachers received in the completion of the requirements to be accredited by the Ontario College of Teachers, a descriptive analysis of coursework at all publicly-funded Ontario Universities (offering a Bachelor of Education) was conducted. Five of the six participants completed a Bachelor of Education degree (which followed completion of an earlier Bachelor's degree), while the sixth completed a Master's program leading to equivalency and accreditation with the Ontario College of Teachers. The data for this analysis were compiled using publicly available

web-based course calendars and course requirements to find out which elementary teacher education programs include compulsory versus elective Physical Education or Special Education courses for generalist teachers. First, I compiled a list of universities in Ontario offering a Bachelor of Education program or Ontario College of Teachers equivalency. From there, I accessed their course websites and reviewed the compulsory courses, elective courses, and academic calendars for health and physical education courses, and for courses including topics related to disability (looking for key terms such as “special needs”, disability, inclusion, adapted, inclusive or “special” education, diversity, or exceptional students). Courses were included if their course description did not exclude physical activity or physical disability as a potential topic (for example, one “special education” course focused exclusively on literacy and was therefore excluded from the analysis). I also looked for courses that encompassed both topics (usually titled adapted physical education, or adapted physical activity). None of the universities offered an adapted physical activity course within the education department; course offerings were through a Kinesiology or Physical Education department, meaning students whose undergraduate degree was in one of these programs would have the course as an elective option. A summary of Ontario teacher education program curricula (specifically related to physical education and general special education) can be found in Table 2.

Table 2

Physical Education and Special Education Curriculum Requirements in Teacher Education Programs in Ontario, to 2014

<u>University</u>	<u>Physical Education Instruction</u>	<u>Special Education Instruction</u>
Brock University	Health and PE Curriculum and Pedagogy (0.5 credit ⁶)	Socioemotional/Physical Processes and the Exceptional Learner (0.5 credit), Programming for Inclusive Classrooms (0.25 credit)
Lakehead University	Curriculum and Instruction in Health and PE (0.25 credit)	Teaching Exceptional Students (0.25 credit)
Laurentian University	Primary/Junior Health and PE (2.0 credit)	Educational Psych./Spec. Ed (3.0 credit)
Nipissing University	Health and Physical Education (1.5 credit)	Educational Psych. and Spec. Ed (3.0 credit)
Queen's University	Health and Physical Education (1.5 credit)	
Sir Wilfred Laurier University	Health and Physical Education (0.25 credit)	Special Education I & II (0.5 credit total)
Trent University	Movement: Physical Education and Dance in the Elementary classroom (3.0 credit)	n/a
University of Ontario Institute of Technology	Health and Physical Education (1.5 credit)	Individual Needs and Diversity (1.5 credit)
University of Ottawa	Personal and Social Studies and Health and Physical Education (3.0 credit)	Education of Exceptional Students (3.0 credit)
University of Toronto	No specific course	No specific course
Western University	Curriculum and Pedagogy in Elementary Health and Physical Education (.25 credit)	Educational Psych. and Spec. Ed.(1.25 credit)
Windsor University	Health and Physical Education (3.0 credit)	Differentiated Instruction (3.0 credit)
York University	Health and Physical Education (1.5 credit)	Inclusive Education (3.0 credit)

Table 2 - Curriculum Requirements of Publicly Funded Ontario Universities, to 2014.

⁶ Credit weighting is relative to the respective school's scale.

All but one of the 13 universities included a compulsory health and physical education specific course as part of their pre-service teacher education program for generalist teachers. Eleven of the universities offered a specific “exceptionalities” course of some sort, however, they varied in topic and one was removed from analysis as the title and description indicated physical disability or physical activity would not be a component of the course (focusing instead on literacy). Three of the courses included both education psychology and “special education” in one course. In reviewing academic calendars for course descriptions, none of the descriptions specifically mentioned physical disability or physical education.

Data Analysis

The data were analyzed in two main steps, an inductive and a deductive. The first involved an inductive approach to attempt to understand the experiences and processes through which teachers learn to teach children with physical disabilities in physical education. This involved reading the transcripts in detail, noting important themes, regularities and patterns, and developing phrases or words to represent these topics (Bogdan & Biklen, 2007). These topics were then further grouped to form codes, or categories, which were analyzed to give a picture of what the data presents. After an inductive analysis, a second reading of the data using deductive analysis was performed using socialization theory. This approach was similar to the first, but with a pre-defined group of categories, aiming to apply the stages of socialization theory to the data.

As explained in Chapter Two, this study uses teacher socialization as a theoretical framework, with particular attention given to Lawson’s (1983a) description of three phases of socialization (acculturation, professional socialization, and organizational socialization). The main tenets of socialization theory guided the formulation of most of the interview questions,

exploring what exposure to teaching students living with disability the teachers had experienced prior to and during their pre-service teacher education. Lortie's (1975) theorizing suggests that many teachers revert to teaching as they were taught, and as such, this assumption guided several questions and issues present in the data collection and analysis.

The complete data set collected in Phase One (that is, the university programs, first interview, and field notes) were analyzed using constant comparative techniques, which allow the direction of the research to be refined throughout data collection by focusing on particular categories that emerge (Bogdan & Biklen, 2007). As explained above, each participant's interview transcript was read first, and then coded for key concepts, common themes or significant events. They were then compared with other participant's experiences to identify significant elements, which guided the interview and probe questions for future subjects to provide many incidents of the focus categories (Bogdan & Biklen, 2007). My field notes were also used to provide any insights or ideas that emerged in my mind during the data collection process, such as key phrases or emphases that I noted from interviewing participants.

The data collected in Phase Two were also analyzed using the same approach. Following the analysis of Phase Two data, the categories were compared with those generated from Phase One in order to identify critical incidents, common experiences or themes, and indicators that may lead to increased or decreased confidence to teach physical education to children with physical disabilities. Once the first round of coding was complete, the transcripts and field notes were read again from a deductive angle, guided by socialization theory (Bogdan & Biklen, 2007). The analyzed interview and field note data were then compared to the results of the analysis of teacher preparation, to identify strengths and weakness of the programs available to

and required of pre-service teachers, and to corroborate claims regarding the extent of preparation to teach children living with a physical disability in physical education.

Trustworthiness. Many methods can be used to ensure the trustworthiness of data in the absence of statistics, and can be accomplished using triangulation and member-checking. The term triangulation originates in the science of land surveying and geometry (Bogdan & Biklen, 2007). With a single source of data, one can only determine their position relative (on a line) to that data, but with a second source, a person can locate themselves at the intersection of the two landmarks, or sources of data (Patton, 2002). The same can be said with qualitative research. By using more than two sources of data for this study, the researcher was able to corroborate and correlate the interpretations of the interview transcripts and field notes with the teacher preparation information, and corroborate the findings with prior research involving the students themselves, as well as the researcher's anecdotal and lived experience.

Member-checking is a form of validation used in qualitative research. In attempting to offer trustworthy interpretations of the data, participants in this study were given the opportunity to review the transcripts of their interviews, and the opportunity to comment on, add, refine, elaborate on or delete parts of their responses. None of participants requested changes or additions to the transcripts.

As a means of gaining a fuller understanding of teacher preparation and confidence, as well as to aid in triangulation, multiple sources of data were used. The interview transcripts and field notes were analyzed through two lenses, both inductive and deductive (Socialization Theory). A third data source in the form of university course offerings for Bachelor of Education students was also added to increase the trustworthiness of the study. In addition, the information

provided in the transcripts was consistent with the analysis of teacher preparation as well as the researcher's own roles and experience (conveyed tangentially through reflection and field notes).

Ethical Considerations

Memorial University of Newfoundland's Interdisciplinary Committee on Ethics in Human Research approved this research. All participants in the study were first provided with a letter of invitation and copy of the informed consent materials as approved by the research ethics board. Participants reviewed this material with me and were provided with the opportunity to ask any questions, and signed the consent form before proceeding with the interview. To protect the privacy of participants, each teacher and their school was provided a pseudonym for use throughout this thesis and related documents. This was considered especially important as the research questions sought to identify gaps or weaknesses in teacher preparation and professional development, but in order to provide a trustworthy account of the participants' experiences, I had to ensure they felt able to speak freely about their experiences.

All documents were transferred directly from the recording device to a password-protected computer hard drive, with the interview transcripts added as transcription occurred. To maintain a maximal level of comfort with the process of being interviewed, I conducted the interviews in a location of the teachers' choice. Most of the participants chose to use their classroom or office space, although two chose to have at least one session at a local quiet coffee shop.

Chapter Summary

This chapter has described the methodology and methods used to collect and interpret the data. The research questions were presented, and the research design described in detail. The qualitative methods employed include first person reflections through interviews, field notes, and

document analysis. Context was given to the research, including the role of the researcher, and a summary of the participants. The methods of data collection and interpretation are detailed, and ethical considerations provided. The next chapter will briefly present the findings of the research.

Chapter IV - FINDINGS

Introduction

As discussed in Chapter Three, qualitative data were gathered through face-to-face interviews, field notes, and document analysis, and then analyzed using a two-step approach. In the first step, I performed an inductive analysis on the interview transcripts and field notes, allowing data to be read without mapping any preconceived theoretical framework onto the data. The second step consisted of deductive analysis using socialization theory as a guide. Using socialization theory allowed the data to be read and understood through a particular lens; in this case, the role that teachers' socializing experiences play on shaping their attitudes, confidence, and level of comfort towards teaching physical education, and for the purposes of this study, teaching physical education to a student living with a physical disability.

This chapter has five sections. In the first section I provide a review of the experiences of the participating teachers, from their own schooling through to their professional development. The second section identifies the influences on the participants during their acculturation, while the third and fourth sections likewise discuss the teachers' professional and organizational socialization. The final section identifies the ways in which participants' teaching strategies, attitudes, and critical thinking skills have been affected by their socialization experiences.

An overview of teachers' post-secondary education qualifications and teaching experience

Two of the six teacher-participants (Joanna and Colleen) were strictly generalist elementary teachers who have taught physical education to their homeroom class. Margaret was also a generalist teacher, but despite holding no additional qualification in the field, her position at the school was the physical education teacher for ten years. Two of the teachers (Sheila and

Patrick) held a specialist designation in physical education: Sheila via her undergraduate degree, and Patrick through physical education additional qualification courses. The sixth teacher, William, holds two degrees in Human Kinetics in addition to his Bachelor of Education, although he had not taught physical education outside of his homeroom classes. Every teacher interviewed came from a different type of academic background, ranging from a traditional four-year undergraduate degree followed by a Bachelor of Education (what is known as the consecutive route to certification), to multiple programs and work experience prior to teaching certification. Although some of these data were presented in Table 1 (see Chapter Three), Table 3 summarizes participants' post-secondary qualifications and teaching experience here for ease of reading.

Table 3

Participant Information About Qualifications and Teaching Experience

<u>Subject</u>	<u>Margaret</u>	<u>Patrick</u>	<u>Sheila</u>	<u>Colleen</u>	<u>Joanna</u>	<u>William</u>
Experience	25 years	31 years	25 years	5 years	3 years	23 years
Undergraduate Degree	BA	BA	BPE	BASc	BAH	BHK
Specialized Training	N/A	N/A	APE Course (Undergraduate)	ASL	N/A	CP Athletics Coach
Number of students with PD	200+	4	<6	24+	24+	100+

Table 3 – Participant Information Summary - Qualification and Teaching Experience

The data analyzed indicated a number of factors that affected the experience of teachers teaching physical education to young students living with a physical disability. Analyzing the various interviews using socialization theory led to several themes emerging within the three stages of socialization, which provide a structure for the following sections of the chapter. The

first was acculturation, in the form of teacher attitudes towards inclusion that were fostered from experiences prior to entering their university education. The second was professional socialization, which encompassed university-based teacher education, professional development, and resulting confidence in performing adaptations to physical education lessons. The third was organizational socialization, including the accessibility of resources and availability of supports offered in schools/organizations in which the participants worked.

Acculturation Influences

The acculturation stage of socialization begins at birth and continues throughout life as the person learns the social norms, expectations and acceptable beliefs and behaviours associated with their various communities (Lawson, 1983a) Although the Ontario Ministry of Education (1980) mandated schools be inclusive of children with disabilities through Bill 82, none of the teachers interviewed for this study recalled having a peer with a physical disability in their elementary or secondary school classes while they were students. Many teachers rely on their own memories and experiences of teachers and teaching from the time they were school students (Lortie, 1975). However, without observing the inclusion of a classmate with a physical disability as children and youth in schools, the participants had little upon which to model their own teaching behaviour, and therefore relied completely on the example set during their post-secondary education.

Margaret taught in an entirely segregated school (or “congregated school”, in school board terms), and stated, at first, that the reason she chose to teach at that school was simply because of its proximity to her home and her children’s school, and that the type of school wasn’t a factor. However, without realizing it, Margaret revealed ways in which simply being exposed

to children with physical disabilities as a child through her mother's employment at the same school had added to her comfort for teaching these children later in her career. Margaret said:

I was very familiar with this school, so yeah, and I would visit. I'd done demonstrations; she was the family studies teacher, so I would come in and do some of the cooking lessons and that kind of thing. So there's certainly an ease of familiarity with the school... yeah... I think [I knew] to expect as much independence as possible from the students and to adapt things as necessary whenever needed.

Although Margaret's prior acculturating experiences were not in the realm of physical activity, it influenced her attitude, which translated to the physical education classroom later in her career. It also may have affected her decision-making in selecting her school, as other teachers may have ruled out the congregated setting in favour of a more familiar environment.

For Patrick, Colleen and Joanna, their exposure to students with physical disabilities was much more limited prior to the start of their teaching careers. However, each was able to mention at least one instance that demonstrated awareness that people with a disability were present in their community. For Patrick, this was in the form of a nearby "crippled children's school", but in his words, "a lot of them were bussed in and we never saw them". Colleen, who is much younger than Patrick (and therefore would have experienced the inclusive school system legislated after 1980) was also at a loss at first to think of a person with a disability in her past. Upon further reflection she was able to think of two Deaf people she had met, although she denied them having any significant influence on her current teaching role in a Deaf and Hard of Hearing program. Joanna also mentioned two children she had encountered while in a leadership role, but described their integration saying, "it was as if there wasn't any difference".

Interestingly, she stated that she was aware of ice sledge hockey, the Paralympic version of ice hockey, but couldn't figure out how she developed this awareness, suggesting perhaps she had seen it on TV.

Four of the six teachers interviewed described their acculturating experience with disability prior to teaching as positive, even if it was minimal. The other two teachers, William and Patrick, had both discussed the segregated schools for children with disabilities in their town, and mentioned their lack of awareness as opposed to a positive or negative exposure or experience. Despite the small amount of exposure to persons living with a disability, all of the teachers spoke positively about their experiences, in some cases noting the language used in the past as no longer appropriate (for example, Patrick talking of the "crippled children's school"), or downplaying the effect disability had on an individual's standing within the community.

Professional Socialization: Teacher Education and Professional Development

As discussed in Chapter Two, pre-service teacher education is regarded as a fairly weak form of professional socialization, having relatively little "impact" on pre-service teachers (Korthagen et al., 2006; Richards et al., 2013; Stran & Curtner-Smith, 2009). However, the teachers in this study showed a variety of ways in which they were influenced by their pre-service teacher education. Although it was mainly in the form of experiential education (that is, teaching placements or practicum experiences), some of the teachers' career paths shifted as a result of being introduced to a "special education" module or classroom. This supports Pugach's (1992) assertion that without a specific apprenticeship in "special education", pre-service teacher education can lead to some positive influence in students' attitudes and teaching practice.

Influence of Undergraduate, Pre-Service Teacher Education, and Professional Development Experiences. Although two of the teachers completed an Adapted Physical

Education course during their undergraduate degree, none could recall a specific example of subject matter concerning physical disability at all during their teacher education program (that is, during their Bachelor of Education degree). For the two teachers (Sheila and William) whose undergraduate degrees included enrolment in an elective Adapted Physical Education course, there was very little prior experience or exposure to students and adults with physical disabilities. Sheila, who came “from small town Ontario where everybody was the same in every way, same race, same abilities”, described finding the “adaptives” course as particularly interesting. During the course she had placement experiences that included working with students with a variety of disabilities in a hands-on, active environment (one at a camp, one at “more of a physio” environment). She felt the course was self-driven, including research and presentations along with reflections on her placements, and she came away learning “it wasn’t scary to deal with this or the other”.

For William, his Adapted Physical Education course directly led to a focused interest in working with athletes with disabilities, which was, subsequently, the topic he focused on for his Master’s degree. However, his course did not include any practical experience, instead using guest speakers to complement the academic, class-based experiences. He stated that the class volunteered with an athletics event the summer after the course, but that this experience was strictly by coincidence. His analysis of the course was that “it was engaging and it got me interested. I don’t know that it would have prepared me to support kids in a school, probably not”. This suggests that most positive experiences during participants’ undergraduate degrees occurred by chance rather than by design.

Patrick started his academic studies after secondary school with a Diploma in Recreation Leadership. He also holds a Bachelor of Arts in History, which led to his Bachelor of Education,

and he completed the three stages of Additional Qualification in Physical Education. His perspective of his teacher education was unique, as his first years of teaching were spent on a First Nations reserve in Northern Ontario, where physical education was done in a classroom with the desks pushed against a wall. He made a profound observation, pointing out that although there may have been a class during his schooling where disability was mentioned,

...What they were aiming us for was like the school that I ended up in, where you had kids coming to school who were well fed, you got parents who cared, who could afford to put them in extra programs, who could give extra help. And the reality was you were not going to end up in that.

Colleen took a combined college-university program prior to her Bachelor of Education, earning both a certificate in Early Childhood Education and a Bachelor of Applied Science. She had a placement during her Bachelor of Education in the Deaf and Hard of Hearing program she currently teaches in, which is where she discovered her passion for working in that particular environment. She explained that it had happened by chance; there was no requirement for any particular type of placement, but that the opportunity had been presented and she took it. When discussing the programs she had completed, Colleen was honest about her feelings:

I learned the most from being in my placements. I didn't learn that much in the classroom. It just wasn't a super positive experience. My undergrad was awesome... I can think of more things I got out of my undergrad than Teachers' College.

Although she remembered lessons about differentiated instruction and different needs during her undergraduate degree, she received nothing specifically related to adapted physical education during any of her courses.

Joanna holds a Bachelor of Arts in Child Studies, and took a Master of Child Studies, which included an equivalency designation with the Ontario College of Teachers' certification program. Like Colleen, she also had a placement in a "special education" setting during her teaching certification program, and "I was hooked. I'd never worked here before and 6 weeks isn't long enough". In her program, placement in a "special education" classroom was required, but the type of class ranged. Joanna's program included a physical education "specialties" course, and although she learned about adapting and modifying lessons for different learning styles, she said there was no physical adaptation discussed.

Sheila (one of the Physical Education specialist teachers) talked about learning about mainstreaming and reverse-mainstreaming in her elective Adapted Physical Education class. However, she attributed a lot of her ability to adapt and modify lessons and tasks to her participation in gymnastics outside of schools, which gave her a solid understanding of movement analysis. Despite her course in Adapted Physical Education during her undergraduate degree, Sheila says she was not introduced to parasport/Paralympic sport during her post-secondary education.

William speculated during his interview that he was hired for his initial position based largely upon his work experience with athletes with cerebral palsy – even though his initial assignment was for a "slower learner" class that encompassed a variety of learning disabilities (some caused by physical impairments as well as not). William noted that had he not had the practical experience with athletes, his "special education" preparation would have been "Zero! We had one day of special ed... Like ALL special ed. We had a guest speaker come in for one day of the whole year. Physical was one category within all that".

Although all of the teachers had very different paths on their way to teaching and through their teaching careers, they all had little specific preparation, and even less experiential opportunities, in “special education” and physical education. Further, none had received any instruction in adapted physical education. Therefore, it may be inferred that their professional socialization implicitly taught them not to value adapted physical education, since it was clearly not valued in any of the university programs. These claims are supported by the following descriptive analysis of teacher education programs conducted for this study.

Teacher education programs. Almost every one of the universities whose elementary pre-service teacher education programs were analyzed in the study (13 institutions: see Table 2 in Analysis of Initial Teacher Education section in Chapter Three) includes some form of physical education preparation in its curriculum. This claim was supported by the experiences of the teachers in this study who completed certifications from several of the universities whose programs were analyzed. In terms of “special education”, the analysis was more difficult due to the breadth of definitions and subfields. For example, while 12 of the 13 schools included a broad “special education” course that could possibly have included components of physical disability or physical education, none specifically mentioned either in their descriptions. Three of the schools offered a combination Educational Psychology and Special Education course. The remaining schools had a variety of names for their courses, from Differentiated Instruction to Special Education. Most schools gave no indication in their course title or description of what type of exceptional learner the course content was geared towards. The schools also had a variety of weighting on each course, with both Special Education and Physical Education ranging between 18 and 72 in-class hours during one semester. Although many of the participants in this study completed their teacher education many years prior to when these data were gathered and

analyzed, it is perhaps indicative of a trend suggesting that inclusion or special education in physical education is typically neglected.

Additional Qualification. The “Additional Qualification” (or AQ) program is comprised of courses approved by the Ontario College of Teachers to cover a variety of topics including physical education and special education. Teachers currently working in the educational system are eligible to enrol in these courses as part of their professional development programs. These courses were referred to by all the teachers in the study on a number of occasions, however, on further examination, it was found that the current Health and Physical Education course guidelines available from the Ontario College of Teachers website are geared towards teachers of grade 7 and 8, and make no specific mention of exceptional students. The guidelines do refer to creating an inclusive learning environment conducive to the development of the students in areas such as intellectual, physical, and moral development. The Special Education course guidelines available in the same location do not mention specific subject areas and therefore make no mention of the physical education needs of these students. These Additional Qualification courses have been updated since many of the teacher participants in this study attended them.

Margaret’s undergraduate degree is in French and History, and she completed the Additional Qualification courses in Special Education (Parts 1, Part 2, and 3: Specialist) after she started teaching children with physical disabilities. Aside from Joanna, she was the only teacher interviewed who had taken any of these courses. Margaret described Part 1 as very basic, and “a little bit of everything”. Parts 2 and 3 (Specialist) were more in depth, and she mused about the insensitive language used in the course title:

It was terrible... it was really bad... teaching the trainable retarded, or teaching the educable retarded. So that was back in the day, but not that long ago! So it was

more looking at communicating and very... students to be able to communicate their needs so they could live their life. Not independently, but more life skills it would be.

As she continued to reflect on the courses, Margaret explained that they had a limited physical disability component, but that she was still able to apply her new knowledge to the students she was teaching at the time.

Organizational Socialization

Organizational socialization is the process through which teachers learn the bureaucracies, institutions, and routines of the profession (Lawson, 1983a). It begins as teachers enter their careers and is heavily impacted by the school environments, as well as school boards and provincial ministries. As such, in this section I focus on participant's experiences of working in schools with children with physical disabilities

Accessibility of Resources and Availability of Supports. Few of the teachers interviewed were able to recommend a specific resource or particular support system that had been exceptionally helpful in their teaching. For most, human resources were mentioned above all as being the most helpful, followed by personal experience, and then other literature or media based resources. For many, the access to useful resources was identified as a struggle, with some teachers having difficulty finding helpful information. Some of the support systems that are in place were also mentioned a number of times, including human supports, parents, administration, and community supports. Finally, although not vital to Adapted Physical Education, material resources such as equipment (specialty or otherwise) can play a very important role in its success.

Accessing Resources. One of the provincial bodies for the subject of health and physical education in Ontario is called Ophea. Aside from a few teachers mentioning Ophea's (2010) *Steps to Inclusion* booklet, very few other specific resources were mentioned. Access to resources is vital to success in a classroom, and physical education is no different (Lloyd & Legg, 2009). However, the challenges faced by teachers looking for resources for including a student experiencing physical disability were evident throughout the interviews. Colleen, for example, talked about having, "'Googled' things, I really tried, I didn't find many resources". Margaret, on the other hand, whose environment is entirely 'congregated', had a physical education program in place when she started in her role as a physical education teacher that she was able to build from. However, even when talking about specific resources, she mentioned Ophea's *Steps to Inclusion* (2010) and made vague reference to "a series of 7 booklets on inclusion put out by [the school board] for Phys. Ed.". Following a probe question, the booklets she alluded to were likely the Active Living Alliance's (1994) "Moving to Inclusion" resource. Margaret stated that human resources were the most influential in her ability to adapt to individual students. Sheila also mentioned that she used PHE Canada's *FUNDamental Movement Skills* (Lloyd & Legg, 2009) book series effectively.

Aside from the previously identified sources of information, none of the teachers were able to point out a specific material resource, such as a particular webpage, video, book or article that had been helpful to their teaching practice. The teachers interviewed relied on trial and error and experimentation to come up with a highly contextualized system that worked for them and their students in their classroom. While "continuous improvement" is largely the case in teaching in general, the teachers interviewed relied heavily on their own creativity and motivation to improve their programs. In terms of their organizational socialization, the teachers found that

active pursuit of resources was the only way they would be obtained, they were not provided as a norm.

Safety Concerns. One of the themes that was revealed during the interviews was the medical or therapeutic emphasis that is often placed on the physical activity of children with physical disabilities. In the cases of students with more involved mobility impairments (such as cerebral palsy and those using wheelchairs for mobility), it was almost inevitable that Occupational Therapists and Physiotherapists were brought up. However, this therapeutic emphasis can be detrimental to the ease and comfort with which teachers are able to include students living with a disability, as it creates the perceived possibility that physical activity could be done “wrong” and thus cause safety concerns, as demonstrated by William’s comments regarding consultants having a phyiotherapy perspective. This presents a unique situation as each field has different goals and a different way of approaching the same student. In the context of physical education, William suggested things that are necessary for optimal experiences for students with physical disabilities:

Often it’s a physio though, a physiotherapist. And they’re not looking at it from a teacher’s vantage, they’re looking at it from a therapeutic vantage, so for those of us in sport, we really don’t like those people, right? Because they “hold us back”[...] if they were trained a little bit differently, if they had a little bit of a different approach to inclusion. That would be helpful.

One of the concerns surrounding safety in physical education classes that came up a number of times was the safety of the student with a disability. In most cases, the concerns were related to contraindications and activities the students should not participate in due to their diagnosis. None of the teachers explicitly expressed concern for the non-disabled students in the

class (in relation to safety around mobility equipment, a slower walking student, and so on), although one teacher did mention that his students were “good about avoiding” the student who used mobility equipment. Although likely not intentional, this comment represents another way that students with disabilities can be excluded in an “inclusive” class. If the teacher uses this kind of language, it conveys the message that that student is an obstacle rather than participant, and begs the question of how might that student feel in a situation when they may already feel marginalized?

Support Systems. For the purposes of this study, support systems were represented in a number of different forms. The primary support that teachers identified was human support, mainly in the form of additional para-educators in the classroom. Support systems also included administrative support (curriculum consultants, principals), parental support (the degree of involvement of parents in the child’s life), community support (attitude and awareness of the school, community organizations), and peer support (the role peers played in the child’s participation).

Many teachers identified their class’s para-educators, or Educational Assistants, Special Needs Assistants and Interpreters, as vital conduits to inclusion. They also commended these people, and others, for their ideas and suggestions for optimizing inclusion in physical education. Two categories were therefore used in analyzing the data surrounding human assistance in physical education: “human supports” for situations where a child required one-on-one support to participate in activities, and “human resources” where the Educational Assistant, Special Needs Assistant, or other knowledgeable person provided suggestions or assistance to the teacher facilitating the lessons.

Consultants are often used in school boards and generally exist for each subject area. However, William, who considered himself “well-connected”, explained that, while he knew who to call for physical education, for special education and many other subject areas, “I couldn’t tell you the name of a person in our board that I would go to [for Adapted Physical Education specifically]”. Likewise, Sheila also struggled to identify where she would seek help in her Board, saying she would “probably go straight to Ophea or Variety Village⁷”. With many of the teachers identifying that they had sought assistance with adapted physical education, it is more likely that these experts are a rarity within the school board, rather than simply underused. Some teachers identified Occupational Therapists and Physiotherapists as supports as well, but most referred to the equipment they could provide or had access to. Of the five teachers who worked in the same school board, only those in a congregated setting mentioned their use of Occupational Therapists or Physiotherapists, and even then it was not necessarily in an inclusive physical education context. This may be a result of the low number and consultative nature of the Occupational Therapists and Physiotherapists employed by their school board.

The degree of parental support was brought up on a number of occasions. For example, even though she had met one particular new student before the school year started, Colleen was unable to meet the students’ needs at first because the parents were unable to provide information in English. Patrick, on the other hand, had a student whose mother was able to attend events like the school’s “Terry Fox Run”, (an annual, nation-wide charity run supporting cancer research) pushing her son’s wheelchair around the course. William talked about a few different students, and noted that over the years, the level of parental advocacy has increased, and gains

⁷ Variety Village is a fully accessible, inclusive sport and recreation facility in the City of Toronto

had been made in terms of inclusion. He talked about knowing what day of the week it was because one particular parent would drop off a sport wheelchair for physical education for one of his students. He highlighted the importance of the parents' involvement and the inconsistency of adapted resources, saying, "you're at the mercy of whether those kids are connected themselves".

This leads to the use of community resources by teachers in physical education. Two of the participants identified organizations that represent developmental disabilities (like Autism Spectrum Disorder and Learning Disabilities) and the "expertise" role these organizations can have within the school system. Teachers are able to consult these organizations for assistance with particular challenges they are facing in the classroom, and these organizations are at the same time advocating on behalf of their clients. Sheila mentioned having a guest in from an external agency who was able to give her some suggestions for different types of balls she could use in physical education with students with Autism Spectrum Disorder, but that the guest was unaware of Ophea and PHE Canada's resources for adapted physical education. Similarly, William also mentioned using community agencies for particular groups of students, but despite his plethora of knowledge in the parasport community, he was unaware of an organization that could provide the knowledge and tools for physical activity to the teachers of his students with physical disabilities.

The final aspect of support systems was the students themselves – their classmates and friends that form their social networks. One of the pre-formed questions in the interview process addressed the effect the inclusive classroom had on the students in the class, and all participants (besides one) responded that the experience was positive all around. For example, Colleen, who had previously taught physical education but whose students were now integrated with a mainstream class taught by a specialist teacher, expressed concern that (based on her

observations), inclusion was not being achieved. She felt that because of a lack of adaptation, her students looked foolish compared to the other students in the class. Colleen advocated heavily for quality physical education during the interviews. She identified physical aptitude as equalizing, and an opportunity for her students to integrate with their hearing peers, noting that recess pick-up basketball at her school is a mixture of Deaf and hearing students.

Joanna also commented extensively on the effect of the integrated environment in her classroom. She told a number of stories about students working together to include their friends, from watching them naturally crawl on the floor together to the exploratory education philosophy that includes the “typically-developing” children using various mobility equipment and reflecting on their experience afterward. Patrick, Joanna, and Sheila were all very positive in their description of the effect inclusion had on “typically-developing” peers. Although Margaret did not have any non-disabled children in her classes, she did mention that she had been mindful of balancing the demands of her more “able” students, to avoid them always filling particular roles (such as cleaning up). In her classroom, everyone did everything.

Equipment Use and Adaptations. All of the teachers identified equipment adaptations that they used with their students. Mostly this included the size, shape, weight and texture of the balls used during physical education. Only half of the six teachers talked about using parasport-specific equipment, such as sport wheelchairs, boccia balls, or goalball equipment in their classes. The teachers were largely aware of the opportunities to use different types of equipment, such as rubber chickens, softer balls, or larger scooter boards in their classrooms, but they sooner identified adaptations to the rules of the games or the roles the children played when speaking about inclusion or adaptation.

The teachers in congregated settings, where therapy was a large focus (physiotherapy, occupational therapy, and speech-language/communication) were able to speak about much more advanced or complex equipment. Margaret's and Joanna's schools, for example, work directly with people who modify and create equipment that the students can use to achieve tasks independently. In some cases this involves the use of switches or buttons to trigger events, such as a bat swinging, or a bowling ball rolling down a ramp. In other cases, the students used balls or objects hung from the ceiling, or hockey sticks that are rigged to attach to their wheelchair.

The teachers in the congregated settings were also the ones who regularly used bicycles in school. However, bike riding was not considered so much a part of physical education as it was considered a therapeutic tool to stretch and use muscles that the students may not use on a regular basis. Margaret described using bicycles frequently in physical education, while Joanna's class used them during "Mobility Time" through the hallways of the school, separate from their physical education time.

The most common resource that was attributed to successful inclusion was the support received. For most teachers, this support came in human form, through either Educational Assistants, or through Special Needs Assistants who provided one-on-one support to the student with a diagnosed disability. William was also very clear that the parental involvement and connection with community organizations was vital in obtaining additional types of support, such as specialized equipment, as well as suggestions for activities or adaptations. Many of the teachers seemed to rely, at least a little, on the Educational Assistants and Special Needs Assistants to make inclusion happen, with the degree varying depending on the teachers. For Patrick's student, the same Education Assistant was with the student through all his years at the school, so they were able to work well as a team, and Patrick was able to trust her to engage the

student in activity if the class was doing something he wasn't able to participate in. For Colleen's student, the human support is vital, as they rely on an interpreter during their current physical education situation.

In their congregated settings, both Margaret and Joanna have many additional adults in different roles compared to a mainstream school, so the human support to students is very high (largely by necessity – most of their students require significant physical assistance with activities of daily living). Margaret's school has seen the number of adult assistants and therapists present reduced over the past few years, which she says has impacted the activities they can do successfully in physical education classes, such as bike riding. However, she feels they are still able to run a quality program. For Joanna's school, which welcomes volunteers and interns in addition to their many staff, there is no shortage of adult assistance for the students. Both of these teachers were able to capitalize on people as a support system to provide a strong, inclusive physical education program.

Creativity played an important role in the success stories the teachers shared during their interviews. Many shared stories or provided descriptions of the adaptations they had made to the rules, equipment, and roles the children played for particular sports or games in their classes. Some examples include having an ambulatory child with cerebral palsy play first base (where he didn't have to run as much) and having a stronger hitter coming up behind him (to give him more time to reach the subsequent bases). Another teacher talked about using pool noodles to extend the reach of the "It" person in games of tag, or using the philosophy of Teaching Games for Understanding and allowing students to choose the equipment they used (such as giving a selection of different balls). One other teacher talked about playing football with some modified rules so that the student wasn't restricted to just playing one position.

The participants in this study demonstrated the influences of their acculturation, professional socialization, and organizational socialization in teaching through their responses to the interview questions regarding how they prepared, performed and evaluated their teaching and their students' learning. Overall, very few teachers had acculturation experiences relating to persons with a disability. For most, professional and organizational socialization were the phases that had the most influence on their teaching practices in relation to teaching physical education to students experiencing physical disability.

Influence of Socialization on Teachers' Attitudes, Understanding, and Practices

There were many examples of ways in which the participants' attitudes developed during their socialization (but from experiences outside of schools) influenced the degree to which students with physical disabilities were included in physical education classes. The teachers each felt differently about inclusion, what it means, and how it is achieved. For example, from Patrick's perspective, inclusion was more or less naturally occurring if the student with a physical disability was present in the class, where they were participating in a modified, completely different, or sedentary activity (such as scorekeeping).

Sheila's attitude towards physical activity and goal for her programs was that each child should "believe they're little athletes", and she regularly made adaptations that, in addition to benefitting identified children, also benefitted other students whose physical skills were behind. For example, using different sized balls and objects for activities, using the Teaching Games for Understanding model, and allowing children a variety of choices for completing tasks. Joanna also expressed her excitement about the effect having peers with physical disabilities has on the "typically-developing" students in her class. William was more critical, talking about how his history with parasport and community connections were likely driving the successes his students

with physical disabilities were experiencing in classes he taught. Colleen, on the other hand, was quite adamant during her interviews that she was not comfortable teaching physical education in any sense – for students with or without disabilities. At the same time, Colleen revealed she values the subject and sees its importance in the lives of her students, both in the context of their disability (hearing impairment), as well as their overall health and wellness. All of the teachers were favourable towards students with physical disabilities participating in mainstream physical education classes, but most were hesitant or apprehensive about taking responsibility for teaching students themselves, especially in the first months and years of teaching physical education.

All of the teachers had positive attitudes towards the inclusion of children with disabilities in their classrooms. For instance, Patrick excitedly told stories about successfully including the student with a mobility disability in his classes (like the child with mild cerebral palsy who played floor hockey as a goalie, and continued to do so into university intramurals), while Colleen shared passionately her strong beliefs in the benefits of physical education to her students, saying,

... it translates into the classroom environment as well. Even like... a ball. Watch the ball, catch the ball, things like that. It's knowing where to look. They're Deaf. So if I'm speaking and someone is interpreting for me, should they be looking at me? No, you don't know what I'm saying. So even being aware of where to look and when would help with balls and things. Tracking objects, being more... not staring off into space all the time, knowing where to look. That's a huge skill for people who are Deaf, because you can't hear, you have to know what's going on around, you have to know where to look. So that's a huge thing.

Despite their overall positive attitudes, the only teachers who expressed feeling prepared to teach a child living with a physical disability were William and Sheila, the ones who had had some extensive hands-on experience or exposure prior to teaching, such as coaching athletes with cerebral palsy in athletics events. For the other four teachers, most of their confidence came from less intensive hands-on experience prior to teaching, or simply from learning by doing with their first experiences being in a classroom, teaching children with physical disabilities. This indicates that professional socialization can have a long-lasting effect on teachers, in both positive and negative ways. Sheila's experience was through an undergraduate adapted physical activity course that included placement opportunities. For Colleen and Joanna, who both teach in a congregated program, they were exposed to working with children with physical disabilities in the classroom for the first time during their teaching placements, and both "fell in love" with the environment and chose to stay with it. Patrick expressed the most excitement for his students' successes, however, he was also perhaps the least experienced in a school environment when his first student with a physical disability arrived in his classroom.

Both Margaret and William had extensive hands-on experience working with children and youth with physical disabilities as part of their acculturation, and their experiences were reflected in their more critical attitude towards inclusion and meaningful participation. For Margaret, her experiences came from volunteering in her mother's classroom, and then her years of teaching at the same school, and for William, it was coaching track and field for athletes with cerebral palsy. Margaret emphasized meaningful participation when she spoke about Boccia, a parasport her students qualify for and have the physical ability to play because it is so easily and widely modified. However, while she expressed her support for the sport, she was also realistic

about the variety of abilities of her students, and identified that things have changed over the years she has been at the school.

One of the biggest challenges is that our kids don't have the hand skills anymore, or the ability to direct us, OR the ability to understand the game. That's the biggest thing. I mean it's fun letting them play, and positioning the ball for them and they get to watch the ball roll down the ramp but how meaningful is that. It's better for them to be using their body and be transferred onto a bike to bike around the school rather than sit in their wheelchair, which they do enough of.

All of the teachers were able to share both the challenges and successes involved in their physical education programs when it came to adapting for and including a child living with a physical disability. Most of the challenges presented were related to safety concerns and access to resources. The successes were credited largely to creativity and support. Overall, most of the teachers felt their programming had successfully included all of their students, although there appeared to be great variation in terms of what successful inclusion looked like or how it was defined.

Understanding of Inclusion. In some of the school settings, it was obvious from the interviews that inclusion is practiced to the full extent of its purpose – all students are involved in all of the activities. Margaret's classes were a strong example, as the entire school population has a disability in her congregated setting. This means that although her students were not necessarily similar in physical ability, all of the activities in physical education were adapted, or assisted by Education Assistants. It was evident that this "total inclusion" was more common practice in the congregated settings than in mainstream schools, although one could argue that the segregated nature of these environments by definition makes inclusion impossible. Although

all of the teachers interviewed expressed that they attempted to include students with disabilities, some students in mainstream environments were “artificially” included in the physical education classes through their presence (rather than participation), and in some cases, were not included at all.

One of the key concepts of inclusion that is not always discussed is that activities should have meaning to the participants (Lloyd & Legg, 2009), something only William and Margaret identified. Sometimes, even though the student is participating in an activity in the same space as their peers, the inclusion can be superficial, or artificial, and on occasion does more harm than good. Goodwin and Watkinson (2000) studied inclusion from the perspective of students with physical disabilities, finding that good physical education days include skilful participation and sharing the benefits of participation (health, skill, fitness, etc.), while bad days involved a questioning of competence (significant or inappropriate modifications) and restricted participation.

In most examples discussed during the interviews the teachers were working to adapt activities, rules and equipment to include all students in the activities. However, in some cases, the activity or school culture dictated the level of inclusion that could be achieved. For example, one of the teachers spoke about needing to run a particular track and field event for “try-out” purposes, and so a student with Autism Spectrum Disorder was given a ball and “kept an eye on”, or that the student experiencing physical disability would sometimes play with his Educational Assistant in the hallway during other activities. Some of the teachers said they would abandon an activity that not all students could participate in, but external pressures from other students, teachers, and parents can make that challenging in some communities, as demonstrated by Patrick’s “try-out”.

Margaret and William were quite critical of the activities they selected and of the meaningfulness of their students' participation. For Margaret, it was difficult for her to have her students participate in a sport like boccia, as they were not able to comprehend the rules enough for the game to have meaning. On the other hand, William discussed one of his students who attended a "special needs" track event and "ended up helping other people. He ended up being a volunteer almost instead of an athlete because... but he's done a lot of stuff so he's not getting a whole lot out of it". However, Patrick came from an older generation that considered the physical presence of a student with a disability label as success, and anything more was a bonus (which he acknowledged during our interviews). For Colleen, her belief that her students could (and should) participate in any activity alongside their hearing peers (and that anything less was unacceptable) indicated she was very critical of the inclusion practices in her school, but she had great difficulty challenging these norms, partially as a younger teacher, and partially because she lacked the knowledge to provide potential solutions. While her experience with more "severe" physical disability was limited given that her school was not accessible, Sheila was cognizant of presenting different shapes and sizes in her classroom and recognized that many of her students faced challenges associated with being immigrants, female, and/or living in apartment buildings. Joanna had perhaps the most positive outlook on inclusion for her students and was by far the least critical of her environment, but this may be a result of her experience being limited to a single congregated setting where full inclusion and participation by all students in physical education is the expectation.

Practice. Some of the teachers spoke about making adaptations in the moment (that is, "on the fly"), where others were much more meticulous in their planning. For Patrick, he adapted as he went, working with the Educational Assistant to assess if and how a particular student

could participate. However, using this method, he estimated that the student did not participate with the class approximately one third of the time, spending that time in the hallway with the Educational Assistant, or perhaps in the corner of the gym doing an alternative activity. The other teachers were more methodical with their planning, identifying methods to adapt for particular students and abandoning activities that would exclude a student. William again took a “big picture” assessment of inclusion, pointing out that it was about more than just the physical education environment:

When it’s done poorly, they’re just once again isolated. They’re the only kid not doing stuff... If it’s done really well, then the kids are included, but it starts in the classroom, it’s not just in the gym. If they’re included in the classroom and they feel it’s just another kid who needs a chair for mobility, but isn’t a wheelchair kid, then when they get to the gym, it’s a lot easier [...] The kids are really accepting. More than the adults.

Sheila explained one of the ways she promotes an inclusive community at her school is by actively seeking out resources surrounding the Olympics and Paralympics. She said she has found things every four years when the Paralympics are on, and mentioned that the Terry Fox Run always brings opportunities for awareness. She has also taken advantage of a wheelchair basketball schools program, even though none of her students use mobility equipment, and the inaccessibility of her school makes it unlikely. She talked about bringing awareness to her students, and for herself as a teacher.

I try to have pictures in the gym of everybody. I have a cut out of a guy who played basketball and used a cup thing to catch the ball, and Chantal Peticlerc, a

swimmer with one leg, a runner who's overweight. I try to get lots of examples for them to see healthy bodies come in all shapes and sizes.

Confidence in Adaptation. One of the biggest barriers presented by the teachers was their lack of preparation for making appropriate adaptations in their physical education classes. The teachers had various confidence levels that were evident in their reflections of their experiences. For example, Colleen, a generalist teacher, shared that she was very apprehensive to teach physical education at all, identifying that her professional socialization experiences in her pre-service teacher education had not included helpful physical education, let alone knowledge she could apply to adapting lessons. Patrick, a specialist whose description of his teaching was enthusiastic, also expressed his nervousness to teach students with disabilities as his professional socialization experience had prepared him for middle/upper-class, non-disabled students. As mentioned before, the teachers' attitudes were largely positive, but all of them expressed some level of apprehension when they learned they would be teaching a child with a physical disability diagnosis in their class.

Although she advocated for quality physical education during our interviews, Colleen was anxious about teaching physical education at all, and shied away from leading the activities (in a team-teaching environment, she was able to "take a backseat" to her colleague). She explained that while she was comfortable with the students having disabilities, she felt unprepared to teach physical education. Even though she knew her students well, she felt she did not have the expertise to provide a quality experience. Her statements at the beginning of our interviews were very negative, including, "I didn't like it. I didn't know what to do", and:

I feel like I did a disservice to them! I know it sounds awful, but I tried. I did research, I did the best I could. But they suffered I think... I wasn't given any tools to help me teach it.

She cited that the emphasis on physical activity isn't there for her students with disabilities. However, after learning about the Long Term Athlete Development Model, Colleen realized that perhaps the previous Physical Education lessons she had been involved in had been beneficial to her students, even though she didn't understand why at the time.

For teachers like Margaret and William, who are both generalist teachers who had experience teaching or coaching people with disabilities prior to their teaching careers, the level of confidence was higher. Although Margaret did not have physical education experience prior to teaching it, she had seen her students participate and was able to draw from her colleagues and the established activities to provide an active and engaging program. For William it was similar. He expressed looking forward to the experience, and being confident and excited about it, but at the same time experiencing some trepidation since his experience was with a homogenous group of athletes as opposed to a very mixed group.

The two specialist teachers, Sheila and Patrick, both facilitated programs based on participation, so while they both expressed that they may have been apprehensive at first, they also said that they quickly shifted to a "wait and see" approach to teaching. Sheila credits her background in gymnastics for giving her the tools to easily adapt to students' different strengths and weaknesses. Patrick, on the other hand, leaned on his strong belief in fairness and equitable competition to make things work. He would frequently mix up teams, or sides of the court to both level the playing field and eliminate keeping score in volleyball games, for example. Both teachers were very confident in speaking about their experiences.

Chapter Summary

Overall, the teachers in this study were positive about their experiences teaching physical education to students with a physical disability. Most felt unprepared or under-prepared by their pre-service training and were underwhelmed by the resources available, but used creativity, human support, and trial-and-error to accommodate their students. Their experiences indicated that acculturation, specifically their experiences prior to teaching, plays a role in decision making, understanding of, and attitude towards inclusion in physical education, and that hands-on experience during professional socialization can be very valuable. Their experiences also showed that teachers are seeking more and better resources when it comes to adapting and teaching physical education, however, they are largely left to their own devices to access support and provide the most positive learning experiences for their students. The next and final chapter of this thesis will situate the results of this research in the literature, and I will discuss further implications and recommendations for providing successful inclusive physical education classes for students with physical disabilities.

Chapter V - DISCUSSION

Introduction

The purpose of this study was to examine the socialization experiences of elementary school teachers who teach physical education to children with a physical disability. Teacher socialization was used as a theoretical framework to guide the data collection and analysis, and to assist in interpreting the teachers' experiences. In this final chapter I will summarize the findings related to the primary research question and the three sub-questions. I will also return to the literature to identify how these findings build upon previous work and address gaps identified. Finally, I offer some recommendations for improving the knowledge and experiences of teachers teaching physical education to children with physical disabilities, as well as identify areas for future research.

Summarizing the Main Findings

In Chapter One I identified the primary question and sub-questions, which were:

- *How does the socialization of teachers prepare them for teaching a student living with a physical disability? Specifically, how and where do teachers gain their experience, knowledge and skills about teaching children living with physical disabilities in physical education?*
- *To what extent are specialist and generalist teachers who teach physical education equipped with sufficient knowledge and experiences to effectively include a child living with a physical disability in a physical education class?*
- *What resources and supports are available to teachers and to what extent does their socialization prepare them to access these resources (during pre-service teacher*

education, through professional development education, literature, colleagues, service organizations, and so on)?

- *How do available resources and support influence teachers' confidence in facilitating successful inclusion of a child living with a physical disability in the physical education classroom?*

Main Research Question

The three phases of teacher socialization were clearly informative in understanding the experiences of the participants in this research. Each of the phases influenced my understanding of how the teacher participants prepared for, performed, and evaluated their own teaching and provided a useful frame through which to analyze the data gathered. The main question addresses the socialization of teachers, and how they acquire the experience, knowledge and skills to teach children living with a physical disability physical education. Experiences during professional socialization (that is, through formal teacher education) were key to influencing the confidence of the teachers in this study.

Acculturation. The first stage of Lawson (1983a) description of teacher socialization, acculturation, would have taken place prior to the inclusion of students with disabilities in mainstream schools for four of the teachers (William, Patrick, Margaret and Sheila). For the other two (Joanna and Colleen), while their school-age years were after the implementation of Bill 82 (Ontario Ministry of Education, 1980) and the obligation of school boards to provide education to all children, the teachers could not identify an “exceptional” pupil in their classrooms as children. This is consistent with Pugach’s (1992) assessment that teachers do not always experience *apprenticeship of observation* (Lortie, 1975) in the field of “special education”. Curtner-Smith et al. (2008) suggest that acculturation is the “most potent type of

socialization experienced by physical education teachers” (p.99), and yet almost all teachers in this study were missing acculturation experiences as they were into the professional socialization stage before they experienced children with physical disabilities in physical education

Professional Socialization. The teachers’ understanding of their professional socialization, namely their pre-service teacher education, for most participants did little to give them the skills and confidence to teach physical education. Nor did they feel it provided them with the skills and confidence to teach physical education to students living with a physical disability. The two teachers who took a post-secondary class in adapted physical activity both expressed that it had been impactful; however, the courses were not provided during their pre-service teaching program, they were electives available during their undergraduate degrees. These two teachers were also the two who expressed the most confidence in their ability to adapt their physical education classes, and demonstrated their ability with examples of adaptations they had successfully implemented. For example, William’s work with athletes with cerebral palsy exposed him to a number of different parasport options, giving him a better understanding of places to turn to for resources or support, along with the experience he relied on. These hands-on types of experiences have consistently been shown to have a significant effect on teacher confidence, attitude towards, and efficacy in teaching students with disabilities (Conderman et al., 2013, Sokal et al., 2014). Although programs focused on physical activity for children with disabilities exist and even thrive on several Canadian campuses (as mentioned earlier, Acadia University, Memorial University of Newfoundland, and Brock University all have their own unique programs), participation is not compulsory for pre-service teachers. Increasing the scale of these programs to allow greater access for undergraduate and pre-service physical education students is thus a recommendation based on the findings of this research.

Pre-service teacher education programs must often overcome the socialization that has taken place through acculturation and the *apprenticeship of observation* (Lawson, 1983a). Yet, participants in this research had few acculturation experiences that involved students with disabilities of any sort. Pre-service teacher education programs are regarded as the weakest form of socialization, as they are often unsuccessful in challenging student beliefs that have been established through their acculturation (Korthagen et al., 2006; Richards et al., 2013; Stran & Curtner-Smith, 2009). In the case of this study, while the participants lacked acculturation experiences related to adapted physical education, there was also little opportunity during their pre-service teacher education program to challenge the assumptions they had formed about disability in general from their cumulative life experiences. This may be due to the curriculum design not including an emphasis on adapted physical education, or a result of the program or delivery style and its ability to engage the pre-service teachers in identifying socialized beliefs.

The teachers all identified that the option of Additional Qualification courses was available, but it was noted consistently that the “special education” and “physical education” subjects were separate and distinct in these types of course. This did appear to depend somewhat on who the course instructor was, as Sheila teaches some of the physical education Additional Qualification courses, and mentioned that she attempts to visit Variety Village (a recognized provider of physical activity teaching and learning experiences for instructors and learners) whenever she teaches the course. This would be a potential option for providing teachers with information and resources on adapting physical education programs through their professional development opportunities, however, consistency of curriculum is important.

Organizational Socialization. As the pre-service teachers transitioned from pre-service teacher to teaching roles in schools, their organization socialization began (Lawson, 1983b). The

individual schools they taught at and the availability of resources, supports, and the expectations of their co-teachers all impacted their confidence and competence in teaching physical education to a child with a physical disability. For some teachers, specifically those at the segregated schools where all children have a disability diagnosis, the school expected full inclusion and active participation of children with physical disabilities. In other school cultures, it was acceptable to have a more superficial level of inclusion, or even a support person facilitating the child's physical education experience. Schools and their cultures tend to attempt maintenance of the status quo, or hold custodial values (Lawson, 1983b), and it can be difficult for a new teacher to hold an innovative orientation in a custodial environment (Richards et al., 2014). This was evident in this study with Margaret's segregated school setting demonstrating extensive adaptation for each student, with a specialist to create or alter equipment, an integrated team that included physiotherapists and occupational therapists, and their use as a "demonstration school", where other teachers could come in during special sessions to observe and discuss the physical education experience. On the other end of the spectrum was Patrick's well-meaning but ultimately incomplete integration of a single student with a physical disability in a school of non-disabled peers. The physical environment of the school was such that the school was three storeys with no elevator, and the school community valued competitive sport participation that made swaying from traditional sport schedules and rules difficult.

Richards et al. (2014) suggested that teachers tend to engage one of a number of different social strategies to cope with the unique environment of their school if it conflicts with their values and what they were taught during their pre-service education. They may choose to follow the norms even if they have reservations, they may adjust their beliefs and behaviours to fit in, or in more rare cases, they may attempt to change the status quo to align with their beliefs and

knowledge about teaching (Richards et al., 2014). The teachers interviewed in this study reported frequently following the norms of their schools despite their own personal beliefs. While most of the teachers did have innovative orientations towards teaching, not all of the teachers had enough knowledge and experience to successfully implement inclusive physical education. This suggests that intentions to teach in more inclusive ways must be supported with the development of suitable knowledge, support, and skills to do so. The intention to teach inclusively is therefore a necessary factor in supporting the provision of high quality physical education for students with physical disabilities, but intention alone is insufficient.

In some cases the teachers' innovative orientations appeared to be somewhat conflicted with their school's more custodial values, however, only in one case (Colleen's) did it appear to be a major problem. The innovative orientation Colleen brought to her school conflicted with the custodial values of a new school community whose beliefs were very much on the superficial side of inclusion (her segregated classroom had been moved recently from one school to another). Although she held beliefs more consistent with the philosophy of inclusion, she hesitated to speak out about examples of what she felt was a disservice to her students. She expressed great passion for her students, but felt that now that they were being taught by a specialist with no adapted physical activity training (rather than herself and another teacher) that their physical education experience was being compromised. This appeared to be a combination of lack of knowledge on the part of the specialist teacher, and the custodial values of the school community, where the addition of the congregated classrooms within their building was still a new concept and the needs of the school as an institution were being put ahead of its new students.

With an overall lack of knowledge about the field, norms surrounding adapted physical education are often poorly established or may be more easily challenged than in some other fields, so an innovative teaching orientation may be successful in a custodial environment for whom inclusion is poorly understood. For example, adapting the activities in physical education in such a way that all children are able to participate may meet with less obstruction than, for example, changing the age at which or the way we teach certain math or language skills.

As every student's unique abilities require different adaptations, there is no "one solution fits all", but quality physical education is highly adapted by nature (Sherrill, 1998, in Reid, 2003). The recent push for quality physical education from Canadian Sport for Life initiatives (Balyi et al., 2005) and the enforcement of stricter compliance with AODA (2005) can, with appropriate support from adapted physical activity specialists, improve the physical education experiences for students with physical disabilities. More work must be done to create inclusive environments in a physical activity context to promote discourse, and educate schools on what a high standard of inclusion looks like in the physical education context.

Sub-Question #1: Teacher Knowledge and Experiences

Regarding the first research sub-question, the findings of this research suggest teachers have limited formal preparation – and thus few positive professional socializing experiences – to teach children with physical disabilities in physical education. Like many other studies on the pre-service physical education teacher education of primary generalist teachers (DeCorby et al., 2005; Faulkner et al., 2008; Fletcher & Mandigo, 2012; Morgan & Hansen 2008a, 2008b; Tsangaridou, 2012), the participants in this study expressed feeling unprepared to teach physical education – not only in terms of teaching children with physical disabilities but also in a general sense -- and similarly relied on other people, like colleagues and education assistants, for

guidance and assistance, and their own, usually limited, experience with physical education. Recalling their pre-service teacher education and professional socialization, none of the teachers in this study could recall a specific mention of physical disability in their courses, and for some teachers, “special education” was only a small part of a larger course, with one teacher identifying only a single lecture throughout his entire degree program that focused on “special education” in its most general terms. These are hardly the types of experiences that can equip new teachers with not only the skills, but the confidence to be able to offer high quality teaching and learning experiences for their students of all abilities in the critical period of the early years. Unfortunately, students with disabilities, and for the purposes of this study, physical disabilities, are therefore frequently the recipients of low-quality physical education when often they are the ones who need the highest quality experiences to support their inclusion and development of physical activity skills at a highly vulnerable time in their lives.

Even for those participants considered specialist teachers in primary physical education, they relied heavily on their personal experiences (regardless of whether these experiences included a person with a disability or not) and ad hoc human support to adapt their programs rather than on specific evidence-based practices advocated by resources or specific courses or lessons. As Lortie (1975) suggests, the apprenticeship of observation results in teachers relying on personal experience, although in this case it was not a direct result of childhood teachers but more personal experience throughout other stages of socialization. Consistent with previous studies (Coates, 2012; Vickerman, 2007), neither the generalist nor specialist teachers in this study felt well prepared to adapt lessons to include a variety of physical abilities. Consistent with DeCorby et al. (2005), all the participating generalist teachers had positive attitudes towards physical education, but their preparation, training, and lack of knowledge were significant

barriers to their ability to deliver a physical education program to their students with physical disabilities. As such, many generalist teachers did not identify themselves as confident, proficient teachers of elementary physical education (DeCorby et al., 2005; Faulkner et al., 2008; Morgan & Hansen, 2008a, b), and few generalist or specialist teachers felt comfortable or proficient in teaching high quality physical education for students with physical disabilities.

Sub-Question #2: Resources and Support

The second sub-question in this study addressed the resources and supports that are available to teachers and the extent to which they access them. The teachers in this study were collectively able to name a number of literature-based resources, however, only one teacher had used any of them with great success. Three of the teachers were unable to describe any textual resources (e.g., books or websites), instead relying on human supports, and a fourth only referred vaguely to “a document provided by the school board”. None of the teachers mentioned a conference or professional learning opportunity that existed specifically for adapted physical education.

Only two of the six teachers accessed anything offered by a service organization, with Sheila, the specialist teacher who used textual resources, accessing a wheelchair basketball demonstration and media surrounding the Paralympics, and William, a generalist teacher with a Human Kinetics background accessing sports wheelchairs through connections of one of his students who uses a wheelchair. As Morrison (2014) describes regarding her “ideal” resource for teachers who work with children with disabilities in physical education, these types of opportunities are important, but need to be more easily accessed and incorporate follow-up or additional opportunities (such as person to person interaction) to be effective. As described in Chapter Four, the remaining four out of the six teachers struggled, some extensively, to provide

appropriate adaptations or modifications to include all students in physical education. Although Joanna and Margaret had no complaints about their physical education teaching experiences, their main source of support was still their colleagues, not a resource, professional development, or their own hands-on experiences. Colleen described her struggle to access resources related to physical education for students with hearing impairments, what they would benefit from and how to adapt to their specific needs. She too learned from her peers throughout the year, even though at the time she did not feel they were experts. Patrick also did not access any resources and used his own ingenuity to adapt where he felt it was possible. In his reflection he believed that had he known about and requested specific adapted equipment that the school would have been supportive, but he was very much on his own to make the necessary adaptations for all of his students to participate.

Regarding accessing resources, one teacher did comment that he did not know of a person related to his school board who would be able to provide expertise on adapted physical education. He considered himself well-connected and had the most experience in the field of all the participants, but he identified that although he knew who to call for other subjects, for information on Autism Spectrum Disorder, learning disabilities, and so on, he had no one he could call about adaptations for students with physical disabilities in physical education.

The combination of a lack of professional development opportunities with expert practitioners and a lack of easily accessible resources creates a large gap for which there is opportunity to fill. As Morrison (2014) discusses, ideal resources are a combination of these two things – a practical experience during which teachers can ask questions and actively learn, and a tangible resource they can take away to reference and reflect on later. Ideally, a follow up

opportunity gives teachers an opportunity to further develop their competence in adapting physical education to a variety of students.

Sub-Question #3: Influences on Teacher Confidence

The third and final sub-question asked how the available resources influenced the teachers' confidence in facilitating the successful inclusion of a child living with a physical disability in the physical education classroom. As stated above, most of the teachers did not access the resources, and therefore it is difficult to determine whether the available resources would have made a difference in this particular group of teachers. Those teachers who did access resources (such as PHE Canada's *Fundamental Movement Skills* handbooks) had confidence in their ability to provide physical education programming to individuals with a physical disability, however, the teachers who accessed these resources were also the ones who had hands-on experience in adapted physical activity prior to their teaching careers. Further follow-up research would be needed in order to know if their confidence came from improved knowledge thanks to the resources, or from practical experience gained prior to teaching.

Implications

This research generally supports that of others who have shown that generalist teachers feel unprepared or under-prepared to teach physical education (Coates, 2012; DeCorby et al., 2005; Faulkner et al., 2008; Fletcher, 2012; Fletcher & Mandigo, 2012; Hodge et al., 2009; Morgan & Hansen 2008a, b; Tsangaridou, 2012; Vickerman, 2007; Vickerman & Coates, 2009). Further, the findings support research that suggests both specialist and generalist teachers typically feel unprepared to teach students with physical disabilities in physical education (Coates, 2012; Vickerman, 2007). The findings of this study thus have implications for teacher education programs, school boards, resource developers, and for teachers.

Teacher Education Programs. With professional socialization currently viewed as one of the weakest forms of socialization, (Korthagen et al., 2006; Richards, et al., 2013; Stran & Curtner-Smith, 2009), teacher education programs must take greater notice of Pugach’s (1992) analysis that most teachers do not carry an *apprenticeship of observation* in “special education”. With hands-on experiences known to improve confidence and attitudes in teachers teaching physical activity to students with disabilities, (Conderman et al., 2013; Sokal et al., 2014; Tindall et al., 2015), pre-service teacher education programs should look to modify their teaching strategies to produce teachers who can confidently provide adapted physical education for all students. The lack of exposure that teachers had as school students to peers who had disabilities was evident in this study, supporting previous conclusions that experiences of teaching and learning *alongside* children with disabilities was rare.

To counter this, physical education teacher education programs should actively seek to provide students with practical opportunities to work with children with disabilities. There are examples of this, such as the SMILE Program at Acadia University, which serves children with all definitions of “special needs” including cognitive, sensory, physical and mental health challenges, and the SNAP program at Brock University, which provides a movement program to children with Autism Spectrum Disorder (Connolly, 2008). In both programs, volunteers are paired with children and not only form an often lasting bond, but the volunteers also learn about how best to provide high quality physical activity experiences for their “buddy”. This type of experience requires “champions” of such causes at each institution, and are labour-intensive, but with institutional support can be very successful in challenging misconceptions learned through socialization, and provide invaluable hands-on experience.

School Boards. The provision of education for students with disabilities has been the responsibility of individual school boards since 1980 (Ontario Ministry of Education). With the deadline for compliance rules surrounding the AODA coming into play over the next ten years, school boards may face renewed expectation to provide accessible opportunities for all learners across all types of learning experiences. As such, school boards need to ensure they provide their schools with the resources required to provide equitable education opportunities. This may come in the form of professional consultants with expertise in adapted physical education for students with both intellectual and physical disabilities, professional development opportunities with experts in the field, or additional access to resources such as PHE Canada's *Fundamental Movement Skills* handbooks (2009), or Ophea's *Steps to Inclusion* (2010) manuals. The implementation of face-to-face resources, such as consultants in Adapted Physical Education, also recommended by Morrison (2014), would begin to address the gap in quality physical education for students with physical disabilities.

Resource Developers. Agencies who support teachers with resources for any subject area are an important part of education in Canada. These organizations can further support teachers in adapted physical education by providing or partnering at the local and school board level to connect teachers with not only their resources, but with the professional development opportunities teachers need to better understand inclusive teaching in the physical education realm. Ideal resources are more than just an object (literature/handbook or webpage), they are a dynamic relationship between the user, professionals and the object (Morrison, 2014).

Teachers. Teachers themselves can continue to improve their confidence teaching children with physical disabilities in physical education by seeking expertise, learning opportunities and resources. With social media and technology readily accessible, resources

come in many forms beyond a handbook or website. Helpful tips, professional opinions, and success stories can be found on various platforms, from social media outlets such as Youtube and Twitter to software applications for tablet devices and phones.

Limitations

Despite the consistent findings across the six participants in this research, there are several limitations. As the researcher had limited resources, teachers were sampled from within a small area of a large urban centre. By collecting data from a variety of teachers of different ages, years of experience, genders and school settings, a collection of experiences was formed. Although the study collected pertinent information to the experiences of the teacher participants, due to the small sample size ($N = 6$), the results of this study cannot be generalized to all teachers across provincial, national, or international contexts. In addition, with the potential breadth of definitions of terms (such as inclusion, disability, and so on), school environments, and variety of pre-service teacher training programs available, this research provides only a snapshot of teacher preparation and experiences at a point in time. This snapshot can be used, however, as a starting point for further investigation using various methodologies across contexts.

Final Reflection

After spending many years pondering the discrepancy between reported student experience and school board policies, investigating this research topic has given me an additional perspective on the challenge of effectively teaching students with physical disabilities in physical education. Although to me it previously seemed that there were many resources and supports available, this research has showed me that they are not always easily accessible, or suitable to the situation. Through this research I have confirmed my suspicions that the discrepancy was not the result of particularly uninterested teachers, a lack of funding, or unrealistic expectations of

students, but rather a combination of many factors, of which a teacher's collective socializing experiences play a large role. The education provided by pre-service teacher education needs improvement in this area, but so do schools' and school boards' connections with service organizations and expert consultants, advocacy for inclusive physical education, and physical education specialty groups' provision of resources. I think an overarching takeaway theme for all of these groups is the promotion of physical literacy support for students, including those with physical disabilities. With a clearer picture of the outcomes of physical education, teachers who teach physical education will have a more structured pathway en route to providing quality physical education to all students.

Conclusion

Overall, neither generalist nor specialist primary physical education teachers are well-prepared with sufficient knowledge or experience to effectively include a child living with a physical disability in physical education classrooms. Given the growing focus on accessibility in Ontario, this research shows the need for additional focus on teacher preparation to provide all students with high quality experiences, not just those in which they can be physically present. The socialization experiences continue to be strong for teachers, however they lack socialization experiences that include students with physical disabilities, limiting the experiences, knowledge and skills they have to draw on in their teaching practice. Literature based resources are available to teachers, however there is little access to specialists and professional development opportunities that create an interactive learning environment. Teachers who had hands-on experiences working with children with physical disabilities in physical activity environments had the most confidence in adapting physical activity in the physical education context. Pre-service teacher education programs, provincial teachers' associations, and school boards need to

provide more practical, hands-on opportunities for teachers to improve their confidence in teaching physical education to children experiencing physical disability.

Reference List

Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11 (December 15 2009)

<http://www.ontario.ca/laws/statute/05a11/v4>

Active Healthy Kids Canada. (2009). *The active healthy kids Canada report card on physical activity for children and youth*. Toronto: Active Healthy Kids Canada.

Active Healthy Kids Canada. (2013). *Are we driving our kids to unhealthy habits? The 2013 active healthy kids Canada report card on physical activity for children and youth*. Toronto: Active Healthy Kids Canada.

Arbour-Nicitopoulos, K. P., & Martin Ginis, K. A. (2011). Universal accessibility of "accessible" fitness and recreational facilities for persons with mobility disabilities. *Adapted Physical Activity Quarterly*, 28, 1-15.

Bain, L. L., & Wendt, J. C. (1983). Undergraduate physical education majors' perceptions of the roles of teacher and coach. *Research Quarterly for Exercise and Sport*, 54(2), 112-118.
<http://dx.doi.org/10.1080/02701367.1983.10605282>

Balyi, I., Way, R., Norris, S., Cardinal, C. & Higgs, C. (2005). *Canadian sport for life: Long-term athlete development resource paper*. Vancouver, BC: Canadian Sport Centres.
ISBN: 0-9738274-0-8

Blankenship, B. T., & Coleman, M. M. (2009). An examination of "wash-out" and workplace conditions of beginning physical education teachers. *Physical Educator*, 66(2), 97.

Block, M. E. & Obrusnikova, I. (2007). Inclusion in physical education: A review of the literature from 1995-2005. *Adapted Physical Activity Quarterly*. 24(2): 103-124.

- Bogdan, R.C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). New York, NY. Pearson Education, Inc.
- Cairney, J., Hay, J., Mandigo, J., Wade, T., Faught, B. E., & Flouris, A. (2007). Developmental coordination disorder and reported enjoyment of physical education in children. *European Physical Education Review*, *13*(1), 81-98.
<http://dx.doi.org/10.1177/1356336x07072678>
- Coates, J. K. (2012). Teaching inclusively: Are secondary physical education student teachers sufficiently prepared to teach in inclusive environments? *Physical Education and Sport Pedagogy*, *17*(4), 349-365. <http://dx.doi.org/10.1080/17408989.2011.582487>
- Committee on Adapted Physical Education (1952). Guiding principles of adapted physical education. *Journal of Health, Physical Education and Recreation*, *23*, 15.
- Conderman, G., Johnston-Rodriguez, S., Hartman, P., & Walker, D. (2013). Honoring voices from beginning special educators for making changes in teacher preparation. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, *36*(1), 65-76.
<http://dx.doi.org/10.1177/0888406412473311>
- Connolly, M. (2008). The remarkable logic of Autism: Developing and describing an embedded curriculum based in semiotic phenomenology. *Sport, Ethics and Philosophy*, *2*(2). 234-256. doi: 10.1080/17511320802223824.
- Curtner-Smith, M. D. (1999). The more things change the more they stay the same: Factors influencing teachers' interpretations and delivery of national curriculum physical

- education. *Sport, Education and Society*, 4(1), 75-97.
<http://dx.doi.org/10.1080/1357332990040106>
- Curtner-Smith, M. D. (2007). The impact of a critically oriented physical education teacher education course on preservice classroom teachers. *Journal of Teaching in Physical Education*, 26(1), 35.
- Curtner-Smith, M. D., Hastie, P. A., & Kinchin, G. D. (2008). Influence of occupational socialization on beginning teachers' interpretation and delivery of sport education. *Sport, Education and Society*, 13(1), 97-117. <http://dx.doi.org/10.1080/13573320701780779>
- Curtner-Smith, M. D., & Sofo, S. (2004). Preservice teachers' conceptions of teaching within sport education and multi-activity units. *Sport, Education and Society*, 9(3), 347-377.
<http://dx.doi.org/10.1080/13573320412331302430>
- Danziger, K. (1971). *Socialization*. London: Penguin Books.
- DeCorby, K., Halas, J., Dixon, S., Wintrup, L., & Janzen, H. (2005). Classroom teachers and the challenges of delivering quality physical education. *The Journal of Educational Research*, 98(4), 208-221. <http://dx.doi.org/10.3200/joer.98.4.208-221>
- Dowling, F. (2011). 'Are PE teacher identities fit for postmodern schools or are they clinging to modernist notions of professionalism?' A case study of Norwegian PE teacher students' emerging professional identities. *Sport, Education and Society*, 16(2), 201-222.
<http://dx.doi.org/10.1080/13573322.2011.540425>

- Dwyer, J. J. M., Allison, K. R., Barrera, M., Hansen, B., Goldenberg, E. & Boutilier, M. (2003). Teachers' perspective on barriers to implementing physical activity curriculum guidelines for school children in Toronto. *Canadian Journal of Public Health*, 94(6), 448-452.
- Faulkner, G., Dwyer, J. J. M., Irving, H., Allison, K. R., Adlaf, E. M. & Goodman, J. (2008). Specialist or nonspecialist physical education teachers in Ontario elementary schools: Examining differences in opportunities for physical activity. *The Alberta Journal of Educational Research*, 54(4), 407-419.
- Favazza, P. C., & Odom, S. L. (1997). Promoting positive attitudes of kindergarten-age children toward people with disabilities. *Exceptional Children*, 63(3), 405-418.
- Fletcher, T. (2012). Experiences and identities: Pre-service elementary classroom teachers being and becoming teachers of physical education. *European Physical Education Review*, 18, 380-395. <http://dx.doi.org/10.1177/1356336x12450798>
- Fletcher, T., & Mandigo, J. (2012). The primary schoolteacher and physical education: a review of research and implications for Irish physical education. *Irish Educational Studies*, 31(3), 363-376. <http://dx.doi.org/10.1080/03323315.2012.710063>
- Fletcher, T., Mandigo, J., & Kosnik, C. (2013). Elementary classroom teachers and physical education: change in teacher-related factors during pre-service teacher education. *Physical Education and Sport Pedagogy*, 18, 169 –183. <http://dx.doi.org/10.1080/17408989.2011.649723>
- Folsom-Meek, S. L., & Rizzo, T. L. (2002). Validating the physical educators' attitude toward teaching individuals with disabilities III (PEATID III) survey for future professionals. *Adapted Physical Activity Quarterly*, 19(2), 141-154.

- Goodwin, D. L., Gustafson, P., & Hamilton, B. (2006). The disability experience in physical education. In E. Singleton & A. Varpalotai (Eds.), *Issues, theories, and trends in Canadian secondary school physical education* (pp. 223-255). London, ON: The Althouse Press.
- Goodwin, D. L. & Watkinson, E. J. (2000). Inclusive physical education from the perspective of students with physical disabilities. *Adapted Physical Activity Quarterly*, 27, 275-293.
- Gratton, C. & Jones, I. (2004). *Research methods for sport studies*. New York, NY: Routledge.
- Grossman, P. L. (1991). Overcoming the apprenticeship of observation in teacher education coursework. *Teaching and Teacher Education*, 7(4), 345-357.
[http://dx.doi.org/10.1016/0742-051x\(91\)90004-9](http://dx.doi.org/10.1016/0742-051x(91)90004-9)
- Higgs, C., Balyi, I., Cardinal, C., Norris, S., Way, R., & Legg, D. (2011). *No Accidental Champions – Long Term Athlete Development for Athletes with a Disability*. Canadian Sport Centres, Ottawa.
- Hodge, S., Ammah, J. O. A., Casebolt, K. M., LaMaster, K., Hersman, B., Samalot-Rivera, A., & Sato, T. (2009). A diversity of voices: Physical education teachers' beliefs about inclusion and teaching students with disabilities. *International Journal of Disability, Development and Education*, 56(4), 401-419.
<http://dx.doi.org/10.1080/10349120903306756>
- Hodge, S., Ammah, J. O. A., Casebolt, K. M., Lamaster, K., & O'Sullivan, M. (2004). High school general physical education teachers' behaviors and beliefs associated with inclusion. *Sport, Education and Society*, 9(3), 395-419.
<http://dx.doi.org/10.1080/13573320412331302458>

- Jerlinder, K., Danermark, B., & Gill, P. (2010). Swedish primary-school teachers' attitudes to inclusion—the case of PE and pupils with physical disabilities. *European Journal of Special Needs Education, 25*(1), 45-57. <http://dx.doi.org/10.1080/08856250903450830>
- Jobling, A., Forlin, C., Tait, K., & Carroll, A. (1999). Teacher education for diversity. *Queensland Journal of Educational Research, 15*(2), 207-225.
- Jordan, A., Schwartz, E., & McGhie-Richmond, D. (2009). Preparing teachers for inclusive classrooms. *Teacher and Teacher Education, 25*, 535-542.
<http://dx.doi.org/10.1016/j.tate.2009.02.010>
- Kirk, D. (2005). Physical education, youth sport and lifelong participation: the importance of early learning experiences. *European Physical Education Review, 11*(3), 239-255.
- Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and teacher education, 22*(8), 1020-1041.
<http://dx.doi.org/10.1016/j.tate.2006.04.022>
- LaMaster, K., Gall, K., Kinchin, G., & Siedentop, D. (1998). Inclusion practices of effective elementary specialists. *Adapted Physical Activity Quarterly, 15*, 64-81.
- Lawson, H. A. (1983a). Toward a model of teacher socialization in physical education: The subjective warrant, recruitment, and teacher education. *Journal of Teaching in Physical Education, 2*(3), 3-16.
- Lawson, H. A. (1983b). Toward a model of teacher socialization in physical education: entry into schools, teachers' role orientations, and longevity in teaching (part 2). *Journal of Teaching in Physical Education, 3*(1), 3-15.

- Lloyd, M., & Legg, D. (2009) *Fundamental movement skills: The building block for the development of physical literacy*. Physical and Health Education Canada, Ottawa, ON.
ISBN: 978-1-895716-73-3
- Loreman, T. (2007). How We View Young Children with Diverse Abilities: What Canada Can Learn From Reggio Emilia. *Exceptionality Education Canada*, 17(1), 5-26.
- Lortie, D.C. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.
- Mandigo, J., Francis, N., Lodewyk, K., & Lopez, R. (2009). Physical literacy for educators. *Physical and Health Education Journal*, 75(3), 27-30.
- Marshall, J., & Hardman, K. (2000). The state and status of physical education in schools in international context. *European Physical Education Review*, 6(3), 203-229.
<http://dx.doi.org/10.1177/1356336x000063001>
- McCullick, B. A., Lux, K. M., Belcher, D. G., & Davies, N. (2012). A portrait of the PETE major: Re-touched for the early twenty-first century. *Physical Education & Sport Pedagogy*, 17(2), 177-193. <http://dx.doi.org/10.1080/17408989.2011.565472>
- Ministry of Education (Ontario). (1980). *"Bill 82": An Act to Amend the Education Act, 1974*. Toronto: Ministry of Education.
- Ministry of Education (Ontario). (2004). *Individualized Education Plan Resource Guide*. Toronto, ON. Retrieved from <https://www.edu.gov.on.ca/eng/general/elemsec/speced/guide/resource/iepresguid.pdf>

- Morgan, P. J., & Bourke, S. (2008). Non-specialist teachers' confidence to teach PE: the nature and influence of personal school experiences in PE. *Physical Education and Sport Pedagogy*, 13(1), 1-29. <http://dx.doi.org/10.1080/17408980701345550>
- Morgan, P. J., & Hansen, V. (2008a). Physical education in primary schools: classroom teachers' perceptions of benefits and outcomes. *Health Education Journal*, 67(3), 196-207. <http://dx.doi.org/10.1177/0017896908094637>
- Morgan, P. J., & Hansen, V. (2008b). Classroom teachers' perceptions of the impact of barriers to teaching physical education on the quality of physical education programs. *Research Quarterly for Exercise and Sport*, 79(4), 506-516. <http://dx.doi.org/10.1080/02701367.2008.10599517>
- Morley, D., Bailey, R., Tan, J., & Cooke, B. (2005). Inclusive physical education: Teachers' views of including children with special educational needs and/or disabilities in physical education. *European Physical Education Review*, 1(1), 84-107. doi: 10.1177/1356336X05049826
- Morrison, H. (2014). *Finding and implementing relevant resources in adapted physical activity (APA): It's easier said than done...* (Unpublished Master's thesis). Brock University, St. Catharines, ON.
- Ontario College of Teachers (n.d.). *Registration Guide for Becoming a Teacher of General Education*. Toronto, ON. Retrieved from: <http://www.oct.ca/-/media/708144310B6C45E7AA7A1CF502BFE138.ashx>
- Ophea. (2010). *Steps to Inclusion*. Retrieved from www.ophea.net.

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

People for Education. (2013). *Annual report on Ontario's publicly funded schools 2013*.

Toronto: People for Education. Retrieved from <http://www.peopleforeducation.ca/wp-content/uploads/2013/05/annual-report-2013-WEB.pdf>

People for Education (2014). *Public Education: Our Best Investment* (Annual Report on Ontario's Publicly Funded Schools 2014). Toronto: People for Education. Retrieved from <http://www.peopleforeducation.ca/wp-content/uploads/2014/06/annual-report-2014-WEB.pdf>

Pike, S., & Fletcher, T. (2014). A review of research on physical education teacher socialization from 2000-2012. *Revue phénEPS/PHEnex Journal*, 6(1): 17pp.

Pugach, M. C. (1992). Uncharted Territory: Research on the Socialization of Special Education Teachers. *Teacher Education and Special Education*, 15(2), 133-47.

<http://dx.doi.org/10.1177/088840649201500208>

Reid, G. (2003). Defining adapted physical activity. In Steadward, R. D., Watkinson, E. J., & Wheeler, G. D. (Eds.). *Adapted physical activity* (11-24). University of Alberta.

Richards, K. A. R., & Templin, T. J. (2012). Toward a multidimensional perspective on teacher-coach role conflict. *Quest*, 64(3), 164-176.

<http://dx.doi.org/10.1080/00336297.2012.693751>

- Richards, K. A. R., Templin, T. J., & Gaudreault, K. L. (2013). Understanding the realities of school life: Recommendations for the preparation of physical education teachers. *Quest*, 65(4), 442-457. <http://dx.doi.org/10.1080/00336297.2013.804850>
- Richards, K. A. R., Templin, T. J., & Graber, K. (2014). The socialization of teachers in physical education: Review and recommendations for future works. *Kinesiology Review*, 3, 113-134. <http://dx.doi.org/10.1123/kr.2013-0006>
- Schempp, P., Tan, S. K., Sparkes, A., & Templin, T. (1996). Teacher socialization in sport pedagogy. In Schempp, P. G. (Ed). *Scientific Development of Sport Pedagogy* (63-81). Münster: Waxmann Verlag.
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-service teachers' attitudes, concerns and sentiments about inclusive education: An international comparison of the novice pre-service teacher. *International Journal of Special Education*, 21(2), 80-93.
- Sherrill, C. (2004). *Young people with disability in physical education/physical activity/sport in and out of schools: Technical report for the world health organization*. International Council of Sport Science and Physical Education.
- Simpson, K. B., Tucker, P., & van Zandvoort, M. M. (2011). Fit to teach physical education?. *Revue phénEPS/PHEnex Journal*, 3(2): 9pp.
- Smith, A., & Green, K. (2004). Including pupils with special educational needs in secondary school physical education: a sociological analysis of teachers' views. *British Journal of Sociology of Education*, 25(5), 593-607. <http://dx.doi.org/10.1080/0142569042000252080>

Sokal, L., Woloshyn, D., & Funk-Unrau, S. (2014). How important is practicum to pre-service teacher development for inclusive teaching? Effects on efficacy in classroom management. *Alberta Journal of Educational Research*, 59(2), 285-298.

Statistics Canada. (2006). *Participation and activity limitation survey 2006: A profile of education for children with disabilities in Canada*. (Catalogue no. 89-628-X no. 004). Ottawa, Ontario ISBN 978-0-662-48621-3. Retrieved from <http://www.statcan.gc.ca/pub/89-628-x/89-628-x2008004-eng.pdf>

Stran, M., & Curtner-Smith, M. D. (2009). Influence of occupational socialization on two preservice teachers' interpretation and delivery of the sport education model. *Journal of Teaching in Physical Education*, 28(1), 38-53.
<http://dx.doi.org/10.1080/13573320903037846>

Teacher's Gateway to Special Education. (n.d). Teaching strategies for gross motor skill development in children with physical disabilities. Retrieved from <http://www.teachspeced.ca/physical-disability?q=node/705>

Templin, T. J. (1979). Occupational socialization and the physical education student teacher. *Research Quarterly*, 50(3), 482-493.

Tindall, D., MacDonald, W., Carroll, E., & Moody, B. (2014). Pre-service teachers' attitudes towards children with disabilities An Irish perspective. *European Physical Education Review*, 21(2) 206-221. <http://dx.doi.org/10.1177/1356336x14556861>

Tsangaridou, N. (2012). Educating primary teachers to teach physical education. *European Physical Education Review*, 18(3), 275-286.
<http://dx.doi.org/10.1177/1356336x12450788>

- Vickerman, P. (2007). Training physical education teachers to include children with special educational needs: Perspectives from physical education initial teacher training providers. *European Physical Education Review*, 13(3), 385-402.
<http://dx.doi.org/10.1177/1356336x07083706>
- Vickerman, P., & Coates, J.K. (2009). Trainee and recently qualified physical education teachers' perspectives on including children with special educational needs. *Physical Education and Sport Pedagogy*, 14(2), 137-153.
<http://dx.doi.org/10.1080/17408980802400502>
- Zeichner, K. M., & Tabachnick, B. R. (1981). Are the effects of university teacher education "washed out" by school experiences? *Journal of Teacher Education*, 32(2), 7-11.
<http://dx.doi.org/10.1177/002248718103200302>

Appendix A – Phase 1 Interview Questions

Initial Interview, Information Gathering

How long have you been teaching?

How many children with a physical disability have you taught in PE?

What type of disability did your former students have?

Background of teaching preparation

Where did you do your post-secondary education? Can you tell me a little about the programs you completed? For example, what was the degree, what was the focus, what courses did you find really interesting or not so interesting?

What courses or preparation did you receive in university for teaching students with a physical disability in physical education specifically? For example, special education classes, adapted PE classes. What are your thoughts about what you learned in those classes? Was there any practical experience involved?

To what extent do you feel the preparation you received helped you create your lesson plans so that they are inclusive of children with a physical disability?

What (if any) other preparation did you have prior to teaching the student with a physical disability?

Prior Experiences of PA/PE with children with disabilities (prior to teaching)

What experience did you have with children or adults with a physical disability prior to entering university? Probe: If not identified, ask specifically about experience in physical activity settings.

Would you say your experience or exposure to persons with a disability prior to post-secondary education was positive, negative, or a mix of both? What influenced the experience?

To what extent did this experience give you skills or insights you've used or drawn from as a teacher?

What knowledge did you have of sport and recreation for people with a physical disability prior to your post-secondary education? Were you introduced to any sports or adapted physical activity during your post-secondary studies?

Background of teaching experience

How many children were in the classes? Were they “mainstreamed” classes or did all students in the class have disabilities?

How accessible have the schools that you have taught in been to students with a physical disability? Can you tell me a little bit about the access and support offered to students?

Are you aware of any inclusion policies your school board has regarding the participation in physical education by students with disabilities? If yes, what are they?

Do you have knowledge of the Long Term Athlete Development Model? If yes, can you please provide a very brief summary of your understanding of the model? How (if at all) has it informed how you teach physical education for children with physical disabilities?

Confidence and experiences

How confident were you going into your first classes with a student with a physical disability?

Did your confidence improve with each subsequent student (if applicable)? What were the reasons for this?

Did you find your confidence grew as the school year went on?

Did your preparations and planning become easier as the year went on? What were the reasons for this?

How did your first experiences prepare you to teach other students with a physical disability?

Appendix B – Phase 2 Interview Questions

Experiences teaching children with physical disabilities

Were students with a disability always present in your physical education classroom? If not, approximately how often/frequently do you teach a child with a physical disability?

How did you learn about the child you were going to teach (and their abilities/physical activity capacity/other physical activities)?

When you found out that you would be teaching a child with (disability just mentioned), what were your reactions?

In your opinion, did the child with a physical disability whom you taught learn the age-appropriate fundamental motor skills in the year/s that you taught them? (disability considered)

What did/did not lead this to happen?

How do you feel the physical education experience affected the child? And what are your thoughts about how it might have affected their peers, both with and without disabilities?

To what extent was the child with a physical disability included in the class?

Accessing resources/information

Where did you go for information? Did any information come to you (by design or chance?) If so, how/what?

What information was most important for you to find?

Where did your resources come from? Were they human? Literature? Media?

Was the information you were able to find helpful? Do you have suggestions for improvement?

Equipment

What adaptive equipment did you have access to?

Looking back, do you think you were properly equipped to provide the most inclusive environment?

Support

Did you receive any feedback from other teachers/Education Assistant/Parents/the child before, during or after the class?

What advice would you give to a colleague who has just found that they will be teaching a child with a physical disability for the first time?

Is there anything you would have done differently?

Is there anything you would suggest is necessary for providing an optimal experience for this or similar children? For example, more support from administration, a full-time support specialist, more pre-service or professional education, more resources, and so on.