IMPLEMENTING THE PHYSICAL LITERACY COMPONENT OF THE 2015 ONTARIO HEALTH AND PHYSICAL EDUCATION CURRICULUM: IS THE STAGE SET?

by

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Abstract

Introduction: Current physical activity levels among children and youth are alarmingly low; a mere 7% of children and youth are meeting the Canadian Physical Activity Guidelines (Colley et al., 2011), which means that the vast majority of this population is at risk of developing major health problems in adulthood (Janssen & Leblanc, 2010). These high inactivity rates may be related to suboptimal experiences in sport and physical activity stemming from a lack of competence and confidence (Lubans, Morgan, Cliff, Barnett, & Okely, 2010). Developing a foundation of physical literacy can encourage and maintain lifelong physical activity, yet this does not always occur naturally as a part of human growth (Hardman, 2011). An ideal setting to foster the growth and development of physical literacy is physical education class. Physical education class can offer all children and youth an equal opportunity to learn and practice the skills needed to be active for life (Hardman, 2011). Elementary school teachers are responsible for delivering the physical education curriculum, and it is important to understand their will and capacity as the implementing agents of physical literacy development curriculum (McLaughlin, 1987). Purpose: The purpose of this study was to explore the physical literacy component of the 2015 Ontario Health and Physical Education curriculum policy through the eyes of key informants, and to explore the resources available for the implementation of this new policy. Methods: Qualitative interviews were conducted with seven key informants of the curriculum policy development, including two teachers. In tandem with the interviews, a resource inventory and curriculum review were conducted to assess the content and availability of physical literacy resources. All data were analyzed through the lens of Hogwood and Gunn’s (1984) 10 preconditions for policy implementation. Results: Participants discussed how implementation is affected by: accountability, external capacity, internal capacity, awareness and understanding of physical literacy, implementation expertise, and policy climate. Discussion: Participants voiced similar opinions on most issues, and the overall lack of attention given to physical education programs in schools will continue to be a major dilemma when trying to combat such high physical inactivity levels.
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Prologue

My intention with this prologue is to help the reader understand my personal connection to education and physical activity. I have a background in kinesiology, which was initially sparked by my love of human movement, as I have been involved with sport and physical activity since the age of 5. During my undergraduate career, I discovered a passion to teach children and youth. I followed this passion to a Bachelor of Education and soon after started work as an occasional teacher for the same school board where I was a student from Kindergarten through Grade 12.

It was during my days as a supply teacher that I began to notice how negatively physical activity was received within the school setting. I noticed a lot of children not wanting to participate in physical activity or physical education class, and there appeared to be an overall lack of attention toward physical education in many schools. One incident is particularly memorable. When I asked an elementary class of students to tell me what they usually do to meet the mandated 20 minutes of daily physical activity during instructional time, their response was ‘silent seat ball’, a sedentary activity that requires little to no movement. This was not only shocking to me, but also very disappointing. This is when I realized that I wanted to somehow make a difference in children’s lives regarding physical activity within the school setting, and after two years of supply teaching I decided to pursue this Master’s Degree.

Positionality of the Researcher

As a researcher I reflected on my background in education and how it might have impacted and shaped the accounts of my participants. My background privileged me to conduct my interviews with people holding key positions within the education system. As someone with an education background, I was easily able to exchange with participants in familiar ‘education’ language. Establishing rapport with research participants often arises from the researcher displaying confidence in what he/she is doing (Ritchie, Lewis, McNaughton Nicholls, & Ormston, 2014), and I feel that I was able to display this confidence as a result of my teaching experience. The essence of qualitative research establishes the
researcher as the instrument of data collection in that the researcher’s personal beliefs, political stance, cultural background, and values are all important elements that may have an effect on the research process (Bourke, 2014). Keeping this in mind, I had to be conscious of my own subjectivity throughout the interviews and the writing of this thesis. I realize that my own voice and positionality are intertwined with my data, in that the codes and themes that emerged from the data were ultimately influenced by my own education background. Throughout the interviews I may not have probed as much as someone without a background in education might have because I had prior knowledge about the topics and I assumed a shared understanding with interviewees. It is possible that further probing could have uncovered more information. Similarly, the participants could have also presumed that I had an understanding of different aspects, and not provided all relevant information, for fear of insulting me. In this way, the data I captured might have been impacted by my positionality as an educator in the Ontario school system. To achieve confirmability, i.e., the act of ensuring that the results are based on participant experiences and not those of the researcher, I considered my own bias and beliefs toward the study and captured these in my researcher positionality statement (Shenton, 2004).
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List of Abbreviations

H&PE: Health and Physical Education
MVPA: Moderate to Vigorous Physical Activity
FMS: Fundamental Movement Skills
MOE: Ministry of Education
Ophea: (formerly) Ontario Physical and Health Education Association
PHE Canada: Physical and Health Education Canada
EQAO: Education Quality and Accountability Office
DPA: Daily Physical Activity
PE: Physical Education
Chapter 1

Introduction

Engagement in regular physical activity plays an important role in the healthy development of children and youth, as well as in the prevention of certain metabolic and cardiovascular risk factors (Janssen & Leblanc, 2010). An active child benefits from optimal opportunities for healthy growth and development expressed via physical, emotional, and psychosocial health outcomes, as well as by an increase in cognitive functioning such as concentration and on-task behaviour, all of which are associated with daily engagement in physical activity (Donnelly & Lambourne, 2011; Eime, Young, Harvey, Charity, & Payne, 2013; Janssen & Leblanc, 2010). Unfortunately, current physical activity trends indicate that the vast majority of Canadian children and youth are not meeting the nationally recommended guideline of 60 daily minutes of moderate to vigorous physical activity (MVPA; Colley et al., 2011). These high levels of inactivity may be caused by suboptimal experiences in sport and/or physical activity that eventually result in disengagement from these activities. Throughout early childhood development, knowledge surrounding the importance of leading a physically active lifestyle and fundamental movement skills need to be established to help avoid potential negative experiences in sport and/or physical activity (Lubans, Morgan, Cliff, Barnett, & Okely, 2010).

To meet current Canadian physical activity guidelines for physical activity and to maintain lifelong physical activity, a foundation of physical literacy needs to be established so that the whole child can be developed. Physically literate children are able to move competently, confidently, creatively, and strategically across a wide variety of health-related physical activities (Mandigo, Francis, & Lodewyk, 2007). They consistently develop the motivation and ability to understand, communicate, apply, and analyze different forms of movement. These skills and knowledge enable children to make healthy, active choices throughout their lifespan, which are beneficial to themselves, others, and their environment (Mandigo, Francis, & Lodewyk, 2007). The development of physical literacy does not always occur
naturally as a part of normal growth, and for many children, instruction and training are needed (Hardman, 2011). Physical education offered in school settings can play an integral role in the development of physical literacy because it is the only time that can guarantee most children the opportunity to receive guidance and encouragement to learn and practice these skills (Hardman, 2011).

In response to a growing concern about inactivity and a long outdated curriculum, the Ontario Ministry of Education (2015) revised the Health and Physical Education (H&PE) Grades 1-8 curriculum. The revised curriculum is based on a vision that students will obtain the knowledge and skills to acquire physical literacy that will allow them to lead healthy active lifestyles.

Since elementary school teachers are expected to deliver the physical literacy component of the 2015 H&PE curriculum, it is important to explore how well equipped they are to successfully implement this component. Therefore, the aim of this thesis is to explore: 1) the content of the physical literacy component of the curriculum policy through the eyes of key informants, and 2) the resources available for the implementation of the curriculum policy in order to identify its strengths and weaknesses in advance of its implementation. This will help to answer the following research question: Is the stage set for the implementation of the physical literacy component of the 2015 Ontario Health and Physical Education Curriculum? Using Hogwood and Gunn’s (1984) framework of 10 preconditions for ‘perfect’ implementation, qualitative interviews of key informants involved with the development and planning of the physical literacy component of the H&PE curriculum, and a resource inventory were conducted. The curriculum policy document and existing supports (lesson plans, activities, and teacher handouts) for teachers to implement the curriculum for building a physical literacy foundation for all children and youth were explored. Recommendations for optimal implementation are presented and will be shared with key stakeholders.
Chapter 2

Literature Review

2.1 Physical Activity and Children

Participation in regular physical activity offers a wide array of benefits to children and youth. In particular, it is generally accepted as an effective strategy for preventing a variety of health risks across age, gender, ethnic, and socioeconomic status subgroups (Janssen, 2007; Janssen & Leblanc, 2010; Katzmarzyk & Tremblay, 2007; Pate et al., 1995; Strong et al., 2005; WHO, 2010). A systematic review found an inverse relationship between physical activity and cholesterol and blood lipids, high blood pressure, metabolic syndrome, overweight and obesity, and depression and a positive relationship between physical activity and bone mineral density (Janssen & Leblanc, 2010). Although these authors also found a corollary increase in the likelihood of injury with increased physical activity, overall, the physical and mental health benefits of physical activity far outweigh its risks for children and youth (Tremblay et al., 2015).

Eime, Young, Harvey, Charity, and Payne (2013) investigated the psychological and social health benefits associated with participation in sport. In this context, sport is considered to be one type of leisure-time physical activity, which is organized, (usually) competitive, and played in a team or as an individual. In particular, team sport has been credited with providing more psychosocial benefits to children and youth through the effect of positive experiences in coaching, skill development, and peer support (Eime et al., 2013). Through engagement in both sport and physical activity, children and youth are provided the opportunity to build self-confidence, as well as to interact and integrate with other young people, resulting in greater social skills (WHO, 2010).

In addition to these physical and psychosocial health benefits, regular participation in physical activity can enhance a child’s cognitive function, which can result in greater academic performance (Donnelly & Lambourne, 2011; Singh, Uijtdewilligen, Twisk, van Mechelen, & Chinapaw, 2012). A
positive association exists among physical activity, fitness, and academic achievement, offering an opportunity to intervene and provide programs that help to improve both health and academic performance (Donnelly & Lambourne, 2011). In a systematic review, Uijtdewilligen, Twisk, van Mechelen, Chinapaw, and Nihiser (2012) found evidence of a positive relationship between physical activity and academic performance. That is, children who participate in regular physical activity both at school and outside of school are shown to have higher academic performance. In studies that did not find an association between academic achievement and physical activity, it was concluded that dedicating class time to physical activity did not compromise children’s academic performance (Donnelly & Lambourne, 2011). Therefore, it is important to provide children and youth with opportunities to be physically active at school, since healthy behaviours are formed at an early age (Hills et al., 2014).

Recommendations founded on the Janssen and Leblanc (2010) review and the accumulated evidence on the health benefits of physical activity in children informed the development of the 2011 Canadian Physical Activity Guidelines for Children and Youth. These guidelines recommend that children age 5-11 years and youth age 12-17 years should accumulate at least 60 minutes of moderate to vigorous physical activity daily in order to reap health benefits (Canadian Society of Exercise Physiology, 2011). It is recommended that vigorous intensity activities and activities that strengthen muscles and bones each be performed at least three days per week.

2.2 Physical Inactivity Levels

All of the benefits obtained through regular participation in physical activity are essential at every age, and it appears to be especially critical for healthy growth and development in the formative years (Caine & Maffulli, 2005; Hills, Dengel, & Lubans, 2014). However, current trends reveal alarming rates of physical inactivity. An annual report card highlighting the most recent findings regarding the prevalence of physical activity among Canadian children and youth revealed an overall physical activity grade of D- (ParticipACTION, 2015). Most children and youth are not meeting the Canadian Physical Activity Guidelines; specifically, a mere 9% of children and youth between 5-17 years of age, meet the
daily recommendation of at least 60 minutes of MVPA. This number has remained stable since the 2009 Canadian Health Measures Survey, which directly measured physical activity by using accelerometry, found that only 7% of children and youth met the daily recommendation (Colley et al., 2011).

**Barriers and Facilitators to Child Activity Levels**

Child and youth physical activity is a very complex behaviour that is determined and affected by many factors (Sallis, Prochaska, & Taylor, 2000). It can be useful to think of the barriers and facilitators of child and youth physical activity in terms of a social-ecological conceptualization, which recognizes that behaviour is influenced by a wide range of factors at multiple levels (McLeroy, Bibeau, Steckler, & Glanz, 1988; Sallis, Owen, & Fisher, 2008; Spence & Lee, 2003; Stokols, 1992). Behavioural influences can be *intra*-individual, which might include individual attributes, beliefs, attitudes, and behaviours, and *extra*-individual, which might include an individual’s physical, social, cultural, and policy environments. All levels of behavioural influence are considered to be interdependent with individual and environmental factors having the potential to simultaneously shape the physical activity patterns and behaviours of people (Spence & Lee, 2003). Thus, it is useful to adopt a social-ecological perspective when considering the barriers and facilitators to children’s and youth’s physical activity patterns.

Individual level influences that can impact a child’s physical activity involvement include biological, psychological, and behavioural factors. Consistent modifiable correlates include self-efficacy, physical competence, perceived benefits, perceived barriers, intention, enjoyment, and physical education attitudes (Sallis et al., 2000). In particular, self-efficacy is especially influential in that the more confidence a child has in his or her abilities to perform physical activity, the more he or she is likely to engage in physical activity. This finding is true across gender, age categories, education level, and family income (Pan et al., 2009). Thus, ensuring that children have strong beliefs in their ability to engage in a variety of physical activity tasks is critical to promote physical activity and to avoid high dropout/withdrawal rates. Self-efficacy needs to be addressed at a young age (Lubans et al., 2010).

The personal and social connections that a child has can be vital to health and well-being. Supportive social relationships encourage physical activity through the establishment of positive social
norms surrounding physical activity (McNeill, Kreuter, & Subramanian, 2006). Within a school setting, teachers are a significant source of motivation and encouragement toward learning in that teachers build the social environment within a classroom (Ryan & Patrick, 2001). In addition, peers help establish social norms within a classroom, as students learn in the presence of many peers (Ryan & Patrick, 2001). In a study of students, faculty, and staff regarding experiences with and perspectives on physical activity at school, physical competitiveness and bullying during physical education class was reported to prevent some students from feeling comfortable and confident to participate (Bauer, Yang, & Austin, 2004). It was concluded that, despite efforts to increase physical activity levels in the school setting through physical education class, barriers still exist within the school’s social environment that need to be addressed (Bauer, Yang, & Austin, 2004).

The physical environment can also constitute a facilitator or barrier to child and youth physical activity. Within a school setting, good quality facilities such as gymnasium space, outdoor structures, and equipment can encourage physical activity among students (Wechsler, Devereaux, Davis, & Collins, 2000). For example, Verstraete, Cardon, De Clercq, & De Bourdeaudhuij (2006) found that providing equipment for games and activities during the recess period effectively increased physical activity levels among students. Similarly, a Norwegian study found that secondary school level students from schools with high availability of various outdoor facilities (e.g. soccer field, playground equipment, sledding hill, hopscotch, and skipping) had higher physical activity levels when compared to students from schools with fewer facilities (Haug, Torsheim, Sallis, & Samdal, 2010). Both of these studies found that the presence of equipment and facilities within the school environment can have a positive influence on students’ participation in physical activity, while a school environment without these features may constitute a barrier to physical activity in youth.

Policy level factors too can have an effect on how, when, or if a child engages in regular physical activity (Bauman et al., 2012). Physical activity related policy is informal or formal legislative or regulatory action taken by governmental or non-governmental organizations that provides direction for collective and individual behaviour. Policies can affect physical activity patterns at local, regional, or
national levels by mandating investment in resources and/or the development of relevant public health regulations (Bauman et al., 2012). Findings from the 2015 ParticipACTION Report Card indicate a need for improvement in the school setting with respect to physical activity policies. In fact, only 55% of school administrators in Canada reported having a fully implemented policy for daily physical education for all students, indicating that almost half of Canadian children are not being given the opportunity for daily physical activity during school time (Opportunities for Participation at School Survey, Canadian Fitness and Lifestyle Research Institute, 2011).

2.3 Physical Literacy

When there are many barriers and few facilitators for children to be physically active, the result can be low fundamental movement skill development and an overall lack of confidence and competence to engage in physical activity and sport. For children to develop preferences, skills, and confidence early in life, adequate developmental opportunities must be provided. These opportunities can be offered in the school setting to help ensure consistency among all children and youth. More specifically, physical literacy (Whitehead, 2007) is an emerging concept showing promise of providing children and youth with the opportunity to develop and grow the skills, knowledge, and attitudes to become and remain physically active for life. If children can begin their journey towards becoming physically literate at a young age, the current trends of low physical activity levels may start to be reversed. Margaret Whitehead (1993) coined the term physical literacy in an attempt to explain the potential that human beings have with regard to physical capacities, which are embedded in ‘perception, experience, memory, anticipation, and decision-making’, allowing individuals to interact with the environment in which they live (Whitehead, 2001). Whitehead’s (2001; 2007) conceptualization acknowledges all forms of expression of physicality as valid and emphasizes the development of people’s physical capacities and confidence that they have the potential to engage in a variety of movements in diverse environments as an expression of their true selves and a way to achieve quality of life.
The contemporary physical literacy ‘movement’ has embraced many elements of Whitehead’s (2001; 2007) conceptualization of physical literacy, although often with a more narrowed perspective. For example, the following definition trains physical literacy towards health outcomes:

Individuals who are physically literate move with competence in a wide variety of physical activities that benefit the development of the whole person. Physically literate individuals consistently develop the motivation and ability to understand, communicate, apply, and analyze the different forms of movement. They are able to demonstrate a variety of movements confidently, competently, creatively and strategically across a wide range of health-related physical activities. These skills enable individuals to make healthy, active choices throughout their life span that are both beneficial to and respectful of themselves, others, and their environment. (Mandigo, Francis, Lodewyk, & Lopez, 2009, p.6-7)

This definition intends to bridge the gap between the sport and education sectors, which are both recognized as key providers of physical activity opportunities for Canadians (Mandigo et al., 2009). Highlighting the benefits of physical activity with respect to the development of the physical, social, affective, and cognitive domains, physical literacy is a promising framework to ensure that all children and youth have the foundation to engage in lifelong physical activity and sport. The development of the ‘whole child’ is acknowledged, although emphasis is on the development of skills that enable one to ‘perform’ rather than on the development of embodied competence.

Fundamental movement and sport skills are the building blocks of physical activity and, while these are an important outcome of physical literacy education, they should not be the only goal. In addition to building basic movement skills, physical literacy education should help individuals develop the holistic ability to read and respond to movements in different environments (Whitehead, 2001). Given that the sport sector typically focuses on physical aspects of physical literacy, the education sector has inherited the task of ensuring that these other, more cognitive, aspects of physical literacy are nurtured.
Although both physical and cognitive elements of physical literacy are acknowledged by the education sector, it appears that physical literacy is mainly viewed as a means to achieve health by becoming active for life (Higgs, 2010). Without the development of physical literacy, many children and youth withdraw from physical activity and sport and turn to more sedentary and/or unhealthy activity choices during their leisure time (Canadian Sport for Life, 2010). Low physical literacy is often associated with low perceived competence for physical activity, which might ultimately cause a person to withdraw from participation in a sport and/or physical activity. For example, a study by Burton and Martens (1986) showed an association between dropout rates and low perceived physical activity ability. Similarly, perceived competence, or having the sense that one has the ability to master a task, has been shown to predict continued interest and perseverance in this task (Cervelló, Escartí, & Guzmán, 2007). In fact, evidence supports the positive association between fundamental movement skills (FMS) competency in children and youth and physical activity levels (Lubans et al., 2010).

2.4 Health Promotion in Schools

The World Health Organization (WHO, 2000) identified schools as the most important setting for children and youth to develop the attitudes, skills, and knowledge required to lead healthy active lifestyles. Since children and youth in Canada spend almost half of their waking hours in the school setting, schools are an efficient and potentially cost-effective venue for a health and wellness program (Mandigo, 2010).

Health promotion is defined as ‘the process of enabling people to increase control over, and to improve, their health’ (Ottawa Charter, 1986). A Health Promoting School, based on the Ottawa Charter for Health Promotion, focuses on the premise that healthy children learn better, and health promotion at schools builds a foundation of health knowledge and skills to enhance the educational outcomes of all students (St. Leger, Young, & Perry, 2008). A Health Promoting School has six essential components: healthy school policies, a healthy physical environment, a healthy social environment, opportunities to develop individual health skills and action competencies, community links, and health services (St. Leger,
Young, & Perry, 2008). Healthy school policies in particular, are a critical way to reach all children in a school setting in a democratic manner.

Establishing an effective healthy school policy requires considerable work from relevant stakeholders at all levels (WHO, 2010). There are many forms that a healthy school policy aimed at physical activity might take, including, but not limited to: school recognition programs, quality physical education curriculum, adequate physical environment features, health promotion for school staff, and school health services (WHO, 2010). The ultimate aim of a healthy school policy is to promote health and well-being among an entire school community (St. Leger, Young, & Perry, 2008).

In the fall of 2013, the Ontario Ministry of Education (MOE) gathered key representatives from across the Ontario education system to discuss the future for learners in Ontario, and created a renewed vision for education in Ontario (MOE, 2014). Within this initiative, four renewed goals were articulated, including the goal of “promoting well-being: all children and students will develop enhanced mental and physical health, a positive sense of self and belonging, and the skills to make positive choices” (MOE, 2014, p.3). In relation to this renewed goal, the Foundations for a Healthy School resource was updated to include five interconnected areas that together inform ways to developing a healthier school (MOE, 2014). The five main pillars that contribute to a healthy school are:

- Curriculum, Teaching, and Learning
- School and Classroom Leadership
- Student Engagement
- Social and Physical Environments
- Home, School, and Community Partnerships

Each area offers a unique opportunity for students to learn in a healthy, safe, and inclusive environment. Within the Curriculum, Teaching, and Learning area, students are provided with a variety of opportunities to learn and develop positive healthy behaviours, which can lead to healthy active lifestyles.

In addition to the Foundations for a Healthy School document, other school health initiatives exist in which physical activity is included as a main approach to becoming a healthy school. An
internationally recognized framework that encompasses the whole school environment, Comprehensive School Health, aims to support students to become healthy learners (Pan-Canadian Joint Consortium for School Health [JCSH], 2015). Partnerships between health and education are vital to achieve a healthy school environment for learning, and they are an effective way to improve both health and education within schools. Across Canada, a partnership made up of 25 Ministries of Health and Education exists to help promote student well-being. This is known as the Pan Canadian Joint Consortium for School Health (JCSH) and is also based on the World Health Organization’s Ottawa Charter for Health Promotion (1986). All of these frameworks are based on the idea that a healthy child is a better learner, which provides a rationale for healthy school approaches (Symons, Cinelli, James, & Groff, 1997).

The elementary school represents an ideal time and setting for children and youth to develop competence and confidence in fundamental movement skills (e.g. running, jumping, kicking, throwing, catching) that will provide them with the foundation to be active for life (Hills et al., 2014; Lubans et al., 2010). The development of fundamental movement skills coupled with a positive learning environment can enhance holistic learning, a goal of education in Ontario. Since health behaviours that are established early on in childhood are more likely to persist into adulthood (Hills et al., 2014), it is important to capitalize on opportunities to establish healthy habits, especially in the school setting (Hills et al., 2014).

### 2.5 Health and Physical Education Curriculum

The catalyst for a policy change may arise within an organized group or from an advocacy group recognizing the need for change in a particular area (e.g., outdated physical education curriculum). Another way in which a policy might be precipitated is through diffusion from one jurisdiction to another, rather than through a new policy development process for each specific area (Olstad, Campbell, Raine, & Nykiforuk, 2015). Through the process of policy diffusion, the behaviour addressed within the policy can become either normalized or de-normalized, depending on the behaviour. School and school boards have the power to introduce their own policies providing that the new policy adheres to any pre-existing provincial standards. Moreover, a policy may or may not be adopted by a particular group depending on
contextual factors such as the capacities of the adopters, the political nature, and the policy itself (Olstad et al., 2015).

As one of the five pillars of a healthy school, curriculum is an education policy aimed at developing lifelong student learners. According to Schmid, Pratt, and Witmer (2006), a policy helps to guide individual or collective behaviours, defined as a law or regulation mandated by government at various levels, and can include formal or informal rules. The authors suggest that policy may be conceptualized at three levels: the first being formal written codes bearing legal authority, the second as written standards that guide choices, and the third as unwritten social norms that influence behaviour (Schmid et al., 2006). Using this definition of policy, education curriculum can be placed in the second category as a written standard that may guide individual or collective behaviours. Education curriculum is a policy that is formed through a thorough review process; in Ontario, the Ministry of Education is ultimately responsible for the development of the curriculum policy documents (MOE, 2013).

According to the Ontario Ministry of Education (2013), the curriculum policy documents outline mandatory requirements and standards identifying what students must know and be able to do at the end of every grade or course in every subject in Ontario publicly funded schools. Developed by the Ministry of Education (2013) and reviewed to ensure that it is current, relevant, and developmentally appropriate, the curriculum documents consist of three components:

- The front matter provides critical foundational information about the curriculum itself and about how learning connects to the Ministry of Education policies, programs, and priorities.
- The curriculum expectations (overall and specific expectations) are the knowledge and skills that students are expected to demonstrate in each subject at each grade level by the end of the grade.
- Additional supports, glossaries and overviews are included to provide further guidance and information to support the implementation of the curriculum. (The Ontario Curriculum Frequently Asked Questions section, para. 2)

Curriculum defines, describes, and communicates the essence of the subject matter at hand; by changing the curriculum, one can change the way in which a subject is viewed and taught within an education
community (Cothran, 2001). This particular avenue for change has recently been employed in the health and physical education community in Ontario.

On February 23, 2015 the Ontario Ministry of Education released a revised Health and Physical Education (H&PE) curriculum for both the elementary and secondary levels. Mandatory implementation of this curriculum began in September 2015. Prior to this time, school boards and teachers were using a curriculum that was developed in 1998. This curriculum lacked many aspects of a more contemporary conceptualization of physical education; in particular, physical literacy was not a stated goal at the time. The overall vision and goal of the health and physical education curriculum in 1998 focused primarily on the physical aspects of child development (e.g., motor skills, fitness), while mostly ignoring the social, emotional, and cognitive aspects of child development. In other words, the main goal of physical education in the 1998 version of the Ontario H&PE curriculum was to enhance fitness and sport-specific skills. A defining feature of the 2015 H&PE curriculum is its emphasis on physical literacy as an outcome of physical education. The vision of the 2015 H&PE Curriculum states:

The revised health and physical education curriculum is based on the vision that the knowledge and skills students acquire in the program will benefit them throughout their lives and enable them to thrive in an ever-changing world by helping them develop physical and health literacy as well as the comprehension, capacity, and commitment they will need to lead healthy, active lives and promote healthy, active living. (The Ontario Curriculum 2015, p.6)

According to Ophea, the H&PE curriculum was thoroughly developed in consultation with experts in the field of health and physical education, teachers, parents, students, universities, colleges, Faculties of Education, and various stakeholder groups. Given that Ontario schools are the only formal education institution in the province to have contact with 95% of children, the population health potential of this initiative is huge (Ophea, 2015).
2.6 Physical Education and Physical Literacy

Physical education has been a school curricular subject for over 100 years with the main aim of developing a student’s ability to be physically active throughout his/her lifetime (Sallis et al., 2012). When physical education is delivered properly by a trained teacher who follows the curriculum while offering opportunities to learn, practice, and engage, enhanced physical literacy is likely to ensue (Hills et al., 2014). In fact, physical education is the only experience within education that focuses on the body and its movement and physical development (Hardman, 2011). The development of physical literacy is unlikely to occur naturally as a part of normal growth; school physical education offers an opportunity for children and youth to accumulate physical activity during the school day, and also represents a crucial opportunity to develop a foundation of movement skills and cognitive learning (Morgan & Hansen, 2008).

Children and youth learn basic movement skills in progression, known as a movement vocabulary, similar to learning the alphabet for reading and numbers for counting; these movement skills become the building blocks for movement knowledge in later life (Mandigo, Francis, & Lodewyk, 2007). Developing a movement vocabulary is often dependent on an individual’s biological make-up as well as breadth of experience because, although the development of fundamental movement skills is age-related, it is not age-dependent (Mandigo, Francis, & Lodewyk, 2007). Physical education, when properly taught, can stimulate both physical and cognitive development, allowing children to learn about the world and themselves (Hardman, 2011). In addition, a properly taught physical education lesson provides children with the resources to learn how to play and respect others, learn cooperation and competition, as well as learn how to handle success and failure. The ultimate goal of a physical education program is to develop physical competence so that children and youth have the confidence to move efficiently, effectively, and safely, while understanding the importance of movement to ultimately support a lifelong journey in physical activity (Hardman, 2011). Knowledge and understanding are also essential for maintaining an active lifestyle. The role of physical education is to develop these attributes so that each student is able to
appreciate the benefits of physical activity and feel motivated to participate in physical activity (Hardman, 2011).

There has been some controversy over the introduction of a new term (i.e., physical literacy) to the physical education lexicon. Lounsbery and McKenzie (2015) question whether or not physical education and physical literacy are distinct given that physical education class is the chosen medium in which to develop physical literacy. They further question the validity of the physical literacy moniker given its scarcity in the physical education literature to date. This criticism may be challenged by viewing physical literacy as an additional outcome to physical fitness, both of which are the result of physical education. In this conceptualization, a quality regular physical education program can help children and youth become physically literate (i.e., develop FMS and an appreciation for physical activity involvement) and physically fit (Mandigo, Francis, & Lodewyk, 2007).

2.7 Accountability in Education

During the 1990’s there appeared to be a growing need for accountability, as schools in Ontario were under watch and were being pressured to provide information regarding what they were doing and how well it was working (Earl, 1995). There was an increase in attention being placed on the quality of education in Ontario, and, in particular, on student achievement (Earl, 1995). As a result, in 1995, the Education Quality and Accountability Office was established, and literacy and numeracy assessments were created for Grades 3, 6, 9, and 10 in the province of Ontario. The main goals of these tests are to provide data on the accountability of teachers, as well as to improve both teaching and learning (EQAO, 2015). These assessment tests are intended to provide students with an opportunity to showcase their abilities in a standardized way, with a more objective lens. It has been found that students feel heightened anxiety during the testing time frame and that these standardized tests unintentionally cause teachers to focus their teaching mainly on the content that will be tested, thus leaving the other curricular subjects behind, and deeming them less important (Volante, 2007). Ultimately this disrupts students from receiving a balanced education since there is more emphasis placed on the subjects being tested. Physical
education is quite often left behind when preparing for standardized testing since it is not a tested subject and is seen as less valued than other curricular subjects (Volante, 2007).

Another example of a lack of accountability related to a physical education policy is the Daily Physical Activity (DPA) policy that was legislated in the province of Ontario in 2005. This Ontario Ministry of Education policy requires that schools provide children in Grades K-8 a minimum of 20 minutes of daily moderate to vigorous physical activity during instructional time (Policy/Program Memorandum No. 138, para. 4, 2005). In a 2012 study by Patton, 64% of 145 teachers surveyed in London, Ontario reported that administrators rarely or never monitored DPA. This absence of accountability in the policy could be a main factor in the little impact that DPA has had on children’s physical activity levels. Procedures to ensure accountability in all education policies should be prioritized and established during the policy development stage to ensure that the policy is adopted and implemented as mandated (Olstad et al., 2015).

2.8 The Role of Teachers

Teachers are the implementing agents of a curriculum policy change in the education setting, and their buy-in to the policy is critical to its implementation. According to McLaughlin (1987), policy impact is ultimately dependent upon the will and capacity of the delivery agent, the person delivering the policy. Will represents the individual motivations, attitudes, and beliefs held by the implementer toward the policy and the policy goals. Will is often a reflection of the delivery agent’s personal assessment of the policy and thus, can be difficult to modify. The more support that is offered to a teacher prior to the implementation process, the more likely it is that the teacher will develop motivation to implement the policy (McLaughlin, 1987).

Teachers are often criticized as being resistant to change (McLaughlin, 1987). Greenberg and Baron (2000) highlight some of the common reasons that teachers may resist change; for example, habit, fear of the unknown, and failure to recognize need for change (as cited in Zimmerman, 2006). This
resistance to change highlights the need for teachers to understand and value the physical literacy component of the H&PE curriculum because they are the ones who are mandated to implement it.

When training (e.g. professional development days), resources (e.g. lesson plans and activity examples), administrative support, and funding are provided, the likelihood that a policy will be implemented is heightened (McLaughlin, 1987). For example, training can enhance the valuing of the new H&PE curriculum policy by teachers. Teachers’ openness to educational reforms, such as curriculum updates, depends largely on their level of involvement and buy-in to the change effort (Datnow & Castellano, 2000). Ensuring that teachers buy-in to the physical literacy concept is crucial to the successful implementation of the new H&PE curriculum because it also affects the teachers’ attitudes and beliefs toward the policy.

Teachers are responsible for using appropriate and effective instructional strategies to help students achieve curriculum expectations (H&PE Curriculum, 2015). With these responsibilities, teachers are encouraged to seek out current resources, mentors, and professional development and training opportunities as necessary, placing the onus on the teacher (H&PE Curriculum, 2015). Therefore, teachers need to be aware of the supports available to them, and the resources must be relevant to the new curriculum to facilitate implementation. Without capacity, teachers might not develop the will to implement the policy, and might lack the buy-in, which is imperative when implementing change and is affected by the events that occur at the policy development level.

Since school-based H&PE has been recognized as an effective avenue to enhance the overall health of children and youth (Olstad, Campbell, Raine, & Nykiforuk, 2015), this adds a great responsibility on the teacher to provide a learning environment that is conducive to produce holistically healthy lifelong learners. Unfortunately, many of the teachers do not have the specialized training to deliver the H&PE curriculum effectively (Mandigo et al., 2004). Research has found that having a health and physical education specialist deliver H&PE curriculum results in greater principal support for the H&PE curriculum in schools. Unfortunately, health and physical education specialist positions are rare in Ontario elementary school PE classes (Mandigo et al., 2004). This is an education issue that should be
addressed either by hiring more specialized teachers or by providing generalist teachers with additional training and support to implement the H&PE curriculum.

When teachers are tasked with implementing a new curriculum, it is imperative that they are provided with sufficient professional development opportunities to facilitate its implementation (Garet, Porter, Desimone, Birman, & Yoon, 2001). In a study examining ideal professional development opportunities for teachers and how to improve teacher learning and skills, three main features of professional development were found to have a significant positive effect on teacher knowledge: focus on content knowledge, opportunities for active hands-on learning, and coherence with other activities (Garet, et al., 2001). Not only can effective professional development opportunities enhance a teacher’s knowledge, but they can also enhance student learning (Sinelnikov, 2009). Therefore, the importance of professional development for teachers tasked with implementing new curriculum, is critical to foster student learning.

Given the recent introduction of physical literacy in the 2015 Ontario H&PE curriculum policy and the evidence about ideal policy implementation conditions, it is imperative to assess whether or not support and resources exist to facilitate the successful implementation of the physical literacy component of the 2015 Ontario H&PE curriculum. Exploring extant resources available to help teachers deliver the curriculum will serve to identify areas in the policy that are adequately resourced and areas that need attention. Thus, the purpose of the research reported in this thesis was to explore the strengths and weaknesses of the Ontario H&PE curriculum and related implementation preconditions in advance of its implementation in September 2015.

It is important to explore the readiness of the education community for the implementation of the physical literacy component within the 2015 H&PE curriculum. Through this exploration, it is important to identify the resources available to teachers to assist with implementation, in order to ensure that students will receive the ultimate benefits of the new curriculum as stipulated in the renewed vision for Ontario learners.
Chapter 3

Methods

3.1 Research Methodology

An exploratory case study methodology was used to understand how the stage is set for the implementation of the physical literacy component as stipulated in the Ontario H&PE curriculum policy and to explore the supports and resources (i.e., capacity) available to facilitate policy implementation. Case studies allow for the exploration of multiple perspectives and data sources to understand complex social phenomena in a holistic, comprehensive, and contextualized manner (Ritchie, Lewis, Nicholls, & Ormston, 2014; Yin, 2003). The case study methodology is preferred when studying contemporary events (Yin, 2003), and thus constitutes an appropriate methodology for studying the implementation potential of the new H&PE curriculum. A case study approach was appropriate because the implementation of the curriculum is contemporary in that it was released in February of 2015, and it is a social phenomenon because it is public education in Ontario. The boundaries for the case study included the area of South Eastern Ontario extending to the GTA. Four of the participants represented three different school boards in this geographical area.

Several frameworks have been developed to assess policy implementation (Rogers, 1995; Schmid et al., 2006; Schneider, 1982). These frameworks provide conceptual ideals for the successful implementation of a policy or intervention. For example, Rogers’ (1995) Diffusion of Innovations model describes five Attributes of Innovations that determine whether or not an innovation (e.g., a new policy) will gain traction through its relative advantage, compatibility, complexity, trialability, and observability. These attributes are similar to Schneider’s (1982) five factors for successful implementation (i.e., viability, integrity, capacity, scope, unintended consequences) in that both models focus on the presence of specific attributes of an innovation during the implementation stage to predict successful uptake. Schneider (1982) identified these factors as performance measures for implementation in the study of
transition services policy in an education setting regarding students with disabilities (Schriner & Bellini, 1994). Schmid et al. (2006) developed a conceptual framework specific to physical activity, which has been used to focus on aspects of the built environment and its effect on physical activity policy. These three frameworks have been used to assess health-related policies during the implementation stage, but not prior to implementation.

While it is necessary to evaluate policy implementation and impact to ultimately determine policy success, assessing policy prior to its implementation is useful for identifying potential problems that may arise in advance of implementation (Hogwood & Gunn, 1984). Highlighting the strengths and weaknesses of a policy before implementation can help identify whether or not the policy is ready to be implemented. To assist with this pre-implementation assessment, Hogwood and Gunn (1984) offer a list of 10 preconditions that should be satisfied prior to implementation in order to ensure successful policy implementation. These 10 preconditions have been used successfully to analyze provincial policy documents specifically related to the Daily Physical Activity (DPA) policy (Memorandum 138) in Ontario schools as a way to understand the readiness of the context and the delivery agents to adopt the DPA policy (Robertson-Wilson & Lévesque, 2009). In their research, Robertson-Wilson and Lévesque (2009) compared and contrasted DPA policy-related documents to each precondition to identify which had been satisfied and to highlight areas that warranted further attention. Their work was limited to archival data and their analysis occurred after the DPA policy had been implemented. In the current study, I used Hogwood and Gunn’s framework prospectively to guide stakeholder interviews and the resource inventory.

Assessing the potential effectiveness of a policy is an integral part of the process in the development and implementation of the policy. When considerable thought is given to potential implementation issues at the policy design stage, the likelihood of successful policy implementation is enhanced. A successful or ‘perfect’ implementation is the presumed aim of policy developers according to Hogwood and Gunn (1984). Perfect implementation occurs when the policy meets all intended goals
and outcomes that were set at the initial stage of policy development. In reality, this type of implementation is rarely attainable for many different reasons, not the least being that policy makers typically rely on an outside implementing agent to translate the policy ideal into action (Pal, 1992).

Hogwood and Gunn (1984) outline 10 preconditions related to the quality of the policy itself and to the anticipated conditions of the context in which the policy will be implemented. A prospective approach was used to assess which preconditions had been considered in relation to the 2015 H&PE curriculum policy and its related documents to determine its implementation readiness. Table 1 highlights the 10 preconditions and their indicators. The table also identifies the data sources that were investigated to assess each precondition (i.e., interview with specific organization, resource inventory of available resources, or review of curriculum policy). According to Hogwood and Gunn (1984), the more of the 10 preconditions that are present, the more likely it is that the policy implementation will be successful.
Table 1: The 10 implementation preconditions for “prefect implementation” and their indicators according to Hogwood and Gunn (1984)

<table>
<thead>
<tr>
<th>Precondition</th>
<th>Indicator</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Circumstances external to the implementing agency do not impose crippling constraints.</td>
<td>Evidence that contextual factors (physical or political) external to the implementation (outside the control of the administrators) were taken into consideration during policy development.</td>
<td>1. One-on-one interview with Ontario Ministry of Education (MOE) representative. 2. One-on-one interview with People for Education representative.</td>
</tr>
<tr>
<td>2. Adequate time and sufficient resources are made available to the program.</td>
<td>Evidence that time allotted between the release and the implementation of the new policy and the availability of resources (funding, training, supports) are sufficient for implementing agents to prepare accordingly.</td>
<td>1. One-on-one interview with expert H&amp;PE curriculum contributor. 2. One-on-one interview with People for Education representative. 3. Ophea and Physical and Health Education (PHE) Canada written resources.</td>
</tr>
<tr>
<td>3. Required combination of resources is actually available.</td>
<td>Evidence that resources needed for the completion of all of the required steps and activities for the policy to be implemented are available.</td>
<td>1. Ophea and PHE Canada written resources. 2. One-on-one interview with expert H&amp;PE curriculum contributor.</td>
</tr>
<tr>
<td>4. Policy to be implemented is based upon a valid theory of cause and effect.</td>
<td>Evidence that the policy is grounded/supported in evidence-based practice.</td>
<td>1. H&amp;PE curriculum policy. 2. One-on-one interview with expert H&amp;PE curriculum contributor.</td>
</tr>
<tr>
<td>5. Relationship between cause and effect is direct and that there are few if any, intervening links.</td>
<td>Evidence that anticipated policy outcomes do not rely on a sequence of inter-dependent actions.</td>
<td>1. H&amp;PE curriculum policy. 2. Published Physical literacy research articles. 3. One-on-one interview with expert H&amp;PE curriculum contributor.</td>
</tr>
<tr>
<td>6. Dependency relationships are minimal.</td>
<td>Evidence that supporting organizations play a minor role in supporting implementing agents.</td>
<td>1. One-on-one interview with MOE representative. 2. One-on-one interview with People for Education representative.</td>
</tr>
<tr>
<td>7. There is understanding of, and agreement on, objectives.</td>
<td>Evidence that the outcomes and expectations of the policy are easily understood by the implementing agents.</td>
<td>1. One-on-one interviews with teachers.</td>
</tr>
</tbody>
</table>
8. Tasks are fully specified in correct sequence. | Description of tasks in the policy documents are sufficiently detailed to carry out the implementation plan. | 1. H&PE curriculum policy.  
2. One-on-one interview with expert H&PE curriculum contributor.  

9. There is perfect communication and coordination. | Evidence that the stakeholders within the hierarchical education system can communicate and coordinate their activities successfully. | 1. One-on-one interview with teacher.  
2. One-on-one interview with People for Education representative.  

10. Those in authority can demand and obtain perfect compliance. | Implementing agency (MOE) has authority over the people and entities (teachers) from whom consent and cooperation are required for successful policy implementation. | 1. One-on-one interview with MOE representative.  
2. One-on-one interview with People for Education representative.  

3.2 Methods

As listed in Table 1, two sources of data were used in this study: qualitative interviews and relevant written resources (a resource inventory). These were collected in parallel, with one informing the other in a back-and-forth process. I conducted the semi-structured interviews with key informants who were involved with the development of the curriculum, as well as two teachers who were mandated to implement the curriculum in the 2015/16 school year. The resource inventory consisted of gathering multiple resources (Arksey & O’Malley, 2005) from Ophea and PHE Canada as well as the H&PE curriculum policy itself, to identify physical literacy supports available to teachers who were mandated to implement the new curriculum.

3.3 Qualitative Interviews

3.3.1 Recruitment. Purposeful sampling was used to recruit and select interviewees who were knowledgeable about the development and implementation plan of the Physical Literacy component in the 2015 Ontario Health and Physical Education Curriculum. I personally invited all of the eligible participants (mostly by email), who were either recommended to me by academic, professional (i.e., education), or personal contacts. This initial contact allowed the participants to feel welcome and comfortable with my research project and with me as the researcher. This supports the development of
credibility, one of the key criteria in the pursuit of a trustworthy study (Shenton, 2004). All seven of the people contacted agreed to participate, and all provided active informed consent. Each participant was made aware of the opportunity to refuse participation and/or to withdraw from the study at any point during the data collection, with assurances that his/her data would not be used if permission was withdrawn. This strategy is used to ensure honesty in the participants throughout the data collection period (Shenton, 2004).

3.3.2 Participants. The seven study participants (5 women) were either personally involved in the development of the 2015 Ontario Health and Physical Education Curriculum or represented an organization that was involved in the development of the curriculum. Organizations represented were: Ophea, People for Education, the Ontario Association for Physical and Health Educators (OASPHE), and PHE Canada. Some of the participants had an affiliation with more than one organization. Participants also included a Superintendent of Education in Curriculum Services, two elementary school teachers, and a representative from the Ontario Ministry of Education. Participants were grouped into three separate categories (e.g. physical literacy experts, policy representatives, and teachers) to highlight the specific perspective that was represented. Physical literacy experts were two participants who have been involved with Ophea and are knowledgeable about physical literacy as a result of their current job (M02 and F04). Policy representatives included three participants all of whom have had, or currently have, experience working with curriculum, whether it be at the Ministry level or school board level (M01, F03, and F06). Teachers included the two participants who were working at the elementary school level in Ontario (F05 and F07). These seven people each provided a unique perspective from their own vantage point within the education system hierarchy. All of the participants had experience teaching at different levels within the school system, with one participant teaching at the university level; three participants were past or present board members of Ophea.

3.3.3 Semi-structured interviews. One interview was conducted over the telephone and six interviews were conducted in person at a location of the participant’s choosing; three interviews were held at the
participant’s place of employment, one was held at Queen’s University, and two were held in the participant’s home. Interviews lasted between 40 to 75 minutes and were conducted over a three-month period. Some of the advantages of an in-person qualitative interview are thoroughness of the response, ability to clear any misconceptions, opportunity to follow up on responses, and the increased likelihood that the participant will be more diligent in providing accurate responses in the presence of the interviewer (Baumgartner & Hensley, 2006). These detailed descriptions of the study context can enhance transferability, a measure of external validity, to other research contexts (Shenton, 2004).

I used a semi-structured interview guide (Appendix B) to collect similar data from all of the interviewees in a way that allowed the interview to move forward naturally with each interviewee (Baumgartner & Hensley, 2006). I began each interview by following the interview guide questions and probed with additional questions when the interviewee broached topics and themes that were not previously considered. Follow-up questions were asked, as appropriate, to ensure an understanding of the interviewee’s responses. This structure allowed the interview to shift focus, which facilitated a natural flow that was not manipulated or controlled by the researcher (Patton, 2002). The interviews were digitally recorded to allow for accurate documentation of every word. Permission (Appendix A) was sought from the participant to audio record the conversations, and notes were taken during the interviews. After the interviews were conducted, I transcribed them verbatim.

3.3.4 Data Analysis. A sequential inductive, deductive analysis strategy was adopted, whereby emerging themes were first identified before the guided analysis was conducted. This strategy allowed for a comprehensive examination of the planned H&PE policy implementation. For the inductive analysis, the interview transcripts (104 pages) were analyzed according to Braun and Clarke’s (2006) six steps for thematic analysis. The first step in the process, transcribing the interviews, allowed me to familiarize myself with the data, which is a key step in the data analysis process. Transcripts were then sent back to each respective participant for member checking to ensure accuracy of the transcription and proper representation of participant perspectives, and to enhance study validity and trustworthiness (Creswell,
2015; Shenton, 2004). Three of the seven participants returned a copy of the transcript with minor edits and clarifications. The second step involved the generation of initial codes from the data. I read all of the verbatim transcripts line-by-line and assigned a code word or phrase (e.g., ‘Assessment for physical education’) to each idea to capture its essence and ensure that all data were represented by the codes. This meant that distinct codes were generated for different segments of the raw data. Once this step was complete, a third step in the analysis process included searching for higher-order themes across the codes. The codes were sorted into subthemes (e.g., ‘Assessment’) before grouping the subthemes into themes (e.g., ‘Accountability’) that would justly represent the H&PE implementation plan. This step allowed me to re-focus the analysis in order to determine how different subthemes could be combined to form higher order themes. In order to enhance study rigour, the fourth step involved reviewing and comparing subthemes and themes with a second trained coder who independently completed steps 2 and 3. The second coder was a certified PHE Canada physical literacy trainer and physical literacy expert with over 4 years of experience in the field. Together, we compared all of the codes with their verbatim data within both the subthemes and themes to ensure that we were consistent in our coding and generation of themes. During step five, after reviewing and arriving at a consensus about the codes and themes, we finalized subtheme labels such that each accurately represented its respective higher order theme. Step six, ‘writing the report’, was accomplished by writing this thesis.

When the inductive analysis was complete, a deductive analytic approach was completed, with the second coder, to place the subthemes and themes identified through the inductive analysis into the 10 preconditions according to Hogwood and Gunn (1984). Deductive analysis is driven by a theory or framework (Braun & Clarke, 2006), in which the purpose is to move from general data to specific data to code for a particular research question or to test an existing theory (Braun & Clarke, 2006; Elo & Kyngas, 2007). According to Patton (2002), deductive analysis can act as a final stage of qualitative analysis to confirm the authenticity of the inductive content analysis and to determine how identified themes might or might not fit into a pre-existing theory or framework. First, we discussed each precondition with its
indicator and guiding question in order to identify the subthemes and themes that would fit under each of the preconditions. For example, precondition 1 relates to any contextual factors that could influence implementation; therefore, subthemes and themes related to context (e.g., political factors) were categorized under precondition 1. Once we reached consensus on the inclusion criteria for each precondition, we reviewed all of the subthemes and themes, along with their corresponding codes to refresh our memory before sorting them into preconditions. We then took each precondition one by one, using each as a lens to identify related subthemes and themes. We discussed each precondition and moved the subthemes and themes around until we agreed on an appropriate fit between each theme and its precondition. All subthemes and themes were placed into a precondition. Although some preconditions contained more than one subtheme and/or theme, subthemes and themes were categorized exclusively into one precondition each.

3.4 Resource Inventory
The H&PE curriculum policy and relevant resources offered by organizations best known by elementary teachers in Ontario (PHE Canada and Ophea) were reviewed. Both of these organizations are popular with and have good reach to teachers all over the province of Ontario. Ophea’s audience includes educators and leaders in all of Ontario’s 5,000 schools, with over 24,000 subscribers to the electronic newsletter (Ophea, 2015). It is evident that Ophea has a solid reputation within the education sector in Ontario and has well-established relationships and communication channels to effectively reach Ontario schools and communities (Ophea, 2015). PHE Canada, on the other hand, has been Canada’s premier professional organization for physical and health education for over 80 years (PHE Canada, 2015). PHE Canada is able to support schools through a range of programs, resources, and initiatives. Together, these two organizations have a profound impact on physical educators in Ontario schools and their offerings should ultimately affect the implementation of the new curriculum.

3.4.1 Selection of Resources. I searched the Ophea and PHE Canada websites using the keywords: physical literacy, curriculum, physical activity, and lesson plans to identify relevant resources. I also
obtained relevant resources not available to the general public through personal, professional, and academic contacts. These searches yielded 35\(^1\) documents, reports, and webpages. Next, I screened these resources against the following inclusion criteria: having a specific focus on physical literacy throughout the document, intended for elementary students, published/made available within the last five years, and designed to be used by a teacher in a physical education setting. Since the resources reviewed were only from two organizations, the retrieval process was fairly straightforward.

3.4.2 **Data Extraction and Analysis** I analyzed the Ophea and PHE Canada documents through the lenses of preconditions 2 and 3 and the H&PE curriculum policy through the lenses of preconditions 4, 5, and 8. The indicators listed in Table 1 were used to extract evidence from the resources as to whether or not the preconditions had been considered. I abstracted a description of each resource, noting the resource type (e.g., video, booklet), intended audience (i.e., for which grades the resource is intended), resource content (i.e., focus of the resource), physical literacy competency (i.e. specific knowledge, attitude, or skill within the cognitive, affective, and/or physical domains addressed by the resource), and accessibility (i.e., source and cost to obtain the resource). This information allowed me to estimate the comprehensiveness of the resources available to support the implementation of the curriculum. I reviewed each document individually, recording the relevant information in a spreadsheet.

As I read through the curriculum policy, I highlighted the sections in which I found evidence of an indicator, noting the number of the relevant precondition in the margin of the policy document. I then transcribed the relevant information onto the spreadsheet, recording, for each precondition, all related evidence accompanied by the page number of the evidence source.

In addition to the curriculum policy review, I reviewed physical literacy articles, and Canadian Sport for Life resources through the lens of precondition 5 in order to understand how the underlying

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\(^1\) This number does not include each individual lesson plan, but rather resource ‘packages’. For example: all Grade 1 lessons = 1 document; a poster series made up of 15 posters =1 document; the 70 Playsport online activities = 1 document.
theory of physical literacy fits within the curriculum policy. Information was drawn from the literature review conducted for this thesis; the following articles were especially relevant: Canadian Sport for Life, 2010; Hardman, 2011; Higgs, 2010; Mandigo, Francis, & Lodewyk, 2007; Mandigo, Francis, Lodewyk, & Lopez, 2009; Tremblay & Lloyd, 2010; and Whitehead, 2001. These articles provided ample evidence about associations between physical literacy and physical activity outcomes.

Table 2. Description of research articles that focus on physical literacy

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Date</th>
<th>Audience</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Physical Literacy: A Guide for Parents of Children Ages 0 to 12</td>
<td>Canadian Sport for Life</td>
<td>2010</td>
<td>Parents</td>
<td>Guide</td>
</tr>
<tr>
<td>Physical Literacy - Two Approaches, One Concept</td>
<td>Higgs, C.</td>
<td>2010</td>
<td>Educators</td>
<td>Research Article</td>
</tr>
<tr>
<td>The Concept of Physical Literacy</td>
<td>Whitehead, M.</td>
<td>2001</td>
<td>Academia</td>
<td>Peer Reviewed</td>
</tr>
</tbody>
</table>

3.5 Integration of Interview Findings, Resource Inventory Results Curriculum Review and Article Review

As a final step, using evidence amassed from the qualitative interviews, the resource inventory, the curriculum review, and article review, I was able to determine the presence/partial presence/absence of each precondition. Each precondition was reread and evidence of its presence detected in any of the data
sources was considered to determine if the precondition was partially or fully met. This information was noted on the spreadsheet.

3.6 Relevance

This study is both timely and relevant. The development of physical literacy is listed as a goal of the revised H&PE curriculum and is becoming more prominent among different physical education organizations (e.g., Ophea and PHE Canada). The implementation of the curriculum was to occur in Ontario schools in September 2015, and with the addition of many new components since 1998, especially physical literacy, it was appropriate to explore the quality of the curriculum policy and the resources that corresponded with it. As noted by Lounsbery and McKenzie (2014), there is scant published information about physical literacy. It is thus relevant to gather and document the perspective of key informants about the readiness of the school community to embrace physical literacy in order to guide its successful implementation.

3.7 Knowledge Translation

Results from both analyses will be disseminated to key stakeholders in the form of a report card that will highlight the key findings. The report card will answer the questions that were developed for each precondition, which were used in the analysis. It is hoped that this study will help teachers continue to facilitate the development of physical literacy in Ontario children and youth by providing helpful recommendations to the teachers themselves and to relevant authorities who are in a position to support the successful implementation of the H&PE curriculum policy into Ontario classrooms.

3.8 Ethics

This study adhered to strict ethical standards, procedures, and expectations of the Tri-Council Guidelines and Queen’s ethics policies.
Chapter 4

Results

This chapter opens with a brief description of general perceptions about the full H&PE curriculum as viewed by the interview respondents. Next, the focus narrows to describe the six emerging themes from the inductive analysis of data pertaining to the implementation of the physical literacy component of the new H&PE curriculum: Accountability, External Capacity, Internal Capacity, Awareness and Understanding of Physical Literacy, Implementation Expertise, and Policy Climate. Next, results from the resource inventory are described in table format. Finally, the presence/partial presence/absence of each of Hogwood and Gunn’s (1984) preconditions is presented in a table that integrates findings from the inductive and deductive qualitative analysis of the interviews and the resource inventory.

4.1 The H&PE curriculum

The revised H&PE curriculum policy received a lot of media attention regarding the sexual education component, and, although this was not the focus of my research, it was mentioned several times. It seemed that, because of the controversy, the curriculum was receiving more attention than any other curriculum had in the past.

It’s probably the most publicized curriculum ever. It would be hard to find someone who didn’t know that we had a new curriculum in the province and I think that’s actually been a good thing. I think that it’s actually raised a lot of awareness around the importance of health and physical education with our kids (physical literacy expert, M02)².

There was a lot of concern associated with the sexual education component. Despite some of the attention being negative, some participants felt that it was a blessing in disguise as it raised awareness of the curriculum in general. However, some participants felt that the negative attention caused the positive

² M02 indicates participant two, male.
components of the curriculum to be overlooked. “So what’s getting out there is inaccurate, it’s putting the spotlight on that, that is not the overall purpose and goal of the curriculum and unfortunately that is like a distractor from the important work” (policy representative, F03).

The extent to which the general H&PE curriculum was valued and prioritized (i.e., buy-in) was seen to be essential for implementation of any of its components, but buy-in was considered to vary across schools and school boards in relation to who was championing it at the top.

So buy-in to me is a really important element - no one is going to say they’re not bought in to 60 minutes of physical activity, or 20 minutes of physical activity, but they’re going to act in ways that will show you whether they are or not (policy representative, M01).

Physical literacy expert M02 stated:

Yeah I mean [buy-in] is vital. And it almost seems like curriculum gets lost along the way when you’ve got all these other priorities that the board has and I think they just assume curriculum will get taught, but if you don’t support it, especially if it’s a new curriculum … They need some support (M02).

The H&PE curriculum as a whole was typically discussed relative to other curricular areas during the interviews. An often cited factor to the lack of buy-in to the H&PE curriculum seen in some elementary schools was the competing attention and focus placed on numeracy and literacy. “Seeing numbers and results, that’s where the priority is – numeracy and literacy” (physical literacy expert, F04).

“And so they’ll always put money into what really counts, even if it’s one quarter, whatever they have they’re going to put into what counts publicly” (policy representative, M01). “But again, it depends on part of the board too. If the board really values EQAO scores, then they’re going to put a lot of pressure on the principal to say ‘well you need to get those scores up’” (physical literacy expert, M02). Teachers provided perspective on the ways in which H&PE was viewed as ‘stealing’ from learning time rather than enhancing a child’s physical and mental health to ultimately improve learning in other areas.
And so people are saying ‘I’m losing 30 minutes’ and it’s interesting because they use that negative term ‘I’m losing’ … It’s not a gain, it’s not ‘this is motivating’ and so we need to change the language so that people see that this is enhancing my teaching, it’s enhancing learning (teacher, F05).

Another example was when H&PE was regarded as a ‘break’ from classroom work, rather than as a curricular subject that was of equal importance as math or language. “But it’s really considered a break in school and I think that’s really a big contributing factor and people not realizing that physical literacy spans so many other things. And probably is as important as your math” (F05).

4.2 Implementation of the Physical Literacy component of the H&PE curriculum

Figure 1 illustrates the codes that were generated from the inductive analysis of participant verbatim transcripts, which were used to identify subthemes, and finally the main six themes. Each main theme and associated subthemes are described below with supporting verbatim transcripts.
Figure 1. Codes, subthemes, and themes related to the inductive analysis

**THEMES**

- Accountability
- External Capacity
- Internal Capacity
- Awareness and Understanding of Physical Literacy
- Implementation Expertise
- Policy Climate

**SUBTHEMES**

- Accountability
  - Assessment
  - Public reporting of Physical Literacy
  - Enforcement

- External Capacity
  - Partnerships and Community
  - Professional Development
  - Supporting Organizations

- Internal Capacity
  - Funding
    - Human Resources
    - Professional Development
    - School Infrastructure and Equipment
  - Uncertainty
    - Conceptualization

- Awareness and Understanding of Physical Literacy
  - Teacher Competence
  - Teacher Confidence
  - Pedagogical Approaches

- Implementation Expertise
  - Roles within Education System
  - Policy to Practice
  - Political Factors

**CODES**

- assessment for PE
- accountability in PE, parent expectations, public results do not focus on H&PE, report cards
- accountability for education policies, teachers holding themselves accountable, principals act as enforcement

- opportunities for partnerships, personal experiences
- availability of resources and supports
- cost of training, Ophea as main resources, PHE Canada, P4E influence, undergraduate focus

- funding as a resource
- collaboration among teachers, PE specialists
- curriculum document, resources for teachers, training opportunities
- equipment, physical environment

- school board, teacher, parents, students, physical literacy as a term
- physical literacy as an outcome, physical literacy is inclusive

- cross-curricular connections, increase teacher knowledge, professional responsibility, generalist vs. specialist
- passionate PE teachers, perception of safety as a constraint, teachers are motivated, teachers need to be confident in content
- infusing physical literacy into teaching, transferable skills

- Ministry level (funding, Ministry decisions), school board level (funding, training, priorities), principal level (influence, priorities)

- curriculum dissemination, physical environment, time between release and implementation, understanding the curriculum
- labour issues, public attention from misinformation
4.2.1 Accountability

This theme reflects the expectations placed upon a teacher to be professionally responsible, with an obligation to implement the H&PE curriculum policy to the best of his/her ability. The subthemes nested within this theme relate to assessment, public reporting of physical literacy, and enforcement. Although assessment can occur in different forms, an overall lack of assessment opportunities and tools to evaluate physical literacy within the physical education setting, compared to the resources available for other curricular subjects, was perceived by teachers. Physical literacy expert, M02, commented on the great tools that did exist, but mentioned that these tools did not necessarily provide an evaluation of student learning: “There are some really good assessment tools - not for summative purposes, but for formative purposes - that have been used in schools now (sic). So they're getting physical literacy assessments in school.” Physical literacy expert, F04, expressed a different opinion regarding the assessment tools:

And the PHE Canada assessment tools, we’ve told them [teachers] time and time again, that they are not very user friendly … So any teacher that I’ve talked to, even the most motivated teacher, Passport for Life is too labour intensive.

Teachers, on the other hand, did not seem to be aware of the tools, nor appear to view these as important. “I mean building phys ed assessment – that is the least of my priority as a teacher too. I’ve got my assessment binder and it’s full of stuff for numeracy and literacy, but there is nothing for phys ed” (teacher, F07).

When participants were asked about accountability, the Education Quality and Accountability Office (EQAO) was often mentioned, likely because it administers standardized tests at the primary, junior, and intermediate divisions as a way of assessing student learning. Both teachers and physical literacy experts agreed that if there was some sort of assessment such as standardized measurements in H&PE, teachers likely would be more accountable. For example, one teacher discussed how physical literacy was not measured.
Another problem in noticing and responding to the needs of physical literacy are that much of education is driven by EQAO scores. And that’s political – nobody measures our physical literacy, we talk about it a little bit, but government focus which filters down to board and school focus is EQAO, which is math and language (teacher, F05).

Physical literacy was discussed as being less prioritized than subjects that were tested and produce public results: “It’s all about the scores [EQAO test scores] unfortunately.” (teacher, F05).

EQAO was mentioned as a way to keep teachers accountable to implementing curricula, yet support for this approach to enhance teacher accountability to physical literacy may be lacking. “Well one way we hold teachers accountable in literacy and numeracy is EQAO, I’m not a big supporter of it. But that’s how teachers are held accountable for that. I would hate to see something similar for physical literacy” (physical literacy expert, M02).

Since EQAO publicizes results, these public reports can increase the accountability placed on a teacher. The public, including parents, have expectations and these reports can provide information as to whether or not their expectations are being met. Report cards, although not public, were mentioned as a way that could increase a teacher’s accountability:

Well I mean, you’re going to have report cards – I mean you’ll have to comment on students progress around the expectations in the curriculum, so I think that’s probably one of the ways, so teachers have to provide comments to parents about how they are meeting or not meeting the expectations [relative to physical literacy] (physical literacy expert, M02).

Principals are mandated to ensure that each teacher is managing his or her classroom in the optimal way to implement the curriculum and following the gymnasium schedule for PE. Policy representative, F06, highlighted the principal’s role in enforcing the curriculum:

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3 Words in brackets have been added by the researcher to clarify meaning and provide context for the quote.
It actually says in the curriculum – in the elementary curriculum on page 16 under the role of the principals – it says ‘to support student learning, principals ensure that the Ontario curriculum is being properly implemented in all classrooms and learning environments using a variety of instructional approaches’. They also ensure that appropriate resources are made available for teachers and students to enhance teaching and learning in all subjects including health and physical education…That’s standard principle for all curriculum, but because it’s written there in policy – it gives them a piece to say that it really is the principal’s job to make sure that the curriculum is implemented (policy representative, F06).

Whether or not principals were actually following through on this mandate, was questionable.

No a principal never checks or comes into the classroom. And it doesn’t happen with any of the other curriculum it’s not just this one, but no. And I mean I’ve maybe had one principal that probably could be able to tell what each classroom teacher is focusing on, what their big ideas are at that moment – I’ve only had one principal like that. The others wouldn’t have a clue (teacher, F07).

This perspective provides insight into the lack of enforcement by principals despite the mandated policy.

Although principals carry a large responsibility to ensure that teachers are implementing the curriculum, teachers have an obligation to maintain professionalism in the classroom.

Ultimately the responsibility is on the principal to ensure that the curriculum is being implemented, but I think there’s lots of responsibility on the teachers themselves to make sure that they’re doing their job and there’s lots of supports in the curriculum itself to help them do that (policy representative, F06).
The professional responsibility of being a member of the Ontario College of Teachers, an order to which teachers must adhere throughout their teaching career, was recognized by all of the study respondents, including teachers themselves.

So teachers are professionals, they are members of the Ontario College of Teachers and their responsibilities and their commitment as teachers is to implement the curriculum and monitor how well students are learning the curriculum expectations in each subject area. It is a full expectation that they will do their best professional work to do that and seek support from colleagues or their principal where they have areas where they need additional support (policy representative, F03).

One participant even compared a teacher’s professional responsibility to that of a doctor, in that they are both professional occupations with an obligation to uphold a proper conduct.

Just like a doctor has an ethical obligation to ensure that they’re up to date on the most current medical procedures, same thing as a teacher right? I think that there is a professional obligation that goes along with that, with your standing as a teacher (physical literacy expert, M02).

Teachers also recognized this responsibility, “it’s up to us to read it on our own, which is fine. That is the professional thing and part of our responsibility” (teacher, F07).

### 4.2.2 External Capacity

External capacity refers to any supports that are offered outside of the school system, which assist teachers during curriculum implementation. The subthemes for external capacity included: partnerships and community, professional development, and supporting organizations. Working in collaboration with local community partners and organizations can foster a positive learning environment for students and school staff.
I think the point is to figure out what the role of the community is in relationship to those particular schools and those students and how you enrich community experiences so kids are getting enriched opportunities out of school and in school, in terms of all these different parts of it (policy representative, M01).

When asked about the concept of physical literacy, one participant focused on the multi-sector support that existed. For example,

It’s bringing people together from different sectors. I love going to those types of conferences where you’ve got teachers, parents, parks and rec, sport organizations, and everyone is there who wants to do or has a similar mandate and now we’re all working together. I think that has been a real success story (physical literacy expert, M02).

Through these partnerships and organizations, it appeared that physical literacy was gaining attention beyond the education setting, which helped to increase awareness of it.

Like I said to someone once, that ‘if the term physical literacy were to die tomorrow, its greatest legacy would be that it brought people together from different sectors’ and so I think they’re hearing it not just in education, but they’re hearing it in the community as well. And those links are being made now, which I think has been fantastic (physical literacy expert, M02).

Community support for physical literacy represents a form of external capacity to support the development of physical literacy among children and youth.

Additional physical literacy resources and professional development opportunities were available to teachers through professional organisations such as Ophea and PHE Canada, which specifically targeted the education community. Ophea was identified as one of the best resources to support physical literacy implementation. Ophea works directly with school boards to offer support, ensuring that all of
their resources align with the Ontario curriculum. “Well probably the main one [resource] in Ontario are the Ophea lesson plans. I mean those are developed in partnership with the school boards, they are linked to every single outcome in the curriculum, those are the main go to” (physical literacy expert, M02). The accessibility of these resources was another reason for their popularity “So any of the Ophea resources are generally available online to teachers, or schools can request them. So they have been excellent, and I would say really that is the most common sources of information is Ophea” (policy representative, F03). Most school boards had a subscription that provided access to Ophea resources for their teachers.

PHE Canada was also mentioned as a great resource by two of the participants “PHE Canada has provided some excellent resources for teachers across Canada on physical literacy” (M02), although it seemed to have a more in-depth treatment of physical literacy that might be discouraging to some teachers.

I’m not sure how much our teachers access that [PHE Canada], it is a great resource. And what we’ve found is that the elementary teachers that did the collaborative inquiry actually got into more of that, because it was that deeper level of understanding (F04).

In fact, the two teachers interviewed for this study had never heard of PHE Canada. Similar to Ophea, PHE Canada had also aligned their resources with elementary curriculum; however, these resources were designed for education across Canada and not specific to provincial curricula. “’cause one of the things that PHE Canada made sure of was that it was consistent with curriculum” (physical literacy expert, M02). Ophea and PHE Canada appear to be the most popular sources for professional development resources for teachers outside of the school setting.

Supporting organizations outside of the education sector were also mentioned as a potential source for physical literacy resources. Canadian Sport for Life was an example:

So they [parents] may not actually hear about it through the school system, they may actually hear it through their organized sport organizations that they’re a part of.
Soccer is a really good example of that – it’s probably one of the lead organizations in Canada that have used physical literacy and LTAD [long term athlete development model] at the grass roots level (physical literacy expert, M02).

In some settings, parents and community members might be exposed to physical literacy within the context of training to become a coach.

So when you take a training course for being a volunteer coach, you’ll often have to do a training course, and you’ll get exposed to Canadian Sport for Life and LTAD, and you’ll hear the term physical literacy. There are also organizations now that require parents to go online and do a training workshop about respect in sport and so they might hear about physical literacy (physical literacy expert, M02).

4.2.3 Internal Capacity

This theme encompasses any physical literacy resources and supports that are available to teachers within the school system itself to assist with implementation. The subthemes for internal capacity include: funding, human resources, professional development, and school infrastructure and equipment.

Funding can present as a barrier to policy implementation when it is lacking and as a facilitator when it is available. “Some funding for training, funding for release time for teacher training and also the provision of training modules and expertise [would facilitate implementation]” (policy representative, F03). Both policy representatives commented on funding: “Always a problem [funding]. I mean the province spends 22 billion dollars roughly on public education. For what, 2.9 million kids? So it seems like a lot but it’s not – most school boards are operating in constrained environments” (policy representative, M01).

Funding that school boards were receiving fell under the Grant for Student Needs umbrella, and it depended on the priorities of the particular school board as to whether or not there would be an allocation of funds to help support implementation.

For any curriculum that’s released, they don’t earmark special funds to support the implementation of that one curriculum … Whatever documents are coming out, they
use the funding from the Grant for Student Needs in order to support the implementation of that curriculum (policy representative, F06).

The way in which funding was allocated at the Ministry level could be misunderstood.

Now there is some frustration on the board side because they sometimes see the Ministry has special projects – for example, we released the School Food and Beverage Policy from a Healthy Schools Unit and there was special funding attached to that so that people could train school board people on this policy and because boards see people given funding for certain policy implementation, they say why not for curriculum. But it’s different for curriculum because it should be part of regular business (policy representative, F06).

Human resources, in the form of specialist teachers, were mentioned as a form of capacity within schools.

There is a need within our systems and our boards to have some sort of quasi-member educator, who isn’t working flat out in a classroom, who can also attend to what kinds of capacity is needed for something like a new health curriculum to become part and parcel to what the school is thinking and operating and doing (policy representative, M01).

One teacher discussed special assignment teachers within her school board as being a contact for teachers to reach out to when they needed assistance with certain curriculum units that were challenging to teach. This teacher reported that, there was no dedicated H&PE special assignment teacher within her school board.

But from a board level we have special assignment teachers that are like coaches that will come in and help teachers with math or literacy things... But we don’t have those for phys ed …So if I needed some help with my math class and I need someone to help me figure out how I can do problem solving and do this at the same time, she can
come in and help with that … I mean we need to have somebody in phys ed though

(teacher, F07)

Whether or not special assignment teachers were available to support H&PE curriculum implementation depended upon the buy-in of the Director of Education in each school board.

Also, within the subtheme of human resources, a policy representative, F06, and a teacher, F07, mentioned collaborative inquiry as a great form of support for teachers. This is the process of teachers working together to learn more about their practice, to foster teachers’ learning and development, in order to improve their understanding of student learning,

If they’ve got a community of practice with other health and physical educators that they can talk to either in the school or in the board – I think that makes a big difference. Training doesn’t all happen in workshops where you go and go to a session and come back; the best training, I think, happens when you’ve got a colleague you can talk to and share ideas with or just by email and you’re able to do it on a non-formal basis – I think that makes a big difference (policy representative, F06).

Collaborative inquiry represents a rich opportunity for knowledge exchange, but it may not (yet) be occurring in relation to the H&PE curriculum, as implied by teacher F07: “[H&PE] never comes up! It’s literacy or math.”

The Ministry of Education offered a regional training session three months after the curriculum was released; however, each school board was only allowed to send only a small number of representatives and these were not necessarily teachers. This training session focused on the content of the curriculum and not its implementation.

So the Ministry of Education provided an orientation training to the Grades 1 to 12 PHE curriculum. It was a two day training session and school boards were invited to send educators, mental health professionals, public health professionals, and public health partners from different roles in the organization… I mean we had teachers from
the entire district so you’re not going to build capacity coming out of that kind of Ministry training (policy representative, F03).

A large, generic event intended for a heterogeneous audience was not viewed as an optimal strategy to build capacity to implement the H&PE curriculum. Physical literacy expert F04 believed that providing a diversity of training opportunities would maximize benefits for teachers: “I think it needs to be a mishmash of things. I think it needs to be attending conferences, I think it needs to be professional learning that happens within the school day.” Policy representative F03 summarized the ideal professional development opportunity:

I think being able to offer professional learning and resources that allow them to fully implement the curriculum is the way to go. I really think that the more resources and the more professional learning we have available to teachers, then the deeper the implementation of the curriculum will be and the more sustained that will be and I also think that it can’t be something we attend to this first year of implementation and then we stop. It has to be something that we continue to renew and offer opportunities for our professional learning and dialogue about how we’re doing.

In addition to the Ministry training, the curriculum document itself acted as a great resource for teachers as it contained relevant materials to assist teachers. “So I think using the curriculum not only as a policy but as a resource is a really good support for implementation” (policy representative, F06). The revised curriculum contained a lot more examples and teacher prompts than did the previous edition.

Health and physical education, some of the things vary because it’s a subject area that you don’t tend to teach from a textbook like math or science and so within the curriculum we try to embed as much support and guidance within the curriculum itself (policy representative, F06).
School infrastructure and equipment also constituted a form of internal capacity to support physical literacy curriculum implementation. Teachers appear to have the creativity and flexibility to make the most of these resources.

But within the new curriculum the different approach to the way we are teaching things with respect to lead-up games and not necessarily the real game, is going to require investment in equipment that is different than it would be in the old curriculum (physical literacy expert, F04).

Most schools and school boards had access to proper equipment or had the financial capacity to support implementation. Participants agreed that, especially in Ontario, there was access to a variety of equipment and physical environments that facilitated implementation. “But I think our gym is pretty well stocked with equipment. I’ve never thought to myself ‘oh we need bean bags and we don’t have them’ there seems to be enough stuff here” (teacher, F07). The gymnasium is a physical environment that can influence implementation; given that there was typically only one gymnasium per school for all of the classes to share, teachers needed to be creative to ensure physical education implementation. “I mean yes there are gym space issues, but teachers are used to dealing with having to adapt to that” (physical literacy expert, F04). Policy representative F03 had a similar response;

I don’t see that as a barrier – I guess in terms of, my mind probably goes more to physical space for that – and I think elementary schools have been highly creative in terms of how they’ve implemented the Daily Physical Activity components.

4.2.4 Awareness and Understanding of Physical Literacy

This theme reflects the extent to which physical literacy is known and understood by different stakeholders within the education community. The subthemes encompassed by this theme include: uncertainty and conceptualization.

Despite opinions that school representatives and teachers should be well informed about physical literacy, there was uncertainty about the level of awareness of physical literacy by different members of
the education community. “School boards should be very aware of it, there shouldn’t be any reason why they’re not aware of it... I would be very disappointed if you asked a school board superintendent or director and they said ‘physical literacy? What’s that?’” (physical literacy expert, M02). There appeared to be skepticism about the reach of physical literacy to the general membership of the education community. “To your point about physical literacy – I’m not sure that is a very common term. Other than for the folks who work in that focused area” (policy representative, F03). In describing teachers’ level of awareness and knowledge about physical literacy, F04, a physical literacy expert opined: “I’d say on a scale of 1-10, they are about a 3... A year or so ago they were probably a zero.” Policy representative F06 reported a similar judgment: “I think it’s pretty variable and it’s dependent on how much work has been done at the board level.” When asked about their familiarity with the physical literacy term, teachers F07 and F05 stated:

I mean no not really – I looked at what you sent. But that’s really the first time I’ve heard the term physical literacy … physical literacy is just not a priority in schools.

Not to say that we don’t encourage healthy, active living and kids being active. But physical literacy as a term hasn’t been thrown around (teacher, F07).

“It certainly doesn’t get thrown around. I’ve never heard it mentioned at a staff meeting” (teacher, F05).

Physical literacy was likely to be a new term for parents and children as well.

Parents I think are becoming more aware of it. I’ve done some workshops with parents and they really like or resonate with the idea of physical literacy. So they see the connection there, which I think is really good. And probably it’s still a relatively new concept I think that many parents are just sort of getting their heads around (physical literacy expert, M02).

It was more difficult to measure students’ awareness of the term. “Kids I think are – well it’s hard to tell. I mean my kids know about it, but I don’t know if they get it from me or they get it from school” (physical literacy expert, M02).
Physical literacy expert M02 and policy representative M01 were able to discuss the concept of physical literacy, showing a deep level of understanding, compared to the teachers who were not familiar with the term at all. “So I think there is a lot of confusion in my perspective about what physical literacy is, and where it’s simply [viewed as] just a development of physical skills and I view physical literacy as something much more holistic” (physical literacy expert, M02). This conceptualization of physical literacy encompasses the affective, physical, and cognitive domains of the child.

Looking at the development and interaction of social skills and cognitive skills and life skills and how the application of those skills through movement and how that makes someone a better mover, but also a better individual as well. The physical activity becomes the vehicle for much more than just being – the physical being, socially, emotional – that kind of idea (physical literacy expert, M02).

The curriculum policy highlights physical literacy as one of the main goals of the curriculum. “Physical, mental, and health literacy. Being contextualized in a way you live in relationship to these things. That’s what this document is really trying to do” (policy representative, M01).

4.2.5 Implementation Expertise

Implementation expertise emerged as founded upon teacher competence, teacher confidence, and pedagogical approaches. Teacher competence was viewed as important for successful curriculum implementation with specialist teachers considered to be especially competent in their field of specialization. “And those people [specialist teachers] come in with knowledge and passion. And teaching needs knowledge and passion” (teacher, F05). Having a specialist teacher could protect teachers who might not feel competent in the PE setting. “I think it is of utmost importance. I can’t even say that just students are losing, but society loses. The teachers lose too though – because it’s not good to have teachers that feel incompetent in a certain area” (teacher, F05). Another teacher compared the idea of a PE specialist to having a music/arts teacher.
Oh I think it would be a great idea. It’s like the arts – we have specialist art teachers coming in once a week, and they’re teaching music, which who am I to teach music? – I’m not a trained music anything. So why would I be able to do that? And same with phys ed, I’m not a trained phys ed teacher, so yeah I think it would be amazing. And I can’t see it ever happening (teacher, F07).

Physical literacy expert M02 discussed the idea that a generalist teacher might be just as effective if given the proper training and resources.

I’m obviously supportive of specialist teachers, the research that we’ve done shows that they feel more confident and competent and kids get more time on task and there are lots of benefits, the research shows lots of benefits to specialists. But sometimes a teacher who is a good generalist teacher, who receives some really good professional development, can be just as effective as a specialist… Maybe it’s more about the informed versus the uninformed (physical literacy expert, M02).

This view was echoed by physical literacy expert F04:

I’m 100% supportive of specialist teachers. I am yes. Some people argue the other way, but I really think that if it’s not a specialist teacher, it at least needs to be a teacher with additional training. I just think in any elementary school now there is so much in every curricular area that’s expected to be taught and we all can’t be experts at all of it (physical literacy expert, F04).

In addition to teacher competence, teacher confidence or comfort with the content of the curriculum was considered to influence physical literacy curriculum implementation. Interestingly at an elementary level and I would think this perhaps is a combination of political, societal, many different things – is the perception of what’s safe. And it really restricts the willingness of staff to engage in certain activities that are probably
expected in the curriculum. We don’t have the training and there is this whole perception of ‘is this a safe activity?’” (teacher, F05).

The perception of safety was also mentioned as a barrier to certain activities if they were considered unsafe. “That’s hard because we are so much about order. I know in my old school we had many stairs and empty classrooms so we would run up and down the stairs. Now that’s considered a safety issue” (F05). A teacher’s confidence and competence will ultimately have a large impact on how a child receives the H&PE portion of their education.

Novel pedagogical strategies were needed to implement the physical literacy curriculum. But how you structure your environment to foster the development of physical literacy is really critical. So things like – a more participant-centred approach like teaching games for understanding can be a really good way to foster physical literacy because it encourages participation in a wide variety of activities, it promotes the idea of developing game sense and game knowledge – being able to read the game is often a term that is used within physical literacy (physical literacy expert, M02).

New pedagogical approaches were needed to achieve physical literacy goals outlined in the new curriculum: “Within the games – they’re moving away from traditional games to Teaching Games for Understanding where they are taught transferable skills that can transfer across game categories and that’s a big shift for teachers” (physical literacy expert, F04).

4.2.6 Policy Climate

The policy climate of the entire education system was considered instrumental to the implementation potential of a new curriculum component. Three subthemes emerged to form this theme: roles within the education system, policy to practice, and political factors. The policy representatives and the physical literacy experts seemed more aware of the different roles within the education system as compared to the teachers.
Each school board was responsible for the implementation of curriculum. “The school boards will be responsible for implementation ... Yeah they [the Ministry] don’t really get into implementation. That’s at the board level, and the school level. The Ministry contracts out the boards to implement their curriculum” (physical literacy expert, M02). It was also the responsibility of the school board to decide how and where to allocate funds: “But then it really was up to the school boards then to develop your own plan and also to finance your own plan” (policy representative, F03). Boards and schools would share in the implementation planning of a new curriculum. “But I think what will impact how well they’re able to implement it are board priorities, board plans, board support and then school priorities, school plans, and school support” (policy representative, F06). Board priorities typically reflected Director of Education priorities, which ultimately affected how money would be spent. “There are certain things that are funded that you can only spend on this. I think the way it works is the school board gets x number of dollars per student and then that’s part of how they develop budget” (physical literacy expert, F04).

Physical literacy expert M02 described the role of a principal as crucial during implementation because the principal had control over many aspects surrounding the actual teaching that occurred at school: “Well principals have a huge role, I think, in terms of they hire the teachers. They set the timetable, they allocate who teaches what.” Not only does a principal make decisions about the teachers within a school, but a principal must ensure that each teacher within the school is following all of the board mandates for that particular school year. “I mean the principal is really the link between the board and the teacher. I mean they’re accountable to the board. So if the board says ‘well that’s a priority for us’, then they have to make that happen, right” (physical literacy expert, M02).

Finally, it was the responsibility of the principal to ensure that each teacher was allotted the appropriate amount of time in the weekly schedule for PE. Once a teacher had H&PE on his or her schedule, then a principal had to ensure that the teacher was following the set timetable.

It is up to the principal and then ultimately up to the school boards to follow up with principals, and principals are supposed to look at people’s timetables – it’s supposed to be on their timetable. It’s up to them whether they follow up, are they [teachers]

Each of the three levels (school board, principal, and teacher) had its specific role to play when a new curriculum was released.

The transition from policy to practice was also viewed to contribute to the overall policy climate related to curriculum implementation. From the time the curriculum was released in February 2015 to its implementation in September 2015, challenges related to the physical environment, curriculum dissemination, and time allotted between curriculum release and implementation were noted. “It’s much easier to write a beautiful policy then it is to realize a beautiful policy” (policy representative, M01).

Some participants agreed that, in Ontario, the physical environment should not constrain implementation. “You know, you may get people saying that they have physical constraints, I would argue they don’t” (physical literacy expert, M02). This curriculum was designed to be implemented in a variety of settings and environments.

Because I think this curriculum is actually very malleable to multiple environments, especially with its emphasis on physical literacy. I mean the whole idea is that you can be active anywhere, anytime, anyplace, with anyone, in any environment and so the idea behind this curriculum is to help when developing physical literacy – it’s meant so that students can interact in their environment anywhere” (physical literacy expert, M02).

Physical activity could occur in many forms including a variety of settings, providing the teacher the opportunity to be creative to encourage participation among all students.

Physical barriers ... I don’t think so. The curriculum really can be implemented in a wide variety of settings. Ideally kids are going to get experiences being physically active in a gym, outdoors, in a classroom, in the community etc. So really I don’t think having a top-notch gym or equipment etc. is a pre-requisite. I think it’s a mindset and
an understanding and if you have a skating rink or a field or a trail and you were a
great teacher you could make it happen (policy representative, F06).

The curriculum dissemination process was also described as inadequate, with some teachers
receiving the curriculum with very little time or support to plan its implementation. Asked when she
received her copy, teacher F07 responded: “I’ll say August – right before school started. But we didn’t
go over it as a staff or anything. It was just handed to us and nothing else.” There were conflicting views
between two policy representatives concerning the time available for teacher training between the release
of the curriculum and its implementation date. “So this year having the half-year window is actually
pretty good. I think it gave people time to get their heads around it, get some implementation, a little
longer would have been better but I think it was pretty good” (policy representative, F06). “Yes!
[February to September time frame was good]” (physical literacy expert, F04). On the other hand,
“Sometimes some people think that radical change like – and that’s radical change to me – that takes 12
years of constant persistence, right. But, that also doesn’t necessarily mean that it didn’t happen
overnight for some people in some place” (policy representative, M01).

Unforeseeable labour circumstances began shortly after the release. “But probably the biggest
barrier is the timing of this because of the labour issues in the province” (physical literacy expert, M02).
Although these political factors did not relate to physical literacy per se, the labour issue was mentioned
throughout the interviews with the policy representatives and the physical literacy experts, and was
viewed as either a potential barrier to training or as causing a delay in the implementation process for
teachers.

Well the current labour context in Ontario is certainly the most significant factor that’s
creating a challenge for us moving forward with any implementation plans because we
were unable to do some of the preliminary work in the spring of last school year
(policy representative, F03).
Physical literacy expert F04 discussed how the labour issues did not affect implementation because a teacher was still required to teach.

I’m not sure that the labour has really had an impact on it at all. I mean teachers have to teach the curriculum and the way the labour is right now it’s really – that hasn’t impacted that except that, I mean I don’t think there would have been any professional learning anyways regardless of whether there was labour issues going on. I don’t think the labour stuff has really affected it (physical literacy expert, F04).

4.3 Resource Inventory Results

Tables 2 and 3 present the results of the abstracted data from the Ophea and PHE Canada resources related to physical literacy. Each resource name, type, intended audience, purpose/content, physical literacy competency, and accessibility status are presented for each of the five Ophea and four PHE Canada resources.
Table 3: Description of Ophea resources that focus on physical literacy

<table>
<thead>
<tr>
<th>Resource Name</th>
<th>Type</th>
<th>Intended Audience</th>
<th>Purpose and/or Content</th>
<th>Physical Literacy Competency</th>
<th>Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands UP for Health and Physical Literacy</td>
<td>3-part mini video series</td>
<td>Ages Part 1: 4-9 Part 2: 8-13 Part 3: 12-18</td>
<td>These videos help educate children and youth about the importance of health and physical literacy. They help develop the cognitive domain and encourage students to be competent and confident in order to make healthy choices that will lead to active lifestyles.</td>
<td>- Cognitive domain: knowledge and awareness building on the importance of physical literacy - Affective domain: attitude and motivation building toward physical activity</td>
<td>Online at no cost (Ophea’s YouTube Channel)</td>
</tr>
<tr>
<td>Instructional Dance Videos</td>
<td>Dance videos (Follow-up lesson plans)</td>
<td>Grades 1-10</td>
<td>These videos include tips for the teachers with creative dance steps, learning goals, and the movement skills that are required for a lesson. These help teachers for the dance component.</td>
<td>- Physical domain: movement skill building of dance</td>
<td>Online at no cost (Ophea’s YouTube Channel)</td>
</tr>
<tr>
<td>Learn to Move</td>
<td>19 Poster series</td>
<td>Not age-or-grade specific</td>
<td>These posters include definitions of the skills with illustrations, and three levels of strategies, which help students learn the movement skill. Fifteen of the posters focus on movement skills (e.g. balance, catching, hopping, trapping). Four of the posters focus on game tactics and transferring skills to game situations.</td>
<td>- Physical domain: fundamental movement and sport skill development</td>
<td>Online at no cost</td>
</tr>
<tr>
<td>Play Sport</td>
<td>Activity-based resource</td>
<td>Grades K-12</td>
<td>This searchable database allows teachers to choose the activity name, school division, category, and movement skill. The activities help children and youth develop an understanding of the skills and strategies.</td>
<td>- Physical domain: fundamental movement and sport skill development</td>
<td>Online at no cost</td>
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</tbody>
</table>
associated with a range of games and sports. It uses a Teaching Games For Understanding (TFGU) approach and includes activity cards with step-by-step instructions including an overview, facility, materials and equipment, diagrams, activity set up and instructions with adaptations, sport connections, and curriculum expectations.

<table>
<thead>
<tr>
<th>Health and Physical Education Elementary Resources</th>
<th>Lesson plans</th>
<th>Grades 1-8</th>
<th>These lesson plans are categorized under different topics: healthy living, fitness building activities, indoor and outdoor games, and movement exploration. Each grade level contains over 100 lesson plans with resource information included. Each lesson includes learning goals, safety requirements, facility, warm-up, minds-on, action, cool-down, consolidation, ideas for extensions, next steps, notes to teachers, curriculum expectations, topics, and grade.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 – 116 full lessons</td>
<td>Grade 2 – 120 full lessons</td>
<td>Grade 3 – 118 full lessons</td>
<td>Grade 4 – 112 full lessons</td>
</tr>
<tr>
<td>Grade 5 – 127 full lessons</td>
<td>Grade 6 – 110 full lessons</td>
<td>Grade 7 – 121 full lessons</td>
<td>Grade 8 – 127 full lessons</td>
</tr>
<tr>
<td>- Cognitive domain: knowledge building of healthy living</td>
<td>- Affective domain: motivation building toward physical activity</td>
<td>- Physical domain: fundamental movement and sport skill development</td>
<td>Online: subscription required for access: 68 of 72 school boards in Ontario have a subscription to access these lesson plans</td>
</tr>
<tr>
<td>Resource Name</td>
<td>Type</td>
<td>Intended Audience</td>
<td>Purpose and/or Content</td>
</tr>
<tr>
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<tr>
<td>Move Think Learn: - Squash in Focus - Softball in Focus - Soccer in Focus - Ringette in Focus - Handball in Focus - Cycling in Focus - Canoe/Kayak in Focus - Badminton in Focus - Archery in Focus</td>
<td>9 Booklet series</td>
<td>Grades 4-9</td>
<td>These booklets follow a TGFU approach that focuses on the transferability of skills. These help children and youth develop physical literacy through game and sport. Each booklet includes a gradual progression of skills for each activity, to encourage learning across a variety of game settings.</td>
</tr>
<tr>
<td>Passport for Life</td>
<td>Assessment/measurement tool</td>
<td>Grades 3-9</td>
<td>This online program supports teachers and students in understanding, assessing, and developing physical literacy. It provides a reflection of a student’s physical literacy, as it generates a student and classroom passport. There are four components of physical literacy included in it: active participation, living skills, fitness skills, and movement skills.</td>
</tr>
<tr>
<td>Fundamental Movement Skill (FMS) Resource Series</td>
<td>Book and video series</td>
<td>Grades K-12</td>
<td>These books and videos are based on the Long Term Athlete Development (LTAD) Model and they support the development of physical literacy through FMS, and long-term sport and physical activity. The video collections include a mini series of short clips showcasing movement descriptions on the action in the form of a freeze frame. The K-3 clips focus on FMS ranging from the stork</td>
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stand to skipping and dodging. The 4-8 clips demonstrate more advanced combinations of movement skills ranging from high jump and hurdling to trapping the ball.

| What is the Relationship Between Physical Education and Physical Literacy? | Information brochure | For educators | This brochure provides information on physical literacy to support teachers’ understanding of the term. It includes sections on the definition, role that physical education has in the development, how to foster physical literacy in the classroom, and pedagogical strategies for its development. | - Cognitive domain: knowledge and awareness building on physical literacy within the physical education setting | Online at no cost |
4.4 Overall Results

Table 5 identifies the presence/partial presence/absence of each of Hogwood and Gunn’s (1984) preconditions based on the integration of all of the findings from the different data sources: i.e., the qualitative interviews, the resource inventory, the curriculum review, and the review of physical literacy articles. Conditions 4 and 8 were found to be present, conditions 2, 3, 7, and 10 were found to be partially present, and conditions 1, 5, 6, and 9 were found to be absent.
<table>
<thead>
<tr>
<th>Precondition</th>
<th>Presence</th>
<th>Evidence</th>
</tr>
</thead>
</table>
| 1. The circumstances external to the implementing agency do not impose crippling constraints. | No       | Themes: Policy Climate - Political Factors  
The two political factors that affected implementation were the labour issues and the media attention received by the curriculum. These had an effect on implementation because the labour issues affected training opportunities for teachers, and the media attention was directed at only one portion of the curriculum and distracted teachers and students from the physical literacy content. “Currently I would say the labour situation is a barrier just because people are not in the mind frame for learning as much and also they are not being allowed to have professional learning opportunities because of the constraints from the union” (policy representative, M06). 
The attitude towards H&PE and physical literacy appears to differ according to position in the education system. The overall focus of the majority of stakeholders is in numeracy and literacy. “What the system is really bought-into is that people can read and do math. That’s what we’re really bought into” (policy representative, M01). |
| 2. That adequate time and sufficient resources are made available to the programme. | Somewhat | Theme: Policy Climate – Policy to Practice  
A time frame of six months was allotted between release and implementation; this time frame appeared to be adequate for most participants, yet the teachers were not able to take advantage of this time frame because they did not receive a copy of their curriculum. There was evidence of the policy considering the end result, but not the means to get to that result. Overall, there was a gap between the policy and implementation.  
“It’s much easier to write a beautiful policy then it is to realize a beautiful policy” (policy representative, M01).  
Resources were considered during the development as demonstrated by the lesson plans created by Ophea. Over 100 lesson plans exist for each of the Grades 1-8. These lesson plans provide teachers with ideas and support to implement the curriculum. |
| 3. That the required combination of resources is actually available.         | Somewhat | 68 of 72 school boards in Ontario have a subscription to Ophea through which they are provided with the elementary lesson plans. There were 35 documents analyzed, which are all available online through the organization’s website, and which provide support to teachers.  
Theme: External and Internal Capacity  
Teachers were aware of Ophea and the lesson plans, however neither teacher interviewed was aware of PHE Canada and the supports that they offered.  
“Well probably the main one in Ontario are the Ophea lesson plans” (physical literacy expert, M02). “I forget the number, but there was a survey done by Ophea and like 85% of teachers used...” |
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Notes</th>
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<tr>
<td>4. That the policy to be implemented is based upon a valid theory of cause and effect.</td>
<td>Yes</td>
<td>The curriculum policy contains reference to many different evidence-based frameworks to support the content. The page references from the curriculum for these frameworks are: pg. 7, 11, 26-27, 33, 40, 79-82, 125-128, and 179-182. The curriculum policy is grounded in many evidence-based practices, and recognized as a world-class curriculum by the physical literacy experts and policy representatives. “But always a strong research base. So teachers can be confident that what is in there for knowledge building is based on a solid continuum of what the research says” (policy representative, F03).</td>
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<tr>
<td>5. That the relationship between cause and effect is direct and that there are few if any, intervening links.</td>
<td>No</td>
<td>Physical literacy is a foundational theory upon which the curriculum is grounded. A thorough definition is provided in the curriculum, and it is referenced throughout many sections in the curriculum: see pages 7-8, 27-34. The physical literacy articles report on the many chains of events that must occur in order for one to become physically literate, and ultimately active for life. Fundamental movement and sport skills must be taught, which constitutes the physical domain, and the affective and cognitive domains must also be developed to enjoy a healthy active lifestyle. In addition, there are many individuals who must assist in this journey of becoming physically literate. Theme: Awareness and Understanding of Physical Literacy – Conceptualization “The entire focus of the curriculum is to develop students who are physically literate and health literate...You don’t teach physical literacy, physical literacy is an outcome” (physical literacy expert, M02).</td>
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<tr>
<td>6. That dependency relationships are minimal.</td>
<td>No</td>
<td>Theme: External Capacity The Ministry of Education partners with Ophea to create resources and supports for teachers during the implementation process. Teachers often rely upon these relationships with organizations such as Ophea, since teachers do not receive direct training from the Ministry for implementation. “So organizations who we thought could support implementation of the curriculum, we’ve provided them with funding to do that” (policy representative, F06).</td>
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<tr>
<td>7. That there is</td>
<td>Somewhat</td>
<td>Theme: Awareness and Understanding of Physical Literacy;</td>
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<tr>
<td>Understanding of, and agreement on, objectives.</td>
<td>Implementation Expertise</td>
<td></td>
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<td>Teachers appeared to be unaware of the term physical literacy and its place in the curriculum. This limited knowledge could be a result of the lack of attention placed on physical literacy at school and at staff meetings. Teachers lacked confidence in teaching different aspects of the curriculum due to safety concerns. Teachers also lacked competence, which could be a result of their overall lack of understanding of physical literacy. Although teachers lacked knowledge, the upper echelons of the education system (Ministry, school boards, principals) appeared to have a greater understanding and awareness of the term.</td>
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<th>8. That tasks are fully specified in correct sequence.</th>
<th>Yes</th>
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<tr>
<td>The curriculum provides clear expectations and goals that are to be achieved for each grade. The role of the teacher is clearly explained within the curriculum policy. The page references for all of the evidence: pg. 6-7, 8-9, 14-15, 19, 22-39, 27, 49-57, 53, 56, 57-58, 79-82, 125-128, 179-182.</td>
<td></td>
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<tr>
<td>Theme: Policy Climate – Roles within the Education System</td>
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<tr>
<td>There appeared to be a discrepancy between what the Ministry thought was occurring regarding curriculum policy dissemination and how the teachers actually received the curriculum policy. “I don’t think there has been any training of it. I personally have not received a new document and I don’t know if the government is doing all paper copies anymore, because I think a lot of new teacher graduates use them on their iPad. When I was in teacher’s college we got a paper copy of them all. That probably is a bit different too – how accessible is it when it’s new, you get a release but you don’t have a paper copy” (teacher, F05).</td>
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<th>9. That there is perfect communication and co-ordination.</th>
<th>No</th>
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<tr>
<td>Theme: Policy Climate – Roles within the Education System</td>
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<tr>
<td>There appeared to be a discrepancy between what the Ministry thought was occurring regarding curriculum policy dissemination and how the teachers actually received the curriculum policy. “I don’t think there has been any training of it. I personally have not received a new document and I don’t know if the government is doing all paper copies anymore, because I think a lot of new teacher graduates use them on their iPad. When I was in teacher’s college we got a paper copy of them all. That probably is a bit different too – how accessible is it when it’s new, you get a release but you don’t have a paper copy” (teacher, F05).</td>
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<tr>
<th>10. That those in authority can demand and obtain perfect compliance.</th>
<th>Somewhat</th>
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<tr>
<td>Theme: Accountability</td>
<td></td>
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<tr>
<td>A main focus throughout the interviews was the idea that teachers needed to hold themselves accountable. “I think they need to be accountable to themselves as professionals and I think that principals, parents, and board leads can say ‘what are you doing and why?’ so teachers need to be able to answer that. Because when it’s the curriculum, and they’re expected to be implementing it” (policy representative, F06).</td>
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<td>It was also discovered that there was a lack of assessment opportunities in H&amp;PE; thus there was little accountability for the subject itself. “That although the policy is robust and rich, the ability for boards to realize that because there isn’t necessarily that kind of accountability system” (policy representative, M01).</td>
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Chapter 5

General Discussion

5.1 General Discussion

This research sought to explore the physical literacy component of the Ontario H&PE curriculum and related implementation preconditions in advance of its implementation in September 2015. In general, the participants expressed agreement about the need for a revised curriculum and described the Ontario school community as very fortunate to have access to such a world-class curriculum. They offered insight into the readiness of the implementation plan and related resources available. Results from the analysis of the interview data included six higher-order themes encompassing 18 subthemes. These themes emphasize many of the issues and concerns that are associated with the implementation process of the physical literacy curriculum from the perspective of different stakeholders within the education community. Together, these themes highlight potential gaps that might exist between the mandated policy and the implementation of the policy. Hogwood and Gunn (1984) refer to this as an implementation gap, and it is a common occurrence since policies are rarely achieved exactly as they were intended to be in practice (Hogwood & Gunn, 1984).

The 2015 Health and Physical Education curriculum is a well-researched curriculum, with some stakeholders agreeing that it is ‘world-class’; yet some teachers appear to lack the confidence and competence in how to implement it. This lack could be related to the systemic problems that exist within the education system, ultimately a likely reflection of both will and capacity; the two components that are required of the delivery agent in order to successfully implement a policy (McLaughlin, 1987).
According to Hogwood and Gunn (1984), there are generally three reasons for a policy to be at risk of unsuccessful implementation: bad execution, bad policy, or bad luck. A policy that is ineffectively implemented would be considered bad execution, whereas a policy that had adverse external circumstances would be considered just bad luck. A bad policy is rarely cited as a reason for implementation failure. The findings show the absence or inadequacy of 8 of the 10 preconditions, suggesting the precariousness of conditions and resources in the months preceding implementation of the physical literacy component of the H&PE curriculum. A potential bad execution could arise from a lack of communication that was mentioned to occur between the Ministry of Education and school board representatives (e.g. Directors of Education, superintendents), as well as a lack of accountability which could result in teachers feeling less pressure to implement the curriculum as mandated. A possible reason for bad luck for this education policy could be attributed to the timing of the labour issues that were occurring shortly after the release of the curriculum. Lastly, the policy, although founded upon a strong evidence base, is not anchored by a direct link cause and effect theory. That is, the causal chain of events between physical literacy and the desired outcome of children leading healthy active lives is more complex, involving many steps to achieve.

There appears to be diversity in stakeholder understanding of the definition and concept of physical literacy; it seems that those working in the upper echelons of the education system (e.g., Ministry, school boards, and principals) have a stronger understanding of physical literacy than do teachers. The findings revealed a lack of knowledge and awareness of the term for the two teachers, despite its pervasiveness in the curriculum. This lack of knowledge among teachers may have a detrimental effect on students, since a main responsibility of teachers is to impart knowledge to each new generation of learners that are encountered (Ennis, 2015). More specifically, without strong teacher guidance in H&PE, students may remain unskilled and not able to demonstrate strong physical literacy.
development (Ennis, 2015). Precondition 7, that “there is understanding of, and agreement on, objectives” was deemed to only have been partially met, given that not all the relevant stakeholders had an adequate understanding of the physical literacy concept.

Ultimately, school board Directors of Education and principals need to buy-in to physical literacy in order for schools, teachers, and students to benefit (United Nations Education Scientific and Cultural Organization [UNESCO], 2015). In other words, they need to develop the motivation (i.e., will) for implementing a new policy (i.e., physical literacy component of the curriculum) (McLaughlin, 1987). In this study, buy-in refers to understanding and prioritizing physical literacy’s place in physical education, and education as a whole, and believing in the concept of physical literacy and the benefits that it can offer individuals. Possessing a high level of buy-in includes a firm belief that building a physical literacy foundation can positively affect overall physical activity levels of children and youth (UNESCO, 2015). Physical literacy experts involved in this study believed that principals and superintendents should have a strong understanding of how physical literacy can positively influence a person’s activity levels, yet remained skeptical that any such awareness would translate into a prioritization of physical literacy, especially relative to literacy and numeracy. Both teachers spoke of numeracy and literacy as a priority and focus and commented that there was never any mention of physical literacy within their schools. This view is supported by the literature reporting the heavy emphasis placed on subjects that are tested through the EQAO (Volante, 2007). The priority placed on these curricular subjects has the potential to compromise the future generation of children and youth, especially if the current physical activity levels continue to plummet. This stance ignores the literature and research that praises physical literacy development as a way of avoiding negative experiences in physical activity, which in turn results in increased activity levels throughout the life course, and ultimately enhanced cognitive functioning and health outcomes (Donnelly & Lambourne, 2011; Eime, Young, Harvey, Charity, & Payne, 2013; Janssen
& Leblanc, 2010; Mandigo, Francis, & Lodewyk, 2007; Whitehead, 2007). It was thus concluded that precondition 1, “the circumstances external to the implementing agency do not impose crippling constraints” was not met.

Capacity-building opportunities (both external and internal) come in many different forms to develop competent and confident teachers. First, it was found that the 2015 H&PE curriculum policy document was different from the last iteration of the curriculum in that it contained ample guidance for teachers. The curriculum provided teachers with clear expectations and included teacher prompts and student examples, both of which could assist teachers throughout implementation. Thus, it was found that precondition 8, that “tasks are fully specified in correct sequence” was met.

It was also found that many different hands-on resources were available to support teachers tasked with delivering physical literacy training (e.g., lesson plans and videos); however, there seemed to be a lack of training opportunities for teachers to support their implementation of the physical literacy curriculum. A lack of these teacher-training opportunities could impair teacher confidence and competence to teach the H&PE curriculum (Mandigo et al., 2004). One possible reason for the lack of capacity (e.g., lack of: funding, training, and specialist teachers) could relate to school board Directors of Education not prioritizing the H&PE curriculum and not allocating funds for training on its implementation. Funding and training (e.g., professional development days) are necessary for teachers to increase their knowledge on physical literacy and how to implement it into their H&PE classes (Mandigo et al., 2004). The resource inventory revealed an abundance of resources accessible to teachers, yet it seemed that the two teachers in this study were unaware of some of these resources and how to use them. All participants appeared to be aware of the Ophea resources, and it was mentioned that the Ministry of Education partners with Ophea and relies on this organization to create these resources so that teachers are provided with tangible supports for the H&PE curriculum. Thus precondition 6 that “dependency
relationships are minimal” was not met. As stated in the curriculum, there is an onus placed on teachers to seek out resources as needed, and the resources inventoried in this study could offer the needed support in supplementing any existing H&PE lesson plans. However, if teachers have not bought-in to physical literacy, due to a lack of understanding or resistance to change, then it is unlikely that they will look for additional support and possibly avoid the new curriculum altogether (Zimmerman, 2008). Providing more training opportunities could result in enhanced teacher understanding of the need for change (as proposed by the new curriculum policy), which could facilitate proper implementation by teachers. The provision of more training opportunities by the Ministry of Education, which could trickle down to the teachers so that all teachers receive equal opportunity during the six month timeframe between curriculum release and implementation, would have been ideal. It appeared that most participants regarded the six month time period as being adequate for ensuring readiness by the implementation start date. Thus preconditions 2 and 3 that “adequate time and sufficient resources are made available to the programme; the required combination of resources is actually available” were deemed to have been only partially met due to the abundance of hands-on resources, but a lack of training opportunities.

Another form of capacity that could help to minimize feelings of being resistant to change is to have specialist teachers available in elementary schools to teach all H&PE classes. Confirming existing literature (Mandigo et al., 2004), most participants recognized that a specialist teacher with a background and training in H&PE would be ideal and beneficial to students. It has been found that specialist teachers are less resistant to change than generalist teachers who are more likely to have a fear of the unknown and may fail to recognize the need for change (Zimmerman, 2008). Specialist teachers who generally focus their teaching on H&PE would likely have more passion toward teaching the H&PE content and be more open to new content in this area (Mandigo et al., 2004). In addition, the H&PE specialist teacher would likely have a good awareness of current physical activity levels in children and be more comfortable with
teaching activities that generalist teachers might consider as more risky. Specialist teachers also have the potential to affect the will of other teachers and could be role models to students and teachers within their school (Mandigo et al., 2004). The overall intention of having a specialist teacher is to provide children with the opportunity to receive the motivation and become instilled with the self-discipline to be active for life.

Despite all of the positive endorsements of having specialist teachers in elementary schools, specialist teachers are currently not the norm in elementary schools in Ontario (People for Education, 2013). As a result, generalist teachers require support to help them develop the motivation, confidence, and competence to successfully deliver the physical literacy curriculum without the help of specialist teachers. As a member of the Ontario College of Teachers, teachers are accountable to teaching the curriculum. While this professional obligation should be enough to force teachers to implement the new mandated curriculum, it is unlikely to occur if they do not feel competent in doing so nor have people above them enforcing the mandated policy. There appears to be an overall lack of accountability for physical literacy by school boards, which can send the message to teachers that physical literacy is not valued, especially relative to other curriculum areas such as literacy and numeracy. Within education, accountability is typically built-in to the subjects that are tested, such as numeracy and literacy, whereas subjects that are not tested appear to be deemed less important (Volante, 2007). EQAO results of literacy and numeracy are released to the public, which has the effect that teachers focus on math and language in hopes of securing a strong academic reputation for their school, which will be compared to other schools and boards across Ontario. Although some participants felt that standardized testing in H&PE might not promote the positive aspects of the curriculum, it may be the only potential solution to increasing accountability among teachers and principals. Currently, it appears that physical literacy is not tested at school and therefore there are no public results and no comparison in H&PE across school boards. It
appears that in order to increase the buy-in, and ultimately increase the money available for capacity-building opportunities, there needs to be more accountability placed on H&PE since it seems that what is tested, attracts money. It is common for boards, principals, and teachers to direct funding and focus towards success in language and math. The emphasis placed on numeracy and literacy demonstrates a high level of buy-in toward these subjects, as well as accountability for them. It was thus concluded that precondition 10, that “those in authority can demand and obtain perfect compliance” was only partially considered during the policy development stage.

Another possible reason for the lack of accountability found in H&PE could be attributed to the overall lack of enforcement concerning the H&PE curriculum. Parents often act as a form of enforcement within education as a way to ensure that their child is learning. Parents can influence education policy as well as some of the operations of the school that their children attend (Sheehy, 2006). There are various ways in which a parent can act to encourage, limit, or shape events that occur within a school (e.g., parent-teacher conferences, public press, family discussion, tax allocation, pressure group activities) (Sheehy, 2006). As a result, it is important that parents are informed of the benefits of building a physical literacy foundation in their children so that they too can buy-in and encourage teachers to provide the best learning environment for students to become physically literate. An increase in parental knowledge and understanding of physical literacy could build support for the H&PE and put pressure on principals to ensure the mandated curriculum policy is being properly implemented.

A potential problem that could be associated with a lack of buy-in of physical literacy throughout the education system is that it impairs the potential for consistency and sustainability of implementation of the physical literacy curriculum across school boards in Ontario. The Directors of Education are responsible for choosing when, how, and on what to spend their school board’s money. Therefore if it seems that a Director of Education is not convinced of the value of physical literacy (i.e., has not bought
into it), then he/she may choose to not direct funding into supporting its implementation. Thus sustainability of the curriculum would not occur because the money is attached to a person and not to the policy itself. This further supports the recommendation that funding and training needs to come from above the school board to facilitate a quality sustainable curriculum.

As stated by Hogwood and Gunn (1984), a policy may be politically and physically feasible, but may still be unsuccessful. Sometimes there is too much expected too soon of the implementing agents, and the policy developers often think of the ‘end’ but not the ‘means’ during the development stage (Hogwood & Gunn, 1984). Teachers are responsible to try to fill any void that may occur as a result of the lack of readiness for implementation by the Ministry of Education. Both teachers in this study mentioned that they did not receive their copy of the new curriculum prior to the implementation date. Yet when the policy representatives were asked how the curriculum dissemination process worked, they appeared to be rather confident that it was a straightforward process and that all schools should have received hard copies of the curriculum sometime in the Spring of 2015, a short time after it was released. This divergence highlights a potential flaw in the process, demonstrating a possible need for more clear and consistent delivery methods of all new curricula. Therefore, precondition 9, that “there is perfect communication and co-ordination” was deemed not to have been met.

According to Hogwood and Gunn (1984), the cause and effect theory upon which a policy is based, needs to be direct without any intervening links. An ideal theory would indicate that one outcome is a direct result of one action. Physical literacy is grounded on several links in order to produce various potential outcomes; for example, an increase in confidence and competence, decrease in dropout rates, and increase in motivation and knowledge are all necessary to achieve an “increase in physical activity levels for life.” This is another reason that teachers require more capacity-building opportunities to develop a thorough understanding of all of the elements relating to building a physical literacy.
foundation. As a result, precondition 5, that “the relationship between cause and effect is direct and that there are few if any, intervening links” was not met. However, the curriculum is based on several other research frameworks that should provide teachers with reassurance in the richness of the content that they are teaching. Thus it can be ascertained that precondition 4, that “the policy to be implemented is based upon a valid theory of cause and effect” was met.

Overall, it appeared that at the time of the data collection (early fall as the curriculum was being rolled out), the implementation of the physical literacy component was not sufficiently supported relative to other school priorities (literacy, numeracy). The apparent lack of consideration for most of the preconditions during the policy development process did not set the stage for successful implementation. The diversity found in the understanding and awareness of physical literacy by the relevant stakeholders provides little hope for it gaining traction in a climate that thrives on numeracy and literacy. The lack of professional development opportunities will limit teachers’ ability to properly implement the new curriculum, considering the importance of providing adequate opportunities for teachers to learn the new content and how to teach it. Physical literacy has the potential to be a promising avenue to change current physical activity trends, however, without proper support (i.e., will and capacity) from all levels of the education system, it is unlikely that students will receive any benefit.

5.2 Strengths

A main strength of this study was the variety of methods used to explore the content of the curriculum policy. Each method - interviews, resource inventory, and curriculum review - revealed information about the physical literacy curriculum and plans for its implementation at various levels of the education system, providing a realistic overview of all the differing perspectives within the education community. Strategies to ensure data quality and rigour constitute another strength. The timing of the interviews was also ideal, as they occurred before the implementation of the 2015 curriculum. Finally, my
background in education allowed me to understand the education language and to communicate with each participant in a manner that resulted in a rich database.

5.3 Limitations

An important limitation of this study was that, although many perspectives were collected from different members of the education community, the small sample did not lead to data saturation within any of the stakeholder groups. It is likely that including more representatives from each of the physical literacy, policy representatives, and teacher groups would have yielded a more comprehensive picture of the readiness for physical literacy implementation across Ontario. Moreover, the two teachers interviewed were both representatives of the same school board in Ontario. This could have had an effect on the findings because, even though they taught at different schools, they worked under the same Director of Education. Thus, their perspectives of physical literacy could have been shaped and influenced by the level of buy-in at their school board.

5.4 Implications and Future Directions

It is likely that this study is a reflection of a societal problem or attitude towards physical activity promotion in children and youth, which is what needs to be addressed and eventually changed. Although people recognize the importance of being physically active, and are beginning to understand the meaning of becoming physically literate to participate in lifelong physical activity and sport, they have yet to give it as much value as other areas of child development. The work that the health, education, sport, and recreation sectors are doing to promote and develop physical literacy must continue until it permeates every aspect of society, and is considered equal among all academic subjects. It may be daunting to think of how physical literacy will survive in a climate that is so focused on reading, writing, and math, but if increased buy-in of physical literacy can be developed and supported by the Ministry of Education, then there is hope that children could be positively impacted.
It may be worthwhile for future research to focus specifically on teachers and principals, to gather an idea of what implementation of the physical literacy curriculum looks like across Ontario and how teachers can be best supported.

5.5 Conclusion

Findings from this study revealed a possible implementation gap of the physical literacy curriculum. The themes that emerged from the interviews highlight many possible reasons that the gap from policy to practice might occur. This possible implementation gap could be attributed to the lack of capacity (i.e., resources) available, which would affect the will of the implementing agent. This is somewhat puzzling because the resource inventory suggested that there were many high quality resources available to help teachers implement physical literacy. It is likely that there is a need for additional support in the form of professional development training days, which must reach a large number of teachers to provide consistency in a well-balanced and equality education experience. The interviews captured issues relating to buy-in, and how both will and capacity could be affected by it, at multiple levels in the education system. Buy-in should occur at the policy level and trickle down to teachers so that each level is able to recognize and support the implementing agents in their quest to develop physical literacy as a response to student inactivity levels. Communication within the education system is imperative to set the stage and support a successful policy implementation, especially of a subject that is not a top priority for many people in education. Increasing communication may also help to provide the implementing agents with the motivation to recognize the need to change teaching methods, while offering capacity to support these changes. Although at times it seems to be an issue relating to which problem comes first (i.e. would buy-in increase will and capacity, or would having capacity and will increase buy-in?) without proper communication within the education system, people will not be able to work collaboratively to address inadequate physical activity levels in our society today.
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http://doi.org/10.2307/41995222


http://doi.org/10.3102/00028312038002437


Appendix A

Letter of Information and Consent Form

Project Title: Promoting Physical Literacy in Ontario Schools
Principal Investigator: Hilary McKenna, MSc (candidate)
Supervisor: Dr. Lucie Lévesque
Queen’s University: Queen’s University
13ham2@queensu.ca: levesqul@queensu.ca
613-827-7285: 613-533-6000 x78164

Invitation
You are invited to participate in a research study as a key informant from the health and physical education field. The purpose of this study is to explore the resources, training and plans for teachers relative to the implementation of the Physical Literacy component of the 2015 Ontario Health and Physical Education Curriculum.

Procedures Involved in the Research
As a participant, you will be asked to verbally respond to interview questions about the implementation plan for teachers and the challenges that may arise during implementation. Some demographic information will be collected (gender, age, organization name, years of experience in your position). The interview will take place with myself, the Principal Investigator, at a quiet location of your choosing and will be digitally recorded to ensure that your words are documented accurately. Participation will take approximately 60 minutes of your time. Shortly after the completion of the interview, if interested, I will send you a copy of the transcript to provide you the opportunity to confirm the accuracy of our conversation, and to allow you the opportunity to add to or clarify any points of discussion that you may see fit.

Potential Benefits and Risks
Possible benefits of participation include the discovery of challenges that may be addressed before implementation begins in September 2015. There is no anticipated direct benefit to the participants from completing this study. There are no known or anticipated risks associated with participation in this study.

Compensation
A token of appreciation for your time will be provided to you in the form of a $5 gift certificate to Starbucks; it is yours to keep even if you choose to withdraw your interview at any time.

Confidentiality
The information that you provide during the interview will be kept confidential. Your name will not be recorded and will thus not appear on any aspect of the interview or research. None of the demographic information (e.g., organization name) will be linked to any presentation or publication of verbatim quotes unless you explicitly provide permission for this. Although I will maintain your confidentiality, the specialist knowledge you provide and the relatively small sample size may mean that others could determine who participated. Digital recordings of your interview will be kept until you have had the opportunity to review the written transcript of the interview after which time it will be erased. Digital transcription of your interview will be encrypted and stored on a password-protected computer. Access to the transcribed interviews will be restricted to myself, my supervisor and graduate students of Dr. Lévesque’s who will help with data analysis and who will sign a confidentiality agreement.

Voluntary Participation
Participation in this study is voluntary. If you wish, you may decline to answer any questions. Further,
you may withdraw from this study by emailing me at 13ham2@queensu.ca at any time during the data collection phase of the study (May-August, 2015) without prejudice. Once the data have been analysed it will not be possible to remove your data except to ask that your verbatim quotes not be used.

**Publication of Results**
Results of this study may be published and/or presented at a professional conference and in peer-reviewed journals. Feedback about this study will be available. If you would like a copy of the results you may provide your email address at the end of this letter.

**Contact Information and Ethics Clearance**
If you have any questions about this study or if you require further information, please contact Hilary McKenna or Dr. Lucie Lévesque using the contact information provided above. This study has been reviewed and received ethics clearance by the Research Ethics Board at Queen’s University (File # 6015536). If you have any comments or concerns about your rights as a research participant, please contact the chair of the General Research Ethics Board, Dr. Joan Stevenson at 613-533-6081 or Chair.GREB@queensu.ca.

Thank you for your assistance in this project!

Hilary McKenna  
Principal Investigator

Dr. Lucie Lévesque  
Supervisor

MSc Candidate
Consent Form

I agree to participate in this study as described above. I have made the decision based on the information that I have read or have had read to me from the Information-Consent Letter. I understand that the information I provide will be kept confidential and that my name will not appear on any aspect of the research. I have had the opportunity to receive any additional information that I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

I would like to receive a copy of the final results of this study.  YES  NO
If you would like to receive a copy via email, please include it here: _________________

Name: __________________________

Signature: ________________________  Date: ________________________
Consent Form for Telephone Interview

Hello, as mentioned in the letter of information, I wish to gather your perspective on Physical Literacy component of the 2015 Ontario Health and Physical Education Curriculum. I have 8 questions that will take approximately 60 minutes depending on your time and interest. It is important that you understand that you are not required to answer any questions especially those that make you uncomfortable, you may withdraw from this interview whenever you wish with no penalty to you. There are no known risks to your involvement in answering these questions and all your answers are confidential to the researchers only. Although I will maintain your confidentiality, the specialist knowledge you provide and the relatively small sample size may mean that others could determine who participated. Do you understand these rights or would you like anything explained further?

YES or NO

Great. Now I wish to turn on a tape recorder so that I do not miss any of your comments and I can record your willingness to continue. Once I remove the script from the tapes, our conversation is kept in a protected computer file for 5 years and then the tapes are erased. Are these conditions okay for you?

YES or NO (adjust accordingly)

Turn on/off tape recorder.

Thank you. I am currently talking to [insert parent name] on [insert date]. Do I have your consent to continue with the interview?

Okay, there are 8 questions. (ASK AWAY)

Okay the interview is complete. It is important that I leave you with contact information should you have any concerns about this interview. Can I leave you with some contact information (phone number or email)?

I you wish to speak to me, my name is Hilary McKenna and I can be reached at _13ham2@queensu.ca (or 613-827-7285). If you wish to speak to someone from the research ethics office you may call Chair Joan Stevenson at Chair.GREB@queensu.ca or 613-533-6081.

Do you have any questions? Thanks so much for taking the time to participate in this interview.
Appendix B

Interview Guide: People for Education Representative

Background Information
Hi. How are you? Can you please tell me a little bit about yourself? What is your background and what kind of work do you do? (Position and number of years at current organization) Today, I will be asking you a few questions about the implementation of the physical literacy component of the 2015 H&PE curriculum. *Throughout the interview participants were reminded that the focus was on the physical literacy component of the curriculum rather than other aspects (e.g. sexual health). Interviewing a representative of People for Education, an organization that provides honest, accessible information to the public regarding public education in Ontario, I am honoured to have the opportunity to gain an understanding of your expectations about the implementation of the new curriculum in September, and any challenges that you anticipate. It is my understanding that P4E conducts research on a breadth of education topics. The 2015 Annual Survey and Report highlights several important findings regarding public education in Ontario, in particular some of the gaps that exist between the existing policies and the reality that each school endures. I hope to be able to tap into some of your knowledge on curriculum here today.

1. What external circumstances (beyond the control of the OME, which is the implementing agency) do you think might impose constraints for the teachers during the implementation stage?

Probes: What about any physical, political, or economic constraints?

2. The policy document was released on Feb.23, 2015 to be implemented in September 2015.
   a. What do you think has been accomplished thus far in terms of putting things into place for the upcoming school year?
   b. What do you think still needs to be accomplished before the 2015-2016 school year?

Probes: How feasible is this? Has sufficient time been allotted? What would be an ideal time-frame?

3. How will funding issues, for resources and teacher training, affect the implementation of the new curriculum?
   a. How will resources and training be made available for all teachers to access?
   b. What types of costs will be associated with these resources?
   c. What types of training are being offered to teachers? What cost is associated with this training?
   d. How might this affect schools with less funding?

4. Physical literacy is now included as an outcome of this curriculum. How familiar are school board directors, principals, parents, and students with the concept of physical literacy and its importance to overall student learning and health?
5. How do the roles of some of the key stakeholders at various levels (policy, directors of education, principals, parents, students) affect the ways in which a teacher will be able to implement the curriculum?
   a. How does the buy-in of the key stakeholders at all levels affect the quality of implementation and the monetary commitment to training and monitoring?
   b. What are your thoughts on specialist teachers vs. generalist teachers relative to the implementation of physical literacy?
   c. How can we hold teachers accountable for building a physical literacy foundation for children?

6. What role did *Ready, Set, Go* have in moving to this current point?

7. How important is it for parents to ensure that the new curriculum will be enforced within their children’s school?

8. What role do you see for People for Education within this implementation process?

9. Lastly, is there anything else that I may have missed that you feel is pertinent to this study?
Appendix C

Interview Guide: Ministry of Education Representative

Background Information
Hi. How are you? Can you please tell me a little bit about yourself? What is your background and what kind of work do you do? (Position and number of years at current organization) Today, I will be asking you a few questions about the implementation of the physical literacy component of the 2015 H&PE curriculum. *Throughout the interview participants were reminded that the focus was on the physical literacy component of the curriculum rather than other aspects (e.g. sexual health).
I would like to gain an understanding of your expectations about the implementation of the new curriculum in September, and any challenges that you anticipate.

1. What external circumstances (beyond the control of the MOE, whom is the implementing agency) do you think might impose constraints for the teachers during the implementation stage?

Probes: What about any physical, political, or economic constraints?

How were these circumstances taken into consideration during the policy development stage? What are the implementation funds for the province of Ontario when a new curriculum is being released?

2. The policy document was released on Feb.23, 2015 to be implemented in September 2015.

   a. What do you think has been accomplished thus far in terms of putting things into place for the upcoming school year?

   b. What do you think still needs to be accomplished for the 2015-2016 school year?

Probes: How feasible is this? Has sufficient time been allotted? What would be an ideal time-frame?

3. What are the driving theories of the new curriculum? What can you tell me about the research behind the development of this curriculum?

   a. How familiar are teachers with the concept of physical literacy?

   b. How familiar are school board directors, principals, parents, students with the concept of physical literacy and its importance to overall student learning and health?

4. How do the roles of some of the key stakeholders at various levels (policy, directors of education, principals, parents, students) affect the ways in which a teacher will be able to implement the curriculum?

   a. How does the buy-in of the key stakeholders at all levels affect the quality of implementation and the monetary commitment to training and monitoring?

5. How will the overall goals and visions of the curriculum be made clear to the teacher? How can we hold teachers accountable for building a physical literacy foundation for children?

6. How will the curriculum be disseminated to the schools? Who is responsible for ensuring that each teacher is given a copy of the new curriculum?
7. How will this new curriculum be enforced?

8. Lastly, is there anything else that I may have missed that you feel is pertinent to this study?
Appendix D

Interview Guide: Key Informants

Background Information
Hi. How are you? Can you please tell me a little bit about yourself? What is your background and what kind of work do you do? (Position and number of years at current organization) Today, I will be asking you a few questions about the implementation of the physical literacy component of the 2015 H&PE curriculum. *Throughout the interview participants were reminded that the focus was on the physical literacy component of the curriculum rather than other aspects (e.g. sexual health).

Interviewing a representative from Ophea/PHE Canada, a reputable source in Ontario/Canada for health and physical educators, I would like to gain an understanding of your expectations about the implementation of the new curriculum in September, and any challenges that you anticipate.

1. What external circumstances (beyond the control of the MOE, whom is the implementing agency) do you think might impose constraints for the teachers during the implementation stage?

Probes: What about any physical, political, or economic constraints?
How were these circumstances taken into consideration during the policy development stage?

2. The policy document was released on Feb. 23, 2015 to be implemented in September 2015.

a. What do you think has been accomplished thus far in terms of putting things into place for the upcoming school year?

b. What do you think still needs to be accomplished before the 2015-2016 school year?

Probes: How feasible is this? Has sufficient time been allotted? What would be an ideal time-frame?

3. What are the resources available to implement the new curriculum?

a. How will these resources be made available for all teachers to access?

b. What types of costs will be associated with these resources?

c. Where are these resources available? (Online, in print?)

d. What types of training are being offered to teachers? What cost is associated with this training?

e. How accessible will these training sessions be to teachers? How much time will be needed to complete the training sessions?

4. What are the driving theories of the new curriculum? What can you tell me about the research behind the development of this curriculum?

a. How familiar are teachers with the concept of physical literacy?
b. How familiar are school board directors, principals, parents, students with the concept of physical literacy and its importance to overall student learning and health?

5. How do the roles of some of the key stakeholders at various levels (policy, directors of education, principals, parents, students) affect the ways in which a teacher will be able to implement the curriculum?

   a. How does the buy-in of the key stakeholders at all levels affect the quality of implementation and the monetary commitment to training and monitoring?

   b. What are your thoughts on specialist teachers vs. generalist teachers relative to the implementation of physical literacy?

6. How will the overall goals and visions of the curriculum be made clear to the teacher? How can we hold teachers accountable for building a physical literacy foundation for children?

7. How will the curriculum be disseminated to the schools? Who is responsible for ensuring that each teacher is given a copy of the new curriculum?

8. How will this new curriculum be enforced?

9. Lastly, is there anything else that I may have missed that you feel is pertinent to this study?
Appendix E

Ethics Approval

May 21, 2015

Ms. Hilary McKenna
Master’s Student
School of Kinesiology and Health Studies
Queen’s University
28 Division Street
Kingston, ON, K7L 3N6

GREB Ref #: GPHE-192-15; Romeo # 6015536
Title: "GPHE-192-15 Promoting Physical Literacy in Ontario Schools"

Dear Ms. McKenna:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled “GPHE-192-15 Promoting Physical Literacy in Ontario Schools” for ethical compliance with the Tri-Council Guidelines (TCPS) and Queen’s ethics policies. In accordance with the Tri-Council Guidelines (article D.1.6) and Senate Terms of Reference (article G), your project has been cleared for one year. At the end of each year, the GREB will ask if your project has been completed and if not, what changes have occurred or will occur in the next year.

You are reminded of your obligation to advise the GREB, with a copy to your unit REB, of any adverse event(s) that occur during this one year period (access this form at https://eservices.queensu.ca/romeo_researcher/ and click Events - GREB Adverse Event Report). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To make an amendment, access the application at https://eservices.queensu.ca/romeo_researcher/ and click Events - GREB Amendment to Approved Study Form. These changes will automatically be sent to the Ethics Coordinator, Gail Irving, at the Office of Research Services or irvingz@queensu.ca for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

Joan Stevenson, Ph.D.
Chair
General Research Ethics Board

c. Dr. Lucie Levesque, Faculty Supervisor
   Dr. Brendon Gurd, Chair, Unit REB