Making Movement a Priority:

By

Rebecca Turner

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Abstract

Childhood obesity and physical inactivity are growing concerns in North America. In 2005, Ontario introduced Policy/Program Memorandum No. 138: Daily Physical Activity in Elementary Schools as part of the Healthy Schools Framework. This framework recognizes the impact that health and activity have on preparing students to learn and succeed at school (Ontario Ministry of Education, 2014). This study examined current teacher perceptions and practices with regards to Daily Physical Activity. Three junior/intermediate teachers from the Durham District School Board were interviewed to learn about their experience with DPA and the impact they perceive DPA to have on their students and school communities. Findings indicate that although teachers recognize the importance of DPA for student health there seems to be a lack of support as well as systemic, and professional practice barriers that limit DPA requirements to be met. These findings signify the need for some change in order to enhance the frequency of implementation and experience for both teachers and students. Further research is needed within Ontario to determine how to adjust this program and make it more accessible for teachers moving forward.

Key Words: Daily Physical Activity (DPA), health, movement, elementary education, exercise
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Chapter 1: Introduction

1.0 Introduction: Research Context and Problem

Obesity is a major concern in society. It has major impacts on health care systems, and an individual’s quality of life. In Canada, there has been significant increase in childhood obesity rates and a decrease in physical fitness levels (Colley et al., 2011). A revised guideline from the World Health Organization in 2010, recommended that all children aged 5-17 get a minimum of 60 minutes of moderate-vigorous physical activity each day (World Health Organization, 2010). Unfortunately, over 87% of Canada’s youth population is not meeting Canadian physical activity guidelines (Canadian Fitness and Lifestyle Research Institute, 2009). Childhood obesity and physical inactivity have been linked to many chronic illnesses, such as heart disease, type II diabetes, high cholesterol, osteoarthritis and cancer (Public Health Agency of Canada, 2011). Currently obesity is placing an estimated economic burden on Canada of 7.1 billion dollars annually and the rates are continuing to rise (Public Health Agency of Canada, 2011). Increasing child physical activity is an important public health challenge that our society needs to proactively address in order to ensure that future generations are able to sustain long and healthy lifestyles.

There has been an increase in reported childhood sedentary time over the last decade with reports of most children spending six out of ten of their waking hours sedentary. Currently, Ontario elementary students are only receiving Physical and Health Education 2-3 times a week. That is only 6% of the Ontario school curriculum time being devoted to physical education (Morgan & Bourke, 2008). Many schools do not employ a physical education specialist, therefore, the educator who often teaches this time is not fully qualified, making the quality of this time questionable (Active Healthy Kids, 2009). In addition, it has been found that the time
students spend out at recess cannot be deemed an acceptable amount of physical activity, as on average boys were found to only participate in 28 minutes a day and girls only 21 minutes a day during all combined recesses (Ridgers, Stratton & Fairclough, 2005). Elementary students spend approximately 7 hours each day at school, therefore the current school system is a key player in contributing to the amount of time children spend in a sedentary state each day.

In 2005, the Ontario Ministry of Education mandated the policy, Memorandum 138-Daily Physical Activity (DPA) in Elementary Schools Grades 1-8, which states that schools must ensure that all students are being provided with the opportunity to participate in a minimum of 20 minutes of moderate to vigorous physical activity during the instructional school day (Ontario Ministry of Education, 2005). Teachers are responsible for implementing this into their classroom schedules as apart of their curriculum; however, often teacher priorities and the lack of knowledge and resources make proper execution difficult (Patton & MacDougall, 2009).

The introduction of the DPA policy in 2005 was an attempt to encourage healthier schools and healthier living amongst Ontario’s youth. However, 11 years later it is not being accomplished on a daily basis in our elementary schools due to the pressures put on teachers to meet all other areas of curriculum, especially literacy and numeracy (Morgan & Bourke, 2008; Dwyer et al., 2003). Further investigation into the current status of Daily Physical Activity in Ontario elementary schools is crucial to understanding how the policy/program can be improved and how non-specialist Physical and Health Educators are implementing DPA into their lessons, and the supports and barriers they are facing.

1.1 Purpose of the Study

The purpose of this research study is to investigate teacher perceptions and implementation of the Daily Physical Activity program in Ontario elementary school classrooms.
with a specific focus on teachers who do not have a specialist qualification in Physical and Health Education. This research will help to identify areas of improvement within the DPA mandate to ensure successful implementation by educators in their classrooms. These findings can be used to further conclude where the benefits and barriers exist in the program and what changes can be made to improve the program and teacher practice. Data will be collected by interviewing a variety of elementary school teachers, all with varying levels of confidence, experience and background Physical and Health Education knowledge. This data will provide a basis for discussion to help Ontario educators determine the areas to focus on, so that the program can be improved for the future. A strong DPA program will provide students with an opportunity to get the recommended 45-60 minutes of moderate to vigorous physical activity, to promote long-term physical literacy and involvement. It will also help many students improve skills, (such as teamwork, problem-solving, attention) which will be beneficial inside and outside the classroom environment. I plan to share these findings with the educational research community in order to further inform elementary school educators of the status of the current DPA program in Ontario.

From this study, I hope to have a better understanding of what the status of the current DPA system looks like in Ontario, more specifically Durham District School Board and suggest some areas that are limiting teacher implementation. By understanding the benefits and barriers teachers are currently facing in the system, new teachers, can be proactive and take early intervention to provide the best learning experience for students while encouraging them to lead healthy active lifestyles.

1.2 Research Questions

The primary question guiding this study is: How is a small sample of Ontario elementary
school teachers implementing the Daily Physical Activity guidelines from the 2005 Ministry mandate?

Sub-questions to further guide this inquiry include:

• How do teachers perceive and prioritize the DPA guidelines as part of their teaching practice?

• Are teachers confident in designing and implementing a DPA lesson?

• What factors do teachers take into consideration when designing their DPA lesson plans?

• What barriers and supports are teachers experiencing when implementing the DPA curriculum?

This project also aims to raise awareness of the importance of Daily Physical Activity as a proactive strategy to avoid future chronic medical conditions and promote a positive attitude towards encouraging life long physical activity.

1.3 Background of the Researcher

I have grown up in Ontario with my rather large extended family, the majority of whom have pursued careers in education. My parents are both teachers, with Physical and Health Education backgrounds and have had experience teaching physical education to a range of students (Kindergarten to Grade 12). This means that leading a healthy active lifestyle is an important aspect of my upbringing and current lifestyle. As a child, I was fortunate to be active and enrolled in many extra-curriculars both in the public school system and community setting. Growing up in a suburb in the GTA, offered plenty of opportunities for involvement in both indoor and outdoor activities. Beginning at a young age I was involved in dance, volleyball, basketball and field lacrosse in the community, as well as taking advantage of the extracurricular opportunities offered throughout my time in elementary and high school. The passion I had for
physical activity and the human anatomy, lead me to Queen’s University, where I completed an Honours Bachelor of Physical and Health Education. During my time in post-secondary studies, I took a particular interest in the studies and extracurricular activities surrounding Global Health and Disability. This provided me with the opportunity to work with both children and adults with a range of disabilities within a physically active context. I was drawn to this because, even though I am perceived as an able bodied individual in society, I have had periods of immobility caused by Osteochondritis Dissecans throughout my youth. Therefore, I have been in the unique position of being limited by mobility for months at a time. This has allowed me to experience the difference in attitudes towards those who are able bodied and those with limitations, in both the contexts of the school system and society.

Much of my work experience has involved children of a variety of ages and abilities, as well as programming that includes aspects of physical activity. Being both a Sports Instructor and Summer Camp Director, has made me aware of the benefits and challenges of keeping children actively involved, especially in large groups. However, as someone who has had a considerable amount of experience working with children and studied the importance of physical activity, I have developed a strong interest in investigating the successes and challenges teachers face when implementing DPA in elementary schools. It is important for me to acknowledge and be aware of how this privilege influences my perspective as a researcher. I am interested in deepening my understanding so that I will be able to apply it to my future teaching practice and best support my students’ health.

1.4 Overview

To respond to the research question, I will be conducting a qualitative research study using purposeful sampling by interviewing three teachers about their current experiences with
the Daily Physical Activity guidelines. The research project is organized into five chapters. Chapter one, includes the introduction and the purpose of the study, how I became involved in this topic as well as the research questions. In chapter two, I will review the literature in the areas of Daily Physical Activity (DPA) and the importance physical activity plays in health and children’s success at school. Next, chapter three elaborates on the research design including, the research methodology, information about the participants, the data collected and limitations. In chapter four, I report the research findings and discuss the significance of the findings in light of the existing research literature. In chapter five, I identify the implications of the research findings for my own teacher identity and practice, and for the educational research community more broadly. It also articulates a series of questions raised by the research findings, and point to areas that require future research. Finally, a list of appendices and references will follow to support my paper and its findings.
Chapter 2: The Literature Review

2.0 Introduction

In this chapter, I review the literature on the importance of Daily Physical Activity for elementary school students. More specifically, I will review the guidelines that have been set by the Ministry of Education regarding Daily Physical Activity expectations for students, and consider what aspects of the program should be of focus in order to help teachers have success with this program. I start by reviewing literature on the role physical activity has on health, wellness and academic success. Next, I review research that has been conducted so far on Daily Physical Activity and the role the program plays in Canadian elementary schools. This will allow for a better understanding of the program, and the past and present guidelines. Finally, I investigate the research that has been conducted to date on teacher opinions of Daily Physical Activity and implementation strategies that have been employed to help teachers overcome identified barriers.

2.1 The Importance of Physical Activity and Physical Fitness in Education

It has been reported that only 9% of children ages 5-17 are meeting the guidelines for physical activity in Canada (Participation, 2011). With children in this age category spending much of their time in school, it is important that the education system support physical activity and health promotion. This will help children not only maintain a healthy lifestyle, but be successful in their academics. Physical activity is defined as any bodily movement produced by skeletal muscles resulting in energy expenditure. It can be categorized into occupational, sports, conditioning, household or many other activities. Physical fitness is a set of attributes that are either health or skill-related. The degree to which people have these attributes can be measured
by specific testing. A person, who is physically fit, is someone who is able to carry out daily
tasks with vigor and alertness, without undue fatigue and is able to enjoy leisure-time pursuits
(Caspersen, Powell & Christenson, 1985). Tests that are often taken to measure one’s physical
fitness are related to cardiorespiratory endurance, muscular endurance, muscular strength,
flexibility and body composition. These tests are used to measure one’s physical fitness in
relation to health. However, physical activity has been shown to impact many areas of a person’s
life.

2.1.1 Physical activity, health and wellness

In today’s society, it is common knowledge that physical activity is an important aspect
of health. There is often a major focus on the physical health benefits in order to avoid illness
and disease. However, it is also important to note the impact physical activity and fitness levels
have on the emotional and social aspects of wellness. Therefore, it is important to recognize the
impact physical activity has on all dimensions of health and wellness.

2.1.1.1 Physical benefits

Physical activity is known for its role in increasing muscle and bone health. Increased
muscle mass, and strength is associated with physical activity. However, the factors that physical
activity and fitness have on maintaining long-term health are even more significant. It is
important to look at the affect that inactivity has on the body. Many studies have found that
being physically inactive has been linked to an increased risk of obesity, chronic disease and
ultimately premature death (Warbuton, Nicol & Bredin, 2006). More specifically, a decreased
level of physical fitness has been found to increase an individual’s susceptibility to
cardiovascular disease, obesity, cancer, hypertension, type II diabetes and bone degeneration
(Warbuton, Nicol & Bredin, 2006). It has been recommended that both adults and children
participate in physical activity in order to decrease their risk of disease. The Canadian Physical Activity Guidelines, 2011, have developed specific recommendations related to physical activity and physical health. It suggests that adults should participate in 150 minutes of physical activity a week and children should accumulate 60 minutes or more a day. Both should be engaging in physical activity that is described as moderate to vigorous, in order to achieve health benefits (Canadian Physical Activity Guidelines, 2011). Aerobic exercise and strength and resistance training can improve the body’s ability to transport oxygen, increase endocrine function and reduce stress (Janssen & Leblanc, 2010). If individuals are able to maintain these physical activity levels on a regular basis they are at a 50% decreased risk of developing the aforementioned chronic health conditions (Warburton, Nicol, & Bredin). Therefore, engaging in physical activity is important in maintaining both quantity and quality of life. It is also important to mention, that although physical activity is incredibly important in maintaining strong physical health, the amount of time spent in a sedentary state, independently affects one’s health status (Ekelund et al., 2006). Increased sedentary time has been linked to an elevated risk of disease and illness (Estein, Paluch, Gordy & Doran, 2000). Therefore, decreasing sedentary time and increasing activity is crucial in disease prevention and maintaining a positive status of overall health (Epstein, Paluch, Gordy & Doran, 2000).

2.1.1.2 Emotional benefits

When discussing physical activity, the focus tends to be on the benefits related to the physical health of individuals that have been discussed above. However, there is great importance to the benefits physical activity has on one’s emotional and social wellbeing. Physical activity has been found to positively affect one’s mood, improve self-esteem, reduce anxiety, improve sleep and assist in stress management (Fox, 1999). Many researchers have
reported the strong relationship between participation in physical activity and an increased self-esteem (Gruber, 1986). Self-esteem is defined as the confidence in one’s abilities or self worth, and is incredibly important during youth development (Whitehead & Corbin, 1997). Ebbeck and Weiss (1998) found that when physical activity programs are introduced properly, they could increase self-perception of competence, which has a direct positive impact on their level of self-esteem. It is important to note, that although there is a connection between increased physical activity and self-esteem, more research is necessary in this area to determine the degree to which physical activity will serve as an intervention to improve self-esteem. It may have to be used alongside other strategies in order to see maximum benefits (Tremblay, Innman, & Willms, 2000).

In Canada, it is estimated that 10-20% of youth are affected by a mental illness or disorder (Canadian Mental Health Association, 2015). This has been identified as the single most disabling group of disorders worldwide (Canadian Mental Health Association, 2015). The ability to use physical activity as a strategy to improve an individual’s mental health is extremely important and relevant as we continue to see a growth in these statistics. A study conducted by Field (2012) found increased activity leads to an increased production of anti-depression neurotransmitters, such as serotonin. This suggests that physical activity has the potential to alleviate some symptoms associated with depression (Taylor, Sallis, & Needle, 1985). In addition, it was found that there was a decrease in the production of stress hormones in those who participated in more activities (Field, 2012). This research suggests that participating in organized activities such as yoga, will lead to a significant decrease in depression and anxiety. There is also literature that has demonstrated the moderate effect physical activity, specifically aerobic exercise, has on decreasing anxiety in youth (Fox, 1999). Teachers could use both yoga
and aerobic activities as part of the Daily Physical Activity program. This could be extremely beneficial in the classroom for all students, but especially those who have increased anxiety related to performance in the school setting (Fox, 1999).

### 2.1.1.3 Social benefits

Engagement in physical activity serves as an opportunity for young children to interact with one another. The social component allows students to work together, developing teamwork skills, and bonding with other students and transcending cultures (Green, 2009). There is ample opportunity for students to interact with their peers and develop interpersonal and intrapersonal skills that they will continue to use throughout their life. Kenneth Fox (1999), states that promoting physical activity to the general public would allow for increased social interaction and overall quality of life. However he also states that there has been less of a focus on the social benefits of physical activity than is warranted, and more research is necessary in this area of study (Fox, 1999).

### 2.1.2 Physical activity and academic success

The relationship between being physically active and one’s academic success is often questioned. It is important to determine what educators define as academic success. There is literature that has found that physical activity serves as a motivator for students during their academic studies (Vazou & Gavrilous, 2012). There has also been a great deal of positive research related to student fitness levels and academic performance related to testing and grades. A study done in Mississippi used six different components to measure fitness and found that there is a significant positive correlation between the fitness levels of students and the scores they have received on standardized tests (Blom et al., 2011). A study in Massachusetts examined 2127 students in grades 4-8 and found a significant relationship between fitness levels and
academic achievement (Chomitz et al., 2009). It was determined that students who successfully completed an increased number of fitness tests were more likely to receive a passing grade on math and English tests (Chomitz et al., 2009). These findings were similar to a compiled meta-analysis from 2011, which focused on the effects of physical activity on children’s achievement and cognition outcomes (Fedewa and Ahn, 2011). They also found, that the largest effect from physical activity was on children’s math achievement, followed closely by IQ and success with reading (Fedewa and Ahn, 2011).

Another important aspect of academic success is student engagement and attention. In elementary school grades, much of the students’ learning takes place during instructional time; therefore high attendance rates are an important aspect of ensuring student success. Blom et al. (2011) found there to be a negative correlation between fitness tests scores and school absences. This demonstrates that those with higher levels of physical fitness were less likely to miss class time. Some of the possible reasons for this outcome were that students were more likely to attend school due to: an increased enjoyment with school, physical activity’s role in increasing student physical and mental health making them more willing and able to learn, and higher self esteem and efficacy (Blom et al., 2011). This is an important observation because this research demonstrates the positive affects related to student attendance and the connection with an increased level of physical activity.

Current research has found that physical activity has an impact on overall student success. Therefore, implementation of initiatives, such as the Daily Physical Activity program, can positively impact the learning environment making it conducive for children to be successful in their academics.
2.2 Daily Physical Activity

Daily Physical Activity (DPA) is 20-minutes of moderate to vigorous physical activity in publicly funded schools. Alberta, Ontario and Quebec elementary school systems have all had DPA mandated by the government in an attempt to promote health and activity (Patton, 2012). This Daily Physical Activity is for students in kindergarten through grade 8, and must occur during classroom instructional time every school day. It must consist of both a warm-up and cool-down component and at least 20-minutes of moderate to vigorous activity (Ontario, 2005). It is also stated that all activity must be adaptable to students, including those with special needs (Ontario, 2005). In a study, conducted by Stone et al. (2012) they identify that the goal of DPA is “to enable all elementary students to improve or maintain their overall health and wellness.”

2.2.1 Background of the Daily Physical Activity movement

The increasing epidemic of inactivity within upcoming generations has lead the World Health Organization (WHO) to identify the importance of physical activity on a global scale. The WHO has developed the Global Recommendations on Physical Activity for Health, with an aim to provide guidance to policy makers on the dose-response relationships related to duration, intensity, type and frequency of physical activity that is necessary for aiding in maintaining good health and preventing illness (World Health Organization, 2016). They have organized the guidelines into three categorizes related to age (World Health Organization, 2016). This initiative by the WHO has been identified as a guiding force for the Ontario Healthy Schools Coalition (OHSC), one of the biggest policy players in health promotion. The OHSC is the provincial chapter of the Canadian Association for School Health. It was formed in 2000 as a response to major concerns related to reductions in school based health and social services. This association includes a diverse group of members from school boards, a variety of health organizations, and
parent-student organizations just to name a few. In its introductory year, the OHSC drafted possible resolution strategies for approaches to school based health promotion, which lead to the Healthy School Framework employed in Ontario schools today (Ontario Public Health, 2011). The four pillars of this framework are: quality instructors and programs, healthy physical environment, community partnerships and a supportive social environment (Ontario Public Health, 2011). Five years later, Daily Physical Activity was implemented under the Ontario’s Health Schools framework in an attempt to support learning and help student reach their full potential.

2.2.2 Ministry implementation of the PPM 138- Daily Physical Activity, in 2005

In 2004, Ontario’s Chief Medical Officer, Dr. Sheela Basrur issued a statement bringing attention to the number of obese children in Canada. She reports that the number of obese children ages seven to thirteen has tripled due to inactivity (Chief Medical Officer of Health report, 2004). The government took action with regards to these findings, and in October 2005, the OME introduced Policy/Program Memorandum 138: Daily Physical Activity (DPA). This mandate addresses the physical activity component of the Healthy Schools strategy, following a similar initiative in Alberta (Ontario Ministry of Education, 2005). As outlined in its mandate, “the goal of Daily Physical Activity is to enable all elementary students to improve or maintain their physical fitness and their overall health and wellness, and to enhance their learning opportunities” (Ontario Ministry of Education, 2005). It prescribes, “a minimum of twenty minutes of sustained moderate to vigorous physical activity each school day during instructional time for all elementary school children in Ontario, including those with special needs (Ontario Ministry of Education, 2005). Within this mandate, there are some key components that are clearly outlined in the Daily Physical Activity resource documents. First, the document reiterates
scheduling and reminds educators that students are to be active for the minimum 20 minutes, during instructional time (Ontario Physical and Health Education Association, 2005). It is specified that this physical activity should ideally be provided in a single, sustained twenty-minute block, but that two or more blocks of at least ten minutes would suffice (Ontario Physical and Health Education Association, 2005). This activity time is in addition to recess, lunch breaks, and extra-curricular physical activity (Ontario Physical and Health Education Association, 2005). It specifically states that the activity must be at an intensity that raises students’ heart rates above resting levels (Ontario Physical and Health Education Association, 2005). Finally, the document makes a point to ensure that the activity is inclusive in nature and must be conducive for participation of all students, regardless of ability (Ontario Physical and Health Education Association, 2005). Although, the document states very clearly the expectations that are to be met by educators, it is not clear how this will fit into the already very busy daily schedules teachers are facing.

2.3 Current State of Daily Physical Activity Programs

In schools, there is often a focus on subject areas that are more academic in nature; leaving curriculum components such as Physical and Health Education lower priority (Patton, 2012). Regardless of most schools having some resources to implement physical education, there are key components missing in order for the programs to be successful. It has been found that only half of Ontario schools have effectively implemented Daily Physical Activity as part of their school environment (Active Healthy Kids, 2014). In order to understand how to constantly improve and adjust the DPA program, it is important to research what implementation strategies are currently working in schools and areas that need improvement. Teacher reactions to the DPA initiative can also serve as important areas of research to understand how educators perceive and
implement physical activity into their teaching practice. Finally, identifying current barriers and supports will only help to further enhance the DPA program for both teachers and students in the Ontario elementary school system.

2.3.1 Current barriers to Daily Physical Activity

Unfortunately, DPA has not been a priority for elementary classroom teachers, and many overlook the benefits of the program and view it as an inconvenience (Patton, 2012). This is due to the stress placed on classroom teachers to cover curriculum (Patton, 2012). Teachers have reported that the biggest barrier they face with regards to DPA is time (Patton, 2012). Many believe that the program is taking away valuable instruction time and this speaks to the reduced value many teachers give to aspects of the Physical and Health Education portion of the curriculum. Another barrier that was identified in the research was the support of stakeholders (Cothran et al., 2010). This includes not only teachers, but also parents, and community members. In the literature, it recognizes that the support from stakeholders is extremely valuable in determining program success, especially with a program like DPA (Cothran et al., 2010). Another area of increased support that many teachers identified would assist them with the program is if these stakeholders supported the changes to daily schedules and the opportunity to seek professional development and training (Castelli & Ward, 2012). This would help ensure teacher confidence and expand resources in order to safely and successful implement DPA in schools. In 2009, Robertson-Wilson and Lévesque investigated the implementation of Policy 138- Daily Physical Activity, using a framework that had been previously developed in 1984 by Hogwood and Gunn. It identifies important preconditions in order for successful implementation of a new program (Robertson-Wilson & Lévesque, 2009). Their conclusions suggest that resources, available facilities, qualified instructors for DPA and proper equipment may be
lacking in Ontario schools in order for the implementation to be successful.

Another barrier that has been mentioned previously, is the lack of Physical and Health Education specialists within the schools. Many schools do not employ a physical education specialist, leaving this area of education to be taught by someone who is not fully qualified (Active Healthy Kids, 2009). Although, the DPA program was intended to be accessible for all teachers to be able to employ in their classes by not having someone in the school that is confident and advocating for the program it is be disregarded. It also means that within the school community the teachers are lacking in support for how to implement an effective 20-minute physical activity program (Active Healthy Kids, 2009).

Finally, a barrier to the program that needs to be addressed is the accountability surrounding implementation. Many schools leave it up to the classroom teacher to determine when they will incorporate DPA into their schedules. However, this freedom and flexibility tends to decrease the accountability of the program (Chorney, 2009). In order for DPA to be taken seriously amongst all educators, there needs to be follow-up and accountability, similar to the literacy and math portions of the curriculum, with the Daily Physical Activity (Robinson & Melnychuk, 2008).

2.3.2 - Teacher reactions to the Daily Physical Activity policy

Much of the research that is currently available regarding teacher reactions and attitudes towards DPA closely relates to research discussed above regarding barriers with the program. Many teachers agree that DPA creates a better learning environment for students, however it still doesn't seem to be a priority in education (Patton, 2012). Research conducted by Patton (2012) found that over half of the teachers in the area he interviewed rarely or never had time to conduct DPA. It was those with strong personal values related to health and fitness or a background in
physical activity and health who made DPA a priority in the classroom (Cothran et al., 2010). Teachers seem to enjoy the freedom they have to incorporate DPA into their schedules, however the research done by Patton (2012) reveals that many believe that if the program was structured in the school wide schedule it would decrease the time each individual person spends planning and would make teachers more accountable (Patton, 2012). When key stakeholders and teachers understand and treat DPA as a valuable component of the curriculum, the policy will be more successful. Further investigation into teacher’s attitudes and willingness to implement the program will facilitate more student involvement and engagement.

### 2.3.3 Current Daily Physical Activity implementation strategies

Although, it appears that DPA is not being implemented to its full potential across all Ontario School Boards, there have been certain strategies and initiatives employed by schools and individual classroom teachers that have yielded some success. Some teachers have found success by incorporating DPA into other subjects in order to overcome the time constraints (Gaus & Simpson, 2009). There is literature on integrating DPA as a kinesthetic learning strategy to reinforce different lessons in math and literacy (Gaus & Simpson, 2009). For example, using DPA as a way to review multiplication and division facts (Gaus & Simpson, 2009). An initiative called Physical Activity Across the Curriculum is a program that supports that most children who benefit from small bouts of various types of activity, such as organized sports, active play and active transportation (Active Healthy Kids, 2014). It has inspired platforms, such as the Take 10 program, which is attempting to incorporate the DPA guidelines in two, 10-minute bouts of physical activity (Vaouz et al., 2012). This gives students a brief break from their school work and can be used as a strategy for a break and then refocusing those students who may have lost the ability to concentrate or focus (Vaouz et al., 2012). These programs are just a few examples
of using DPA as an opportunity to have energizers worked into the day providing students the opportunity to exert some energy and then refocus.

2.4 Conclusion

In this literature review, I looked at research on Daily Physical Activity and its current status in elementary schools. This review emphasizes the importance of children leading a physically active life in order for them to achieve a long-term health. It also, explains the DPA initiative that was put in place by the ministry and provides research on the current status of that program. This review raises questions about teacher implementation and points to the need for future research in order to determine both program and student success.

In light of this, the purpose of this research is to learn current teacher perspectives and experiences with Daily Physical Activity. This research study will be conducted using semi-structured interviews with non-specialist, Ontario elementary school teachers. This will allow insight into a small population of educator experiences with the DPA curriculum. Through this research, I hope to contribute to improving teacher support with implementing the Daily Physical Activity policy. Hopefully, this will lead to an improved level of physical activity in Canadian youth as well as success for students in Ontario elementary schools.
Chapter 3: Research Methodology

3.0 Introduction

In this chapter, I explain the research methodology I have chosen, identifying the various methodological decisions made, and the rationale for these choices based on the research purpose and questions. I begin with a discussion of the research approach and procedure, before describing the main instrument of data collection. I then identify the participants of the study, listing the sampling criteria, describing the sampling procedures, and providing some information on the participants. I proceed to describe how I have analyzed the data, before recognizing relevant ethical issues that have been considered and addressed. Lastly, I speak to some of the methodological limitations of the study, while highlighting and acknowledging the strengths.

3.1 Research Approach & Procedures

The procedure for this research study began by analyzing the existing research regarding the Daily Physical Activity program in Ontario schools. This information was presented in the following chapter in the form of a literature review. Literature reviews are used to refine the research context, acknowledge important findings related to the topic and direct the pathways for outcomes of the current study (Bandara, Miskon, & Fielt, 2011). This is an important step to establishing the context of the research to come. Next, a qualitative research approach was adopted to collect data. Throughout the 20th century, there has been an increase in qualitative research (Creswell, 2013). However, Carr (1994) insists that qualitative research has had to overcome many obstacles in order to achieve recognition for its current contribution to knowledge. In response to the historically negative bias towards qualitative research, Carr (1994) argues that neither approach (quantitative or qualitative) is superior to the other, and that they serve diverse purposes. Qualitative research is used to analyze, report and interpret a variety of
perspectives (Creswell 2013). It is often used for to explore and understand the meaning of individuals or groups impute to a social problem (Creswell, 2013). This made the use of qualitative research methods a goo approach for the scope of research conducted in this study. This study is aiming to gather insights on the current experiences teachers are facing with the Ontario Ministry’s Daily Physical Activity Program. Therefore, there is great value in being able to collect data using words versus the numbers and statistics associated with quantitative data.

Qualitative research employs methods that are conducive to more purposeful sampling and open-ended questions (Creswell, 2013). For this research project, semi-structured interviews were arranged with three elementary school educators, and data was collected by recording the participants responses to a series of questions. The semi-structured interview is a beneficial method of collecting data through flexible conversation (Fylan, 2005). This questioning format allows the researcher to structure questions to guide the conversation, ultimately focusing on what they want to find out (Fylan, 2005). By using a semi-structured interview approach, the researcher is able to vary the flow and questioning for each participant to allow for a more fluid conversation (Fylan, 2005). This allows the participants to share their experience and provide extensive and reflective answers to the questions without the interview structure being too rigid (Fylan, 2005). However, some structure was maintained to ensure that the coding framework for the questions could be employed to find themes amongst the data.

In this study, the data reflected the teachers’ opinions and experience on the current DPA program. The participants selected use DPA in their teaching practice but, are not qualified Physical and Health Education specialists. After completing the interviews with all the participants, the data was consolidated and coded for themes that align with the research question. Lastly, the findings collected in this study were connected to the previous literature and
possible future implications of the data.

### 3.2 Instruments of Data Collection

The instruments utilized for data collection in this research project included semi-structured interviews with three volunteer participants. Each of these participants were aware of the research project and gave written consent to be included in the study. The interview questions asked were designed to focus on the teachers experience with executing Daily Physical Activity as part of their daily schedule in their division. In addition, these questions would provide insight to teacher-identified strengths and weaknesses of the DPA program in their school. A list of the interview questions is Appendix B.

This semi-structured interview method was an effective method for collecting data for this particular study. It allowed for many open-ended questions and discussion between the participants and the researchers (Creswell, 2013). These semi-structured interviews also provided the participants with the opportunity to reflect on their practice and share their experiences with daily physical activity (Creswell, 2013). These participants expressed how they perceived Daily Physical Activity affected students learning, overall health, motivation and engagement in classroom material. Some also expressed their opinions relevant to Daily Physical Activity and how the government established the policy. These questions were created using a semi-structured method to allow for fluid conversation and additional questioning and discussions to emerge between the researcher and participants regarding Daily Physical Activity implementation.

### 3.3 Participants

The participants involved in this research study include three elementary school teachers who are currently employed by the Durham District School Board. The interviews were conducted using a qualitative method of data collection in the form of semi-structured
interviews. The focus of these interviews is on the experiences and current implementation of Daily Physical Activity by these teachers. In this section, I review the sampling criteria I utilized for participant recruitment. I will review a range of possible avenues for teacher recruitment and have also included a section that will introduce each individual participant.

3.3.1 Sampling criteria.

The following criteria will be applied to this study’s teacher participants:

- Teachers will be working in an elementary school, in the Durham District School Board. This will help to ensure that all of my data is from the Durham area, and is with teachers who are required to be implementing DPA.
- The participants will all be currently teaching in the junior division at their school (Grades 4-6)
- Teachers will have been working the field of Education, or enrolled in a pre-service teaching program, previous to September 2006. The government mandate was issued in 2005, therefore by ensuring that teachers have been working in the field since 2006, I will be able to interview people who were part of the education system when the addition of DPA came into affect. This will provide insight on how it was implemented, teacher reaction, resources provided, and time management.
- Teachers will not be classified as Physical and Health Education specialists. Due to the fact that there is such a small population of teachers in elementary schools that are Physical and Health Education specialists, I want to make sure the data I collect is reflective of the majority of the teacher population. Therefore, I will focus on participants who have no specialized qualifications in Physical and Health Education.

By ensuring these criteria are followed I will confirm that my sample size, is a good
representation of teachers in the board and will provide a criteria that will maintain consistency across all participants. This will help ensure quality sampling, ultimately increasing the integrity of the research studies findings (Marshall, 1996).

3.3.2 Sampling procedures/ recruitment

The strategy employed in recruiting participants for a study of depends on the aim of the research and the questions being answered (Marshall, 1996). In order to explore this research topic and collect data, a combination of purposeful sampling and convenience sampling will be utilized. Purposeful sampling will ensure that the interviews conducted will provide data related to elementary school teachers experience with DPA (Marshall, 1996). Convenience sampling is a method of sampling that involves using the most accessible participants (Marshall, 1996). This method will need to be used due to the time restraints on this particular research project. These sampling techniques will also help to ensure that the participants will each come from a different division and are not qualified Physical and Health Education specialist, but also, allow teachers to volunteer to be part of the study. To recruit participants I will be contacting teachers within local schools in the Durham District School Board and providing them with an overview of my research study. I will provide the participant criteria and ask that these individuals to distribute my information to teachers they believe may fulfill the criteria. I will include my contact information, rather than ask these individuals to provide me with the names and contact information of people they think would be suitable. This will help ensure that teachers are volunteering to participate rather than feeling pressure or obligation to participate.

3.3.3 Participant bios

In order to maintain anonymity of participant’s pseudonyms will be used to refer to my
participants. My first participant, Sam, is a grade 6 teacher who has taught in a variety of settings over the last 10 years. They currently teach grade 6 math, social studies, language, science and physical education. They teach at a Kindergarten to grade 8 school that currently does not have a set time for DPA, it is organized at the teachers discretion. Although Sam does not have a degree in Physical and Health Education their participation in sports and athletics as a child has helped to inform his own teaching practice and engage students in movement.

Next, Alex, is a grade 7 homeroom teacher who teacher mostly art and language, however throughout their educational career has had an extensive Physical and Health Education background. Alex was teaching Physical and Health Education during the year of the DPA mandate release and has seen its change over the years. They have taught Physical and Health Education to students of all ages but has also been in charge of DPA coverage at their school. At Alex’s school there is scheduled time for DPA and it is incorporated into the prep time teachers receive. Growing up Alex was a high level figure skater and feels fortunate to be active throughout their childhood. They studied Kinesiology in university and feels quite knowledgeable and confident with instructing student movement. Alex is also actively teaching yoga in the community.

The final participant Quinn, currently teaches grade 6, math language and social studies they have experience teaching Kindergarten to grade seven, as well as has year of experience incorporating DPA into their daily practice. Quinn describes themself as an active individual who grew up playing a variety of sports and continues to incorporate physical activity into their daily life. Each of these participants shares valuable experiences that contribute to the findings in Chapter 4.
3.4 Data Analysis

I will collect data from the three semi-structured interviews, by of using a voice recorder. This will allow me to review the data more thoroughly during the transcribing process. I will transcribe each interviews questions and responses after reading over the data several times. The data will be coded by focusing on themes, patterns and statements of interest that is in line with my research on Daily Physical Activity. Then, I will take that data and code it into a chart form based on the question and the corresponding responses. After identifying several codes I will be able to distinguish between common themes or distinct differences (Creswell, 2013). These themes will be further discussed in Chapter 4.

The aspects investigated throughout the duration of the data analysis process will focus on the teacher experiences and implementation of the 2005 government mandated Daily Physical Activity program. Furthermore, the effectiveness of the program as part of the classroom and school environment are examined. Each of these aspects are directly linked to my research question, “How is a small sample size of teachers responding to the Daily Physical Activity guidelines.” Hopefully, this will give some insight into the current status of DPA in the Durham Region and identify any areas of support or improvement.

3.5 Ethical Review Procedures

In order to ensure that the ethical review practices were evident throughout the duration of this interview process, the procedures that were approved with the Masters of Teaching Program at the University of Toronto were applied. This was important in order to build trust with the participants and ensure that the data was collected ethically (CIHR, 2010). All participants were provided with a full explanation of the study, including duration of interview, protocol and procedures. In addition, all participants completed written ethical consent forms; a copy of these
forms will be obtained by both the researcher and participants (See Appendix A for Consent Letter). The participants were made aware that their identity and school identity would be protected, using a pseudonym and they were notified of their right to withdraw from participation in the study at any stage of the research study (CIHR, 2010). They will be provided with the opportunity to review the transcripts from the interview and clarify or retract any statements before I conduct my data analysis (CIHR, 2010). All data will be stored on a password-protected device and will destroyed after five years. Additionally, all participants were informed that there were no known risks or benefits for their involvement in the study (CIHR, 2010).

3.6 Methodological Limitations and Strengths

The research projects that are conducted as part of the Masters of Teaching program are intended to provide some insights on current classroom practices and teacher strategies. As future educators this research project investigates the implementation of a current area of practice in the education system. More specifically, this study is providing me with information of current strategies for implementing DPA in elementary schools within the Durham District School Board. Although, DPA is mandatory across the province, one board remained the focus of the study. Although it would have been ideal to discuss DPA with teachers all across Ontario The decision to focus on one board was made due to the time constraints for this specific research project and for the convenience of the researcher. Therefore, the data collected in this study is just a very small sample of that of Ontario and there could be variability in the results. However, the data collected during this study that has been shared by education professionals will still be valuable to share and use for the purpose of this study.

This study was also limited by the sample size of participants. Due to approved parameters
of the research study, teacher candidates are only approved to interview 2-3 participants. This deceases the range data that could have been collected had the study been approved for a larger sample size (Marshall, 1996). Having an increased sample size will provide a greater representation of the population of interest (Marshall, 1996). Although, increasing the sample size would have been ideal, this was not possible due to the restrictions on this specific research study. Generalization is also not the goal of most qualitative research, including this study.

In order to increase the integrity of my study, participants were who did not have a Physical and Health Education background were purposefully selected (Marshall, 1996). This allowed the researcher to perceive where the difficulties are for the majority of the elementary school population. Very few elementary school teachers are teaching physical activity with the necessary qualifications (Morgan & Bourke, 2008) therefore, by interviewing non-specialist teachers about their experience with DPA, the researcher is better relate to the experience of the majority of the elementary teacher population.

Finally, due to the research parameters, another limitation encountered during this study was the lack of data from students or community members. Under the approved scope of research, the only participants in this study could be teachers. Therefore, we were not able to collect any insight from the students on their experiences with DPA, and their opinions on implementation and ideal practice. In addition, there was no approval for observation to take place, therefore no visual data or practical examples could be used to inform the findings. Both of these experiences would have allowed a more in depth evaluation of current DPA practices and student enjoyment/engagement and teacher execution with the mandatory 20-minute program. Just like students are better able to learn during practical experiences, the research would have been better informed had their been a time to observe in a teachers DPA program.
While the above statements mention some possible limitations to this study, the following will provide some examples of the studies strengths. Although the study had a limited sample size and was restricted to only data collection from teachers. The semi-structured interview method allowed for teachers to provide more in depth answers to the questions, especially compared to collecting data through a survey (Creswell, 2013). Having the opportunity to sit face to face and have a conversation with a fellow educator about the current DPA program allowed for the ability to have a detailed narrative and smooth conversation (Creswell, 2013). This created a space for teacher to speak to what mattered most to the about DPA. The selected participants shared their DPA experience, frustrations, strategies and successes and the researcher was able to get a good understanding of their level of connection to the program. This provided them with the opportunity to share their lived experiences, reflect on their practice and have a strong voice as an education professional (Creswell 2013). The data that was collected was qualitative and then coded based on reoccurring themes, thus providing more detailed information than quantitative statistics (Creswell, 2013). This detailed information can be later used to drive changes and improvements using the specific opinions and examples from participants.

3.7 Conclusion: Brief Overview and Preview of What’s Next.

In this chapter, I explained the research methodology. I began with a discussion of the research approach and procedure, delving into the meaning and significance of qualitative research and highlighting some its major differences from quantitative research. I then described the instruments of data collection, identifying interviews as the primary source of data. I explored the various types of interview conducted in qualitative research, and spoke to some of the benefits of semi-structured interviews. I then identified the participants of the study, listing
the criteria applied to all interviewees, and providing brief introductions to those selected. I also described the recruitment procedures, which entailed purposive sampling in order to maximize the richness and depth of data obtained, as well as convenience and snowball sampling due to the overall extent and scope of the research study. I proceeded to describe how I analyzed the data, examining individual interviews before looking for common patterns and themes across the data. Ethical issues such as consent, risks of participation, member-checks, right to withdraw, and data storage methods were also considered, and the ways to address these potential issues were recognized. Lastly, I discussed the methodological limitations of the study, such as the interpretive abilities and biases of the researcher, while also highlighting some of the strengths such as first-hand accounts with teachers. In the next chapter, I report on the research findings collected for this study.
Chapter 4: Research Findings

4.0 Introduction

This chapter presents and discusses the findings based on the perceptions of three elementary school teachers from the Durham District School Board and their experience with the implementation of DPA. All participants have had at least five years of teaching experience in the board and have taught at different schools in the region. At the time of the interviews, all teachers worked in the junior and intermediate grades this was a decision made in order to focus on these various grade levels more specifically. Currently, all participants are classroom teachers and have had experience teaching Physical and Health Education at multiple stages of their careers.

Throughout the analysis, the purpose of this research study remained the focus, and information was gathered on the current state of implementation as well as teacher perceptions of our Ontario Ministry’s Daily Physical Activity mandate. In addition, this study was conducted to gather information on how teachers are effectively implementing DPA into their daily classroom routines, and the observed effects this has on student learning, engagement and classroom management.

The findings resulting from the interviews provide some insight to elementary school teachers’ experiences, practices and understanding of the Daily Physical Activity (DPA) guidelines in their school environment. Throughout the discussion, connections are drawn between participants’ experiences and the Chapter 2 literature review. The findings are organized into three themes:

- Educators recognize the benefits of consistent DPA practice and believe that it is an important contributor to student success.
4.1 Consistent DPA Practice is an Important Contributor to Overall Student Health and Success.

With the overarching data that has been released regarding the current status of Canadian children’s health, the inclusion of DPA is clearly important to encourage children to be active and learning in a less sedentary environment; study participants seemed aware of the importance of having students be active as a promotion of health and quality of life. They shared their perception that current school environments seem to promote sedentary behaviour. Sam discussed that at their school they can see many students who could use that extra 20 minutes of moderate to vigorous activity to improve their physical and mental health, saying:

Unfortunately, there are so many students in my class that are not involved in activity outside of school. They leave when the bell rings at the end of the day and they go home to environments where they are entertained by television or video games. That is why it is so important that we as teachers are reducing the amount of time they are sitting during the school day…. We have these students for 7 hours every day, and we should be ensuring that the education program is including a variety of health dimensions to teach students how to be healthy active citizens in society.
Quinn’s remarks align closely with the research conducted by Epstein, Paluch, Gordy & Doran (2000). These researchers found that teachers are quite aware that increased sedentary time is related to a heightened negative health effects. Therefore, decreasing sedentary time and increasing activity is crucial in disease prevention and maintaining a positive status of health, especially for children (Epstein, Paluch, Gordy & Doran, 2000). The teachers interviewed for this study uniformly agreed with the literature data. During my discussion with Quinn, they acknowledged that the logistics of the current education system is not conducive to mitigating these health consequences. They said:

In many classrooms we are asking young children with various needs, ADHD, learning difficulties, behaviour management issues, to spend the majority of their day sitting at a desk and working or listening to those around them. Although these are important skills for them to have, if we begin to look at the amount of time in a week they are asked to be seated or sedentary we are contributing to the epidemic that is a result of young children not being active.

There is reason for concern when the education system that is designed for children to learn and grow in a safe environment is a key contributor to a health crisis that could leave our public health system and government in a major deficit in generations to come (Ontario Ministry of Education, 2005).

In addition to concerns with regards to cardiovascular health and physical fitness, there are serious alarms related to the mental health of youth in North America. Students are struggling to utilize tools that will aid their self-regulation and coping mechanisms with stress, anxiety and building self-esteem and confidence. Participant Alex has found that they have been able to effectively incorporate background knowledge of yoga practice as a form of DPA for the classes
they are teaching:

When the weather is not as good, I will do a short yoga session with my students in the classroom. It gives them time to reflect, recharge and be in the moment and during this time I have been able to assess the students’ self-regulation learning skill and it is amazing growth over the course of the year.

Although yoga is not typically classified as a vigorous activity, having students be active in a variety of forms appears to be allowing them to enhance their development on an emotional level. This has proven to help students cope with the demands of school and better prepare them for future difficulties and pressure they may encounter (Field, 2012). The idea of healthy body and healthy mind is abundant in the literature. Similar to the experiences Alex has encountered, Field (2012) found increased activity leads to an increased production of anti-depression neurotransmitters, such as serotonin. This suggests that physical activity has the potential to alleviate some symptoms associated with depression (Taylor, Sallis, & Needle, 1985). In addition, it was found that there was a decrease in the production of stress hormones in those who participated in more activities (Field, 2012). The findings collected during this study, coincide with the literature and suggests that participating in organized activities such as yoga, will lead to a significant decrease in depression and anxiety in youth (Fox, 1999).

The participants in this study have found that incorporating components of DPA throughout the day are beneficial to students learning. Not only do teachers report that DPA promotes components of wellness and balance in students lives, but also it gives young brains the stimulus it needs to refocus and be ready to intake and process new information. Within the context of the classroom, Quinn has found that their students are better prepared to sit and learn new math concepts following short spurts of DPA:
I often will use DPA as an energizer in my class. I find it especially helpful to give students a fitness break before teaching having them sit and learn a new math concept. One time in particular before we wrote our fractions math test, I took them outside and we did a large group game called bump it tag. Then when we came back in they quickly looked over their notes for 15 minutes and we wrote the test. I noticed a significant difference in their ability to sit still and focus... students in my class who are often staring off into space after 15 minutes into writing were able to complete the test without the reminder. I think it was because we had gotten the fidgets out before the test.

That increased level of focus that Quinn was observing first hand is similar to the findings from the literature that have concluded physical activity as a support to enhance students attention spans and memory (Blom et al., 2011; Chomitz et al., 2009; Fedawa & Ahn, 2011; Vaszous & Gavrilous, 2012,). A person, who is physically fit, is someone who is able to carry out daily tasks with vigor and alertness, without undue fatigue and is able to enjoy leisure-time pursuits (Caspersen, Powell, & Christenson, 1985), therefore if educators can support the enhancement of student physical fitness, there may be a dose response with regards to their performance in subjects such as math, science and literacy (Blom et al., 2011; Chomitz et al., 2009; Fedawa & Ahn, 2011; Vaszous & Gavrilous, 2012,).

In order for students to achieve success while in the classroom, they often need to be able to work in environments with others, listen and follow instructions and regulate the time that certain behaviour is appropriate at school. For some students this is much more difficult then others, and for teachers tackling behaviour in the classroom can be quite challenging. There was a tremendous amount of data collected during my interviews that connected DPA and behaviour management within the context of the class. From the remarks made by the participants in this
study, it seems that often, educators use DPA as a strategy to yield a desired behaviour from the students. Alex discusses that the students enjoy DPA so much that she uses it to motivate the class to work hard and finish what they have been asked to do, and then they can participate in DPA:

Last year, I did it a lot because the group I had really needed it, it was a motivator for the group, and a behavioural strategy I found worked. They were just so busy that they needed to go out and be active… They would sit and do what they were suppose to during the day because they wanted to be able to go out and do some fun games at some point during the day.

Sam discusses that they can sense when the students are starting to get agitated and often will use that as a cue to take a break in the class before he starts to lose their engagement.

When I am standing in front of the class teaching, and I see the boys and girls start to get silly, I use my professional judgment and decide to take them out and do something where they can move. It is a very long time for my grade 6s to be sitting at a desk all day; they need the time to run around.

Both of these examples demonstrate that participants perceive themselves to be focused on being able to read the students’ energy and engagement in the classroom in order to be proactive before undesired behaviour can manifest. Quinn finds that DPA is extremely helpful for students who are more typically a behaviour challenge in the classroom. They have found that providing DPA on a regular basis helps these students because they know that there will be a time in the day where they will get to be a bit more active and therefore are more willing to focus during work time. They say:

For students in my class who are identified with different behavioural or attention needs,
knowing that they are going to get that DPA time, motivates them to do their work before because they don't want to miss out, but also helps them continue for the rest of the day because they have had time to burn some energy. Although there is not an abundance of literature about students’ behaviour and daily physical activity, this comment closely relates to students’ ability to focus and remain engaged. It is also understandable, that young children who are able to burn some energy and move around may be in a better state both physical and mentally to learn. Based on the statements shared by the participants in this study, it is reported that children that are physically active appear to more readily enjoy day-to-day pursuits, therefore it makes sense that students are better able to control their own behaviour after enduring some moderate to vigorous physical activity. With this in mind, the incorporation of physical activity in to the school day for students is creating a positive classroom space that allows them to be healthy in addition to successful in their learning.

4.2 A Passion of Physical Activity Promotes the Implementation of DPA in the Classroom

A tremendous portion of the data collected related to the experiences of the individual teachers and their own connections to physical activity. There seems to be a trend that teacher who self identify with Daily Physical Activity are more inclined to make DPA a regular daily practice. This was then further supported by an extension of confidence with physical activity and the creation of innovative ways teachers are including Daily Physical Activity as part of their whole curriculum. I will first discuss the ways the backgrounds of Alex, Sam and Quinn have reportedly influenced and informed their teaching practice and their connection with physical education. Then share the different ways teachers used cross-curricular implementation to meet the DPA requirements.
4.2.1 Participants self-identification and autonomy with regards to physical activity.

The main reason the participants were using the recommended guidelines of DPA in their classrooms was highly influenced by their own background experience and comfortable level with leading physical activity, especially when leading younger individuals. After speaking with my participants, it became quite clear that all seemed to have a high level of confidence with leading children of a variety of ages through physical activity. Alex, Sam and Quinn all discussed their connection with the importance of being active themselves, and therefore felt that it was also an important aspect of the day for their students. As mentioned before, Alex and Sam noted the importance of being able to read your students. Often they are able to tell when the students are getting restless and could use a bit of a break to reenergize their bodies and minds.

One of the most notable findings was that those who were participating in this study identified themselves as someone who is not only competent but also confident and enjoys teaching physical and health related activities to their students. Unfortunately, because only 6% of elementary schools in Ontario have a Physical and Health Education specialist in their school (Active Healthy Kids Canada, 2009), there are quite varying levels of confidence when it comes to implementation of DPA. This is an issue that Sam believes is a contributing factor at the school where they are currently teaching. They perceive that a lack of confidence with leading these types of activity discourages teachers from implementing DPA on a regular basis: “If you asked any of the teachers on my staff if DPA was important, they would all say yes. It is just the teachers who are comfortable leading these kinds of activities [large group physical activity] are much more likely to do it.” There seems to be a discrepancy here between the willingness and the confidence to teach a specialized subject area.

When the Ministry announced DPA as part of the curriculum in 2005, they did not consider
that not only do many teachers not have the qualifications to teach Physical and Health Education, but they also do not have the confidence or interest in the subject area. Due to this, DPA becomes the section in the curriculum that is often put aside, especially when other content is incomplete or subject matter becomes time sensitive (Patton, 2012). All of the participants included in this study mentioned the importance of proper training and resource acquisition for all teachers, especially if the expectation is that all teachers will be slotting in DPA to their own timetables. This training is crucial to providing teachers with the tools to conduct a successful and meaningful DPA program in their classrooms, especially for those who otherwise lack the training and background experience. Even more beneficial would be to have an educator with a Physical and Health Education background take the lead on organizing and implementing the DPA program within the school. This would ensure that the time being spent doing DPA was beneficial for the students and executed in the most effective manner. Conclusively, the data collected from the participants in this study aligns with the findings from Cothran et al. (2010), which determined that educational professional with strong personal values related to health and fitness or a background in physical activity and health were the teachers making DPA a priority in the classroom. In order to have DPA be successfully implemented in every school, it would be beneficial to have a specialist, or someone with strong core physical health values oversee the execution of the Daily Physical Activity program.

4.2.2 Participants’ inclusion of Daily Physical Activity to enhance other subject areas.

Within all aspects of education, there tends to be discussion surrounding the lack of time available for teachers to accomplish everything that is asked of them from a curriculum standpoint. This often leaves teachers scrambling to meet expectations and covering important and interesting content only at the surface level. So naturally, the mandate to include 20 minutes
of physical activity into each day of the week was seemingly impossible for many educators. As expressed by Sam and Quinn, there is only so much time in the year and there is already so much that these kids are expected to know. Especially for the grades where there is standardized testing (EQAO) that takes place in the spring. The teaching focus becomes predominantly related to areas of math and literacy and other subjects are pushed aside. The term cross-curricular instruction has been a buzzword in education for quite some time. If as educators there is encouragement to incorporate math and literacy or science and literacy, can the same framework not be used to include concepts of physical activity and health into “academic” subjects? During the interviews with my each participant was asked if they had found a way to integrate DPA into other areas of the curriculum. Each participant initially responded by saying that is was completely separate and that they hadn’t used DPA to enhance other areas of the curriculum at all. However, as the discussion continued, each of them shared examples of times they had included cross-curricular implementation with out even realizing it. In Alex’s class, they used their routine DPA as a topic for writing an opinion essay. It was the first time the students had written a formal essay and Alex used a topic that they all knew and had some experience with to help them understands the fundamentals. They said:

I was teaching them how to write an essay at the time, and so the shared writing that we did, we wrote an essay about DPA… After participating in DPA routinely throughout the year, we thought of three reasons why DPA was important to incorporate into the day and one of the ones they came up with was incentive and behaviour the other was mental health and the third was physical health, and then each group together wrote their own paragraph based on the topic they were given. Then we put it all together.

Not only did this activity help Alex more effectively utilize the time she has with her students,
but it also provided even more meaning and depth to time the students had spent being physically active over the course of the year. Similar to the research conducted by Gaus and Simpson (2009), Alex was finding success by incorporating DPA into other subjects.

Sam and Quinn shared some of the ways they have successfully integrated DPA into the math curriculum, they have used different decks of cards workouts that have incorporated adding, multiplication, subtractions and division as well as activities that have included probability problem solving questions. Both have expressed that the students really enjoyed these activities, and as they are active in the learning process the educators can see them acquiring the fundamentals that are necessary to be successful in that unit. The idea of using kinesthetic learning strategies to reinforce different lessons in math and literacy is supported in the literature (Gaus & Simpson, 2009), and continued support from educational professionals and health professionals will help to promote the effectiveness of integrating DPA to enhance other areas of the current Ontario curriculum.

4.3. Teachers Perceived Barriers to Implementing DPA

Although the benefits of DPA are quite clear and there are reflections of effective implementation of DPA from the participants in this study, the reality is that DPA is often not being implemented the way it was intended to be and to an acceptable standard. There does not seem to be incentives or support from board and administration level to encourage teachers to develop a solid DPA program as part of their practice. The current demands of the curriculum and the amount of time required to complete all the material that is necessary for students to have as they move along to the next grade omits initiatives like Daily Physical Activity. In addition, the credibility of the program is lacking because it is not an official part of the evaluation and assessment that takes place for the provincial report card. Finally, most schools and classrooms
were not built with Daily Physical Activity in mind, and therefore there are both physical restraints and safety concerns with teachers executing a DPA program.

Based on the sentiments made from the participants in the study it appears that there is a perceived pressure within school to perform and yield results particularly in the areas of focus for provincial testing (literacy and numeracy). The frustrations that participants during this study expressed were with regards to the fact that key stakeholders at board level are focusing more on areas of education that the Ministry is striving to improve. Quinn shared that, in their experience as a teacher, they have seen a constant shift of board level priorities and it makes it hard for teachers to ‘keep up’:

Each year there seems to be a different focus and it [DPA] just doesn’t seem to be a priority within the system. When it first was released teachers were going to workshops, money was spent on resources and equipment and time was allotted for DPA. Now no one is talking about it.

In addition to DPA not being a focus at board level it is no longer being given the funds for resources and workshop time. Alex comments on how they feel there is a lack of understanding from key stakeholders (administration and supervisory officers) on the importance of DPA.

For one thing, the board has to believe in it [DPA] and encourage us to do it, because if they aren’t mentioning it, which they don't, then no one is going to do it…. “Why on earth would the principal care about DPA if when the superintendent comes to visit they are not asking about DPA and if the superintendent and the principal are not endorsing and encouraging teacher to do the program, then teachers are going to focus on what the administrative team is focusing on. There is such a big push and focus right now on math and EQAO scores that there is so much being put on the teachers’ plate. No one is being
held accountable for doing DPA because it doesn't feel like that is the care… or priority
from those ‘up top’.

They express concern with the fact that DPA was founded based on a major youth health crisis
that has seen no improvement. While Daily Physical Activity should be a logical solution,
administrative parties are not endorsing it.

In the literature, it recognizes that the support from stakeholders is extremely valuable in
determining program success, especially with a program like DPA (Cothran et al., 2010) but if
they want DPA to be successful, they need to begin the discussion and put aside some of the
other imitative. Quinn expressed the feelings they had towards improving DPA by stating;

If the board really wants us to do it they need to pull back on bump it up walls.

Something needs to give, because you can’t do it all, or they need to stop changing the
report card programs or more E.As in the classroom, because you are being pulled in 20
different directions. But for me it is a stress relief to do it, so like, I don't understand why
some teachers choose not to, but maybe because they don't feel like they have enough
time, especially testing years (grades 3,6), and although even for them the kids need it, no
amount of math is that important, let kids play games and run around.

Rather than looking for a new focus every year, a new initiative should be given the time to grow
and mastered by the teachers before there is a shift in focus. If something is not put in place to
help develop a more effective way to increase students activity level Ontario will be facing not
only a crisis with academic but will also be facing detrimental public health burden.

In many schools, teachers are given the flexibility to allot their own DPA time. While this
is very effective for those who are proponents of DPA, those who are uncomfortable are less
likely to follow through. Omitting DPA from the daily schedule has no current impact on
progress reports and student assessment. A suggestion from Alex, with regards to improving the logistics of DPA included moving to school wide events. The difficult part is finding teachers who are willing to add this organizational task to their already busy schedules.

What is successful is when teachers set up school wide events, like a Friday run or things like that, and that works really well and everyone comes out and participates together. I know that no one would be against it if it was a regular structured thing, but I think no one feels the need to take the initiative. Like I don't think any one would be upset, if we did a structured thing. It just doesn't seem to be a priority at the moment.

By doing events that include the entire school, teachers are left more accountable and ultimately, left with fewer excuses of avoiding DPA. This is similar to the literature released by Patton (2012), which reveals that many educators believe that a structured school wide schedule it would decrease the time each individual person spends planning DPA and would make teachers more accountable (Patton, 2012).

Once these barriers are overcome, consideration must be given to physical and safety concerns surrounding student physical activity both indoors and outdoors. In the guidelines for Daily Physical Activity teachers are instructed to lead activities that increase students heart rate to moderate to vigorous level. This proves to be quite challenging for teachers to accomplish in their small and overcrowded classroom spaces. Although teachers are encouraged to creatively integrate activities that can be completed in the classroom, there are some major concerns with regards to safety. The participants I interviewed shared the experiences they have had being in different classroom spaces. Quinn talked about the positive and negatives with being inside the school, versus being in a portable space.

On one hand there is often more space in the classrooms that are located inside the school
than inside the portable, however then you have to worry about disrupting the classes going on around you. Because not everyone does DPA at the same time, it can be very distracting if your class is doing physical activity in the room or in the hallway around other classes who are working on their math lessons.

Either way, the limited space creates a barrier for teachers to work around when trying to effectively implement a DPA regimen. Alex feels that when they mandate for DPA was released there was not much thought put into where students would engage in these activities. Alex says:

Many schools are overcrowded and do not have available gym space. Therefore, as soon as the weather starts to get colder teachers are less likely to take their kids outside to participate in DPA due to the extensive amount of time for them to get changed and get outside, there is just not enough time in the day.

All participants in this study shared the difficulties they experience with finding enough space to conduct a proper DPA activity, especially when the weather starts to get cold. This lack of space leads to concerns related to student safety. The increased awareness of liability and injury prevention has limited the scope of creative use of classroom equipment. Students are no longer allowed to move desks and chairs to clear the space, and the increased awareness of concussions has lead teachers to shy away from any compromising situations.

The combination of lack of support, the current scheduling process and the excessive caution that comes with being in a confined physical space, creates barriers that are deterring teachers from consistently implementing DPA.

4.4 Conclusion

The complexity of these findings suggests that the current implementation status of DPA in Ontario is not an area of focus for the Durham District school board. Many teachers recognize
the importance of promoting healthy active lifestyles for both the physical and mental wellbeing of students. The comfort level of individual teachers with physical activity is a driving force in the implementation and continuation of an effective DPA program. In addition, the ability for teachers to creatively develop cross-curricular lesson plans that incorporate DPA into a variety of subjects will lead to effective results for both students and teachers. Unfortunately, many teachers feel they are faced with barriers that extend from a lack of support from key stakeholders, including principals and upper administration. A complex and constantly changing series of battling interest, especially related to literacy and numeracy has suppressed the focus on current issues related to increased sedentary behaviour and childhood health and physical activity levels. The restrictions of schedules, physical space and safety concerns, compound the difficulty of executing a meaningful DPA program.

Next in Chapter Five, I will discuss the importance of shifting the focus to promote healthy active lifestyles to the youth in our school system, and the benefits this will have on the academic concerns many students, schools and boards are facing. I will also note areas that require further research.
Chapter 5: Conclusion

5.0 Chapter Introduction

The following chapter will further examine three elementary school teachers’ experience with implementing DPA. This chapter will briefly revisit the findings of this study and their significance, which was explored in detail in the previous chapter. Based on the findings, this chapter will highlight broad and narrow implications of implementing Daily Physical Activity in Ontario elementary schools. Following the implications, recommendations to improve the current status of DPA implementation for both teachers and students will be suggested. This chapter will offer a contribution to the literature about Daily Physical Activity in DDSB and Ontario, by indicating areas for future research. The end of this chapter will reflect the significance and goals of this study.

5.1 Overview of Key Findings and Their Significance

In this study, three key themes emerged based on semi-structured qualitative interviews with three junior-intermediate division elementary teachers from Durham Region. The interviews were conducted with the following research question in mind: how is a small sample of non-specialist Ontario elementary school teachers reportedly responding to and implementing current Daily Physical Activity guidelines? As highlighted in Chapter Two, the literature discusses the importance of increasing the physical literacy of today’s youth, as well as a discussion surrounding barriers that teachers face with respect to properly implementing the DPA mandate. There was limited literature on successful implementation strategies and therefore throughout my data collection I noticed the divergence in my participants’ experiences that lead to successful DPA. I have identified some supports and barriers that could aid in teacher
planning and execution of DPA. Based on my research findings, three reoccurring themes emerged from my data analysis, as follows.

(1) *Consistent DPA practice is reported an important contributor to overall student health and success.* Participants sentiments aligned with the research in that they believed DPA to have a positive impact on the students health and wellbeing, saw an increase in student ability to learn and focus after small bouts of activity and enhanced the classroom environment.

(2) *Participants identified the key factors that promote educator implementation of DPA in a classroom.* Teachers reflected on the impact their own values and connection to physical activity related to initiatives such as DPA. There appears to be a trend in the way an individual self identifies with Daily Physical Activity and their confidence when leading others in these pursuits. This was then further supported by an extension of confidence with physical activity and the creation of innovative ways teachers are including Daily Physical Activity by integrating it into different areas of the curriculum.

(3) *Barriers both physical and systemic are reportedly hindering the proper implementation of DPA.* Teachers shared that they feel a lack of support from board and administration level to develop a solid DPA program as part of their practice. Due to the push to increase math and literacy scores, DPA does not seem to be an area of concern or focus within the school system. In addition, the program is suffering from a lack of accountability and credibility because it is not an official part of the evaluation and assessment that takes place for the provincial report card. Finally, most schools and classrooms were not built with Daily Physical Activity in mind, and therefore there are both physical restraints and safety concerns with teachers executing a DPA program.

Based on these three themes, this study might suggest that currently DPA is not a priority
in our public elementary school system. Participants reported that since the release of DPA the discussion surrounding its presence in the schools has decreased. The focus has shifted to enhancing other areas of the education system and has pushed DPA to the sidelines. The next section of this chapter will explore both broad and narrow implications of these findings.

5.2 Implications

The following section will explore both the broad and narrow implications of this study. Based on the findings, the section will first examine the impact of DPA on a broad level. This will focus on its relevance for students and connection to the educational community. This section will conclude with implications on a narrow level in relation to my personal identity and practice. This section will serve to further investigate the findings and inform the next section concerning recommendations.

5.2.1 Broad: The educational community

This section will explore the broad implications of this study regarding teachers’ experiences implementing DPA into their daily practice. The first implication of this study is that Physical and Health Education needs to receive the same recognition and support from key stakeholders as other academic areas. The next implication explored in this section is the importance of having qualified Physical and Health Educators model and run DPA in their schools in order to enhance the integrity and accountability of the program. The final implication examined in this section suggests that an update to the regulations of the mandate and a curriculum for teachers to follow is needed in order to enhance the DPA program and provide teachers with useful resources to guide their students. After each implication is explored in further detail, recommendations will be made in the following section.

Although there are many barriers that were identified in this study related to DPA, one
that may have the most significant impact is the perception of Physical and Health Education. Unfortunately, within the education community, Physical and Health Education has been treated as second-class subject. While our society currently faces a childhood obesity crisis, the benefits of exercise and movement in the classroom cannot be overlooked. This study suggests that teachers may feel that DPA is not highly regarded by administration and board level supervisors. Due to the overwhelming amount of curricular that teachers must cover in each grade, there may be little incentive offered by upper administration. With the current goal to enhance student’s literacy and math scores little discussion about proper DPA has continued since the mandates initial release. The literature, as well as the data collected from participants in this study suggests that students who engage in physical activity, develop learning skills and have better cognitive and academic scores (Sparking Life, 2015). When executed correctly, participating in DPA helps build a positive classroom community for students. Therefore, if initiatives such as DPA were given more focus, there may be an increase in academic learning and better understanding across all subject areas.

The findings from this study imply that similar to other subject areas, teachers who have more experience and knowledge in a subject may be more comfortable with teaching and developing lessons. This is exaggerated in Physical and Health Education because the comfort level of an individual teacher impacts so significantly on their instruction. In addition, the concern for student safety and heightened awareness of concussion protocol further accentuates the need for trained personnel. Although the intention of DPA was to be executed by every classroom teacher, the program may benefit when there is a Physical and Health Education specialist in the school. Not only might this help to relieve the pressure that non specialist teachers face with trying to develop appropriate lessons, but also possibly improve the quality of
the programming. This study indicates that having a qualified individual take a leadership role within the school would allow for a liaison at each school to attend professional development sessions with regards to DPA and then share the knowledge and resources with other teachers.

The final implication from this study implies there is a need to reintroduce and reinvent the role of DPA in the elementary classroom to help teachers overcome barriers and enhance student health. Since the introduction of DPA in 2005, there has been little evaluation and adjustment to the mandate. This is apparent by the lack of literature as well as updates to the DPA program. In addition, the findings suggest that when DPA is implemented it is likely to be conducted in isolation, rather than integrating activities into other subjects. By meeting DPA requirements through cross-curricular methods, teachers may find it easier to overcome time restrictions and meet all areas of required curriculum.

5.2.2 Narrow: My professional identity and practice

As mentioned in Chapter One of this study, my passion and experiences with regards to physical activity and health has guided me through my education and brought me to investigate the current implementation of DPA in Ontario. Although, my teacher education is focused on the intermediate and senior levels, this research has made me more aware of the experiences students have had before entering high school and has also sparked my interest in being a Physical and Health Educator in the elementary grades. It is here that a foundation can be developed to encourage healthy active lifestyles for all students. Conducting this research has provided me with a different perspective with how I can be a supporter of DPA, throughout my future career as an educator, whether this is in the area of Phys. Ed, science or at the intermediate level. For instance, this research has made me aware of how important it is to be role model within my own school and the community. As a Physical and Health Education professional it is crucial that I
participate alongside my students and have a positive attitude towards the DPA mandate. This study has made me aware of how the attitude and value I exhibit towards DPA will translate towards my students. By making DPA a priority in my classroom, I will teach my students the importance of incorporating moderate to vigorous activity in order to be successful and healthy across all pillars of health and wellness. Beyond being a positive role model in the classroom, this research has made me much more aware of my influence on DPA within the school. Due to my background knowledge and passion, it is important that I take a leadership role within the educational community and serve as an advocate for both DPA and Physical and Health Education. By being a driving force for DPA within my school, I will ensure that teachers have the tools and resources necessary to implement a great program. This could include but is not limited to attending PD sessions, seeking out new and innovative ideas, helping create a schedule for DPA etc. Based on my research it suggests that most teachers agree with the importance of students being active as part of the day; however, they are just not comfortable and aware with ways to incorporate activity efficiently and effectively into their day. This research has allowed me to view my knowledge on Physical and Health Education as an asset that would be used to benefit this program from both the perspective of students, and my fellow educators.

5.3 Recommendations

The following section will explore recommendations informed by the implications above with regards to several stakeholders in the Ontario Education system. While there are a wide variety of possible recommendations to be made, this section will explore recommendations for school administrators, teachers, and ministry personnel. Within each recommendation, feasibility, time, accountability and possible outcomes will be explored. These recommendations might serve to better support the DPA mandate and teacher implementation within a school
community.

5.3.1 School administrators

As was explored by the first implication of this study, teachers feel that they need to execute results in the areas of focus that are priority for school administration. Due to Physical and Health Education having a second tier status compared to subjects that are being evaluated province wide, often initiatives such as DPA receive less time and focus. It is recommended that in order for DPA to be respected and implemented properly within Ontario elementary schools, that school administrators need to encourage and recognize its value. Based on the comments made from the participants, it is clear that a teacher’s practice is influenced by what the administrator values. This is an attempt to keep things copacetic within the school community. In order to efficiently and effectively have administrators be supportive of the DPA program it is crucial that they lead the discussion to initiate a school wide plan or schedule for everyone to follow. This would not only allow for more structure and organization within the school, but would serve to decrease the stigma that surrounds DPA. In addition, principals and vice principals could connect with teachers and create a DPA committee that consisted of people who were willing and comfortable with taking the lead on this within the school. The creation of this committee would demonstrate the administrator’s value of incorporating DPA in their school. Ultimately, teachers will feel that they are empowered and supported by the school leaders and more likely to meet the requirements.

5.3.2 Teachers

Although, an implication from the findings of this study suggests that it would be beneficial to employ a Physical and Health Education specialist at each elementary school, this may not be feasible from a systemic standpoint at this time. This should not hinder individual
schools from developing an effective DPA school program. The participants interviewed in this study were not Physical and Health Education specialists, however they were utilizing their knowledge and areas of expertise to find a program that works best for their students. In order to have a successful DPA program in the classroom teachers have to be willing to instill the value of taking that DPA time with their students. Understanding and researching the benefit of movement on student learning will allow teachers to not only see the greater need for our youth to be active but they may also find ways to implement DPA that will result in increase success in learning and scores on provincial tests. Being active during the day is not only important for students, but teachers can benefit from small bouts of DPA as well. The program will be more successful if teachers are willing to participate and be involved with students during this instructional time. This will demonstrate that teachers value the short amount of activity time, an ultimately increase the buy in from all students in your class. In addition, it is suggested that teachers move away from using DPA as an incentive or punishment for students. Teachers are not likely to take math practice question away from students when they are misbehaving and therefore DPA should be seen as a crucial part of each and everyday. Teacher will find that by allowing students the time to be active each day will decrease the unwanted behaviour in their classroom and increase student focus.

Through the creation of a small committee of dedicated individuals with a passion for the inclusion of DPA, there is more likely to be some success with DPA in a school. This would encourage more teachers to take risks and try new activities with their students. When a need for adjustments and change is put into effect by teachers and supported by administration, it is always most effective and more readily received.

5.3.3 Ministry and school board personnel
Finally, an implication from the findings of this study suggests that ministry and board should renovate and reevaluate the current DPA mandate. As stated above it has been twelve years since the initial release of DPA and very little reflection and adjustments have been made to the program. The childhood obesity crisis our country is facing has seen little to no improvement and the province’s DPA program is becoming less and less apparent in Ontario school classrooms. With that being said an adjustment to the DPA program should be more reflective in nature and ministry and board personnel should turn to teachers to find out what is successful and what the obstacles are that teachers are facing when trying to implement DPA in their school. Alongside these educators the ministry should develop more accessible resources that encourage using DPA in combination with other subjects. By providing teachers with the tools to implement DPA in a cross-curricular manner, the obstacle of time and physical space could begin to be combatted. In addition, to including teachers in this discussion, health care professionals should be consulted in order to increase the credibility of the program. If ministry personnel created a revitalized DPA program that included teachers and their experience in the process, we would bring the discussion surrounding DPA to the forefront of education priorities and ultimately see benefits in student wellbeing and learning acquisition.

5.4 Areas for Further Research

While the findings of this research provide some insight into the experiences of a few teachers in DDSB, it is just a small representation. That being said convergence with the literature implies that there is currently limited success with DPA implementation across Ontario. The scope of this study, restricted some of the data that was collected, and due to this there are some areas that should be considered for future research. First, it was difficult to collect data from different areas of Ontario to compare experiences based on demographics such as
rural/urban communities, public school or independent schools, etc. Therefore, with more literature collected in different areas of Ontario the educational community would be able to better understand trends that are being faced by all teachers in education.

In addition, a limitation of this research study is the scope of data collected allowed as part of the MTRP. This meant that only teachers could be used for data collection and valuable information from student experiences, administrators, support staff, and parents was restricted by the parameters of this study. In order to best support this program in the future, it is crucial that further research be conducted in order to understand more broadly the different experiences and perspectives key stakeholders have in regard to DPA. The findings collected from this research would not only benefit teachers as they attempt to successfully implement DPA, but also provide some insight into student enjoyment, learning, and administrative logistics surrounding the mandate. This ultimately, would help to close any gaps in the literature that currently exist.

5.5 Concluding Comments

This Master of Teaching Research Project explored DDSB teachers’ current experiences with implementing the Ministry’s Daily Physical Activity requirements into their classroom schedules. It was of particular interest to me, as a future Physical and Health Educator, to better understand the success and difficulties teachers face with implementing this mandate twelve years after its release. This research matters for teachers who are trying to teach students, the importance of physical activity and create a positive learning space for all students. Furthermore, this research is important to those who are in charge of making decisions and recommendations regarding DPA. As stakeholders, there is the opportunity to make changes, which will help not only teachers but more importantly, support students. I hope that this research encourages further investigation on how to better support the DPA program in order to see it implemented more
consistently across Ontario. Ideally, further areas of this research will be explored by other teacher-researchers, as this will yield data that is from the front lines, ultimately leading to more meaningful research and contributing authentic results. Although being a teacher-researcher is overwhelming at times, I hope more educators are interested in contributing to this area of study, in order to enhance the literature and resources that are available for teachers to use in their practice.
References


Physical and Health Education Journal, 78(1), 14-21.


Appendix A: Letter of Consent for Interview

Date: ___________________
Dear ___________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying how elementary teachers are implementing 20 minutes of Daily Physical Activity into their classroom schedules. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of an approximately 60 minute interview that will be audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my research supervisor and my course instructor. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the audio recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no other known risks to you for assisting in the project, and I will share with you a copy of my notes to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Sincerely,

Rebecca Turner

MT Program Contact:
Dr. Angela Macdonald-Vemic, Assistant Professor – Teaching Stream
angela.macdonald@utoronto.ca
416-821-6496
Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw at any time without penalty.

I have read the letter provided to me by Rebecca Turner and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ________________________________

Name (printed): ______________________________

Date: __________________________
Appendix B: Interview Protocol

Thank you for participating in my research study. The aim of this research is to learn how a sample of elementary teachers in the Durham District School Board, are implementing Daily Physical Activity in their schools and classrooms. This interview should take approximately 60 minutes, and is comprised of approximately 21 questions. I want to remind you that you can choose not to answer any question, and can remove yourself from participation at any time. Do you have any questions before we begin?

To begin can you state your name for the recording?

Background Information

1. Can you tell me about what teach, job title, responsibilities, other school involvement?
2. How many years have you been teaching? How many years at this current school?
3. Why did you want to pursue a career in education?
4. I would like to get a feel for the current school environments you are working in. How would you describe the school to a new family who may be enrolling their child there next year?
   a. demographics
   b. neighbourhood
   c. academic focuses

Daily Physical Activity

5. Would you say you implement DPA in your classroom on a regular basis?
   a. Why or why not?
   b. Approximately how many minutes per week?
6. What type of physical activities do you implementing during DPA large vs small group activities, low-organized game (tag), instructional, circuit
   a. Why do you choose to implement these types of activities?
7. Where does your DPA typically take place? Example: classroom, common space, cafeteria or gym, outdoors, etc.
8. How do you make time for DPA? Do you schedule it or fit it in when there is a natural lull in the day?
9. Do you tend to teach DPA on its own or do you integrate it with other curriculum subject areas? If so can you provide an example?
10. What seems to be the general attitude toward DPA in your school?

a. Does a structure in your school ensures accountable implementation of DPA?
   i. (if yes) How does this work?
   ii. (if no) Do you think such a structure would be effective? Why/not?

Perceived Barriers and Supports

11. What supports do you receive with implementing DPA in your classroom?
   a. workshops
   b. colleagues (teachers, admin, support)
   c. ministry documents
   d. school community

12. In your opinion, what type of training would benefit teachers in implementing the DPA program? Example: ideas for DPA, research supporting DPA, community network, personal physical fitness knowledge, when/where best to do DPA, etc.

13. What barriers do you face in implementing DPA in your classroom?
   b. Can you give a specific example of a time you encountered these barriers.
   c. How do you think these barriers might be overcome?

14. What range of impacts have you observed DPA having on students? (depending on response, can probe specifically about student engagement and participation – What learning skills are directly affected by DPA?)

15. What strategies if any can school boards offer to ensure the appropriate delivery of the DPA policy by teachers?

16. As a novice teacher entering the field do you have any suggestions for me with implementing DPA Successfully in the classroom?

17. Final Thoughts/Conclusion