DAILY PHYSICAL ACTIVITY (DPA) IN ONTARIO: UNCOVERING THE ‘HOW’ OF TEACHER IMPLEMENTATION

By:

Laura Stewart

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Abstract

Ontario’s Daily Physical Activity (DPA) policy was instituted in 2005 by the Ontario Ministry of Education, as a component of the Ontario Healthy Schools strategy. The purpose of this study was to determine how a sample of elementary educators implement successful DPA programs in their classrooms despite the barriers they face. Interviews with three classroom teachers committed to DPA participation were completed, followed by qualitative analysis of the interview data through which three key findings emerged. First, participants recognized that their past and present personal and educational experiences were influential to their DPA participation. Further, these teachers explained various ways in which they were able to utilize school and community resources to overcome barriers to the implementation of DPA. Finally, participants spoke to the current supports and additional needs for DPA in order to ensure future success of the program. These findings suggest several implications for the educational community including the importance of developing teacher understanding of physical activity benefits for students. Additionally, teachers must be made aware of ways in which to utilize spaces and resources beyond ones’ own classroom, and finally, administrators must understand their key role in supporting DPA.

Key Words: Daily Physical Activity (DPA), Physical Education, Health, Implementation
Acknowledgements

This research project represents a culmination of many influences, from initial conception to this final product. I began my undergraduate studies in 2007 at the University of Toronto, where I explored my love of health and physical activity through completion of a four year Honours degree in Physical and Health Education. However, prior to beginning my Master of Teaching studies at OISE, I worked for four years within the Heart and Stroke Foundation’s Children and Youth programs, exposing me to the realm of health and DPA in Toronto area schools. My work there, along with a life-long love of physical activity, was the stimulus for undertaking this particular topic for my Master of Teaching Research Project.

I am grateful for the initial ponderings on day one of my journey at OISE from our research professor, Dr. Angela MacDonald-Vemic, who made it clear that although I thought I had no strong research interests, this was inside me from the start. Additionally, the support and feedback from her, and that of my second year advisor, Dr. Sarah Cashmore, was invaluable to the completion of this project.

This degree has been about more than just completing this thesis; it has been a time of great personal growth, learning and change. There have been many people who have been instrumental to my success over the last two years. First, to my loving parents, who supported my decision to return to school after four years in the workforce, and have supported me both emotionally and financially. Additionally, I must acknowledge my partner, Scott, who was a huge emotional support throughout this process, always keeping me on track and acting as a sounding board for my ideas. I further wish to acknowledge and thank my friends and OISE peers from PJ 161/261 who have been a part of this research project from the very beginning, and have supported me in varied ways throughout this process.
Chapter 1: Introduction

1.0 Research Context

Currently, we are living in an age in which the increasing prevalence and severity of childhood obesity may reverse the progress of life expectancy made in the modern era (Daniels, 2006). It is estimated that over one quarter of Canadian children are now overweight or obese, an 11% increase over rates from thirty years ago (Shields, 2006). This startling increase in prevalence of overweight and obese children can largely be attributed to the consumption of too many calories, and a lack of physical activity (Hobin, Leatherdale, Manske, Robertson-Wilson, 2010; Tremblay & Williams, 2003; Weiting, 2008). In the field of education, these numbers have various consequences. Children who are overweight or obese are more likely to face stigmatization, depression, low self-esteem, miss more schools days, in addition to the myriad of health detriments they are at greater risk of in their future (Young-Hyman et al., 2006).

Canadian Physical activity and sedentary guidelines dictate that children aged 5-11 must accumulate at least 60 minutes of moderate to vigorous physical activity (MVPA) each day (Canadian Society for Exercise Physiology, 2013). However, recent data suggests that over 90% of Canadian children and youth aged 5-17 do not meet these guidelines (Colley, Garriguet, Janssen, Craig, Clarke & Tremblay, 2011; ParticipACTION, 2015). Children are spending less time participating in active play, fewer minutes in physical education classes in school, and more time spent in sedentary activities such as watching television or playing video games (ParticipACTION, 2015).

To aid in the battle against this health crisis, the Ontario Ministry of Education introduced their Healthy Schools: Daily Physical Activity policy in 2005 (Ontario Ministry of Education, 2005). Ontario’s Daily Physical Activity program or ‘DPA’ was first implemented on
October 6th, 2005 by the Ministry of Education. This mandated program dictates that all elementary students from grades 1-8 must receive at least twenty minutes of sustained moderate to vigorous physical activity (MVPA) each school day during instructional time (Ontario Ministry of Education, 2005). Ontario was following a similar policy in Alberta with the addition of the MVPA designation. British Columbia has since followed suit and introduced their own DPA program for grades K-12 (Chorney, 2009). These policies were intended to help students reach the optimal levels of physical activity each day (Patton, 2012).

These policies are a definite step in the right direction, as increasing physical activity in elementary aged children has many benefits, including increased fitness, reduced body fat, and reduced risk for developing chronic diseases such as cardiovascular disease, diabetes and cancer (Janssen & Leblanc, 2010). Not only are the physical benefits well acknowledged but research has also found that physically active students have positive changes in mental and emotional well-being, including self-esteem, and decreased levels of depression (Biddle & Asare, 2011; Reilly et al., 2003). Teachers should also note the increases in cognitive function and academic success associated with physical activity in students (Castelli, Hillman, Buck, Erwin, 2007; Coe, Pivarnik, Womack, Reeves & Malina, 2006; Petty, Davis, Tkacz, Young-Hyman & Waller, 2009).

1.1 Research Problem

The 2005 Ontario Ministry of Education mandated policy on Daily Physical Activity (DPA) for grades 1-8 has been a positive step towards decreasing obesity and improving children’s health (Tremblay, 2007). However, many teachers and administrators have faced barriers to implementation causing sporadic, inconsistent, and sometimes non-existent use across
Ontario elementary schools (Chorney, 2009; Patton, 2012; Rickwood, 2015; Strampel, Martin, Johnson, Iancu, Babineau & Carpenter, 2014).

Although this policy has not been formally evaluated, there is evidence that DPA programs have been difficult to implement and have been shown to be inconsistently implemented in Ontario (Rickwood, 2015; Strampel et al, 2014). Some of the barriers faced by teachers include a diminishing priority of physical education, absence of student and teacher mentorship and fewer leisure minutes within schools (Rickwood, 2015). Some teachers cite that the limited instructional resources available, and a lack of professional preparation are additional barriers. (Chorney, 2009). It has also been cited that curriculum expectations are too demanding, placing increased time pressure on classroom teachers (Patton, 2012; Strampel et al, 2014). In addition, lack of ownership or responsibility for maintaining or implementing the policy is another factor that stands in the way of DPA programming (Chorney, 2009).

Educational administrators seem to have seen their error in decreasing funding and focus on physical education in schools in the late nineties and are now introducing programs and policies to counter their actions. Although DPA is one step in the right direction, currently, less than half of children in Ontario are being provided DPA every day (Rickwood, 2015; Stone, Faulkner, Zeglen-Hunt, Cowie Bonne, 2012)

1.2 Research Purpose

Considering the previously noted barriers faced when implementing DPA programs, the goal of my research is to learn how elementary teachers are able to implement and maintain successful DPA programs despite such barriers. My intention is to shed light on the ability of teachers to run successful DPA programs despite the barriers they face, and to use the findings to improve and refine my own teaching practice.
A further purpose of this study, by identifying and highlighting best practices used by teachers in implementing DPA, is to share my findings with the broader education community in order to delineate implications and recommendations for stakeholders in education.

1.3 Research Questions

The primary question directing this study is: How do a sample of elementary educators implement successful DPA programs in their schools or classrooms despite the multitude of barriers they face? Subsidiary questions to further guide my study are:

- What experiences have teachers had that make implementing DPA a priority for them?
- What resources have been made available to support teachers in implementing a DPA program?
- In what ways, if at all, does administrative and colleague support affect the ability for these teachers to implement DPA in their schools?
- How do these teachers believe the education system can further support them to overcome these barriers?

1.4 Background of the Researcher

From a very young age, whether I was aware at the time or not, I had a passion for physical activity. I participated in sports and clubs in and out of school. During my elementary years I was fortunate enough to have physical education classes every day, although I did not receive this education from a physical education specialist. When I reached secondary school, I could not understand why physical education classes were not mandatory beyond Grade 9. After high school I pursued further study in physical education, receiving an award for students with high academic standing pursuing post-secondary studies in physical education.
As someone who graduated from the Faculty of Physical and Health Education at the University of Toronto (now Faculty of Kinesiology and Physical Education), I have continued my passion for health and physical activity, and gained knowledge on the anatomical and physiological side of physical activity. In my final year of undergrad at the University of Toronto, I developed a strong interest in pursuing health promotion and completed a placement with the university’s Health Promotion Services. Although I initially wanted to pursue graduate studies in this field, I ultimately found something more suited to me.

From 2011-2015 I was employed by the Heart and Stroke Foundation of Canada, in their Children and Youth department. I was responsible for raising funds, while educating Toronto children and youth around the practices involved in maintaining a healthy heart. During this time I was exposed to disparities within and between schools when it came to physical education. I have been in some of the smallest gymnasiums you can imagine and wondered how students could possibly receive the physical activity they need.

During my time working for the Foundation, and visiting schools, I became aware of the DPA program. I thought it was an amazing, novel idea; to have teachers ensure students were receiving enough activity in their very own classrooms was a wonderful thought. However, this was also the time during which I was made aware that DPA programs are being inconsistently implemented. From my experiences, I noted that many teachers did not place a priority on this mandated policy. When prompted, teachers often told me they did not have enough time to fit DPA into their instructional day, or that the program had lost momentum since its inception in 2005. Thus, as I now pursue graduate studies in education, I have developed a strong interest in learning how teachers can successfully implement this policy in order to support me in my future as an elementary educator, and to better inform all teachers.
1.5 Overview

To respond to the research questions outlined above I will be conducting a qualitative research study using purposeful sampling to interview three teachers about their strategies for implementing successful DPA programs. In Chapter 2 I will review the literature in areas of physical activity in children, childhood obesity, school physical activity programs, and barriers to implementing DPA. Next, in Chapter 3, I will elaborate on my research design. In Chapter 4 I report my research findings and discuss their significance in light of the existing literature. Finally, in Chapter 5, I identify the implications of the research findings for my own teacher identity and practice, and for the educational research community more broadly I also articulate a series of questions raised by the research findings to denote areas for future research.

Chapter 2: Literature Review

2.0 Introduction

In this chapter, I review the literature pertaining to Ontario’s Daily Physical Activity (DPA) program, highlighting key terms and definitions, and including current physical activity guidelines for children. I address, using current research, the need for such a policy, focusing on the prevalence and causes of childhood obesity and inactivity, while justifying schools as the ideal setting for intervention. Next, I bring forth research underlining the benefits of physical activity for children, including physical, socio-emotional, and academic components. In addition, barriers to implementation of a successful DPA program will be discussed in more detail, along with an overview of some of the practices that have been suggested as potential solutions to overcoming these barriers. Finally, I discuss the current status of the DPA program in Ontario.
2.1 Ontario’s DPA Policy Defined

As discussed in Chapter 1, Ontario’s Daily Physical Activity program or ‘DPA’ was first implemented on October 6\textsuperscript{th}, 2005 by the Ontario Ministry of Education in response to the Ontario Chief Medical Officer of Health Report that suggested many children and youth are not given the opportunity to be physically active every day (Basrur, 2004). Similar policies have been incorporated in other provinces in order to combat childhood obesity rates, with the intention of lowering the risk for heart disease, type 2 diabetes, hypertension, stroke, and some cancers (World Health Organization, 2002).

Specifically, the Ontario DPA policy, which has since been incorporated into the Ontario curriculum, mandates that all elementary students from grades 1-8 must receive at least twenty minutes of sustained moderate to vigorous physical activity (MVPA) each school day during instructional time (Ontario Ministry of Education, 2005). In addition, the policy dictates that activities must be sufficient in raising the child’s heart rate and that there must be variety in activities to ensure engagement (Ontario Ministry of Education, 2005). Unfortunately, the Ministry documents outlining DPA do not define what would constitute MVPA.

Physical activity is defined as movement that increases ones heart rate or breathing and requires energy expenditure (Canadian Society for Exercise Physiology, 2013). However, defining MVPA is slightly more difficult. Generally, moderate activity means there has been an increase in heart rate, while vigorous activity impairs the ability to talk, and substantially increases heart rate (Canadian Society for Exercise Physiology, 2013). For children, MVPA would include what is known as ‘energetic play’ which refers to activities that get children working hard, breathing heavily and feeling warm (Canadian Society for Exercise Physiology, 2013).
It is essential to have an understanding of what is expected of teachers in this policy before delving into the literature surrounding specific aspects of such a program.

2.2 Rationale for the DPA Policy

There is a great body of evidence supporting physical activity intervention programs such as Ontario’s DPA policy as a means to combat childhood obesity and inactivity (Chorney, 2009; Fung et al., 2012; Rickwood, 2015; Robertson-Wilson & Levesque, 2009; Stone et al., 2012). This section looks at the obesity epidemic, and Canadian children and youth inactivity as the main propellants for the introduction of DPA, and further justifies schools as the optimal setting for intervention.

2.2.1 Childhood obesity

The current generation of children and youth are expected to live shorter lifespans than their parents (Daniels, 2006). As technology advances, and morbidity and mortality of chronic diseases decrease, we should expect the opposite trend. However, childhood obesity rates are rising at alarming rates, with over a quarter of the Canadian population aged 5-17 being categorized as overweight or obese (Shields, 2006).

Obesity during childhood is an important determinant of obesity in adulthood (Dietz, 2004). These children have higher cardiovascular disease morbidity and mortality as adults, regardless of adult weight. In addition, obesity leads to chronic diseases such as type 2 diabetes, cardiovascular disease and some cancers (Dietz, 2004). Roberts (2000) concluded that physical activity intervention was necessary to help children who are overweight or obese to reach a healthy body weight; diet alone is not sufficient.
Studies have concluded that not only does childhood obesity equate to an increased risk of chronic disease in the future, but it is also a predictor of poor mental health (Wang, Wild, Kipp, Kuhle, & Veugelers, 2009). Wang et al. (2009) looked at the relationship between self-esteem and obesity in children, taking a longitudinal approach, as many previous studies had not been able to determine the direction of the relationship between self-esteem and obesity. The authors found that obese children were almost twice as likely to report low self-esteem as compared to their ‘normal’-weight counterparts. Additionally, students participating in physical activity bouts five to seven times per week cut their odds of reporting low self-esteem in half (Tremblay, Inman & Willms, 2000).

The biggest factors contributing to this rise of obesity rates in Canadian children are an increase in caloric intake and a decrease in output through physical activity (Hobin, Leatherdale, Manske, Robertson-Wilson, 2010; Tremblay & Williams, 2003; Weiting, 2008).

### 2.2.2 Inactivity

Canadian recommendations state that children and youth should get 60 minutes of MVPA each day (Canadian Society for Exercise Physiology, 2013), yet recent data has found that only 9% of 5-17 year olds are meeting this target (Colley et al., 2011; ParticipACTION, 2015). A particular study by Colley et al. (2011) looked at children and youth aged 6-19 years of age. They found that only 9% of boys and 4% of girls were achieving the recommended 60 minutes. Not only were these children receiving inadequate physical activity time, they were spending over 8 hours or 62% of their waking hours sedentary. Although the statistics around child activity levels looks quite grim, intervention at the school level could be successful in reversing this trend (Chorney, 2009; Strampel et al., 2014).
2.2.3 Activity in a school setting

In order for children and youth to reach the aforementioned daily physical activity targets, the onus is on parents in the context of the home, recreational programs, and schools (Patton, 2012). Schools are the ideal place to deliver education around the importance of physical activity, and there is a unique opportunity in the school setting to include all students in health-enhancing physical activity, regardless of socio-economic status and family influences. Physical activity in the school setting allows virtually all children to benefit in a cost-effective manner (Patton, 2012). Strampel et al. (2014) agree that since a large portion of time is spent at school, it is a well-suited environment for increasing a child’s physical activity participation.

Not only are schools able to implement physical activity programs in a cost-effective manner, but they contribute to the attitudes, skills and knowledge students gain in order to develop a life-long habit of physical activity (Carter & Micheli, 2012). When these positive behaviours are initiated at a young age, they can be tracked into adulthood, resulting in a myriad of benefits (Carter & Micheli, 2012). Thus, many local governments have enacted policies to increase physical activity as a means of combating obesity and poor health in children.

In recent years there has been a decreased focus on physical education in the Ontario school system. Students are most often taught by non-specialist teachers, on average two to three times per week (Faulkner, Dwyer, Irving, Allison, Adlaf, & Goodman, 2008). Additionally, Morgan (2007) looked at students’ activity levels in grades 1-6 using pedometers. It was determined that children do not compensate for the loss of physical activity on days where they do not participate in physical education classes. This lack of a compensatory increase equates to the need for intervention; if children are not participating in physical education classes, opportunities must be created for them to be physically active.
2.3 Benefits of Physical Activity in Children

The benefits of physical activity participation are far-reaching and there are many direct and associated positive outcomes; physical, socio-emotional and mental in nature (Janssen & Leblanc, 2010; Warburton, Nicol & Bredin, 2006). These benefits, when initiated at a young age, track into adolescence and adulthood (Carter & Micheli, 2012). The benefits will be discussed below.

2.3.1 Physical

Physical activity in children is linked to many positive health outcomes backed by a substantial body of research. Physical activity is associated with both primary and secondary prevention of chronic disease, including cardiovascular disease, diabetes, cancer, hypertension and premature death (Warburton et al., 2006). Additionally, active children are better able to maintain a healthy body weight, leading to a decreased risk for many chronic diseases including cardiovascular disease, diabetes, and hypertension, among others (Bouchard, Shephard & Stephens, 1994). Not only does physical activity have direct health benefits but it has indirect outcomes as well through a positive influence on nutrition choices and the decision not to smoke (Bouchard et al., 1994).

The relationship between physical activity and physical health benefits is known as a dose-response relationship, meaning the more active a person is, the greater the benefits will be (Janssen & Leblanc, 2010; Warburton et al., 2006). Research has found that even modest amounts of physical activity can help children that are in high-risk groups, including obese children (Janssen & Leblanc, 2010).
Not only will active children lead longer and healthier lives physically, but their mental health is also positively affected, as discussed in the subsequent section.

2.3.2 Socio-emotional

Physical activity frequency and level have been shown to be positively associated with general well-being, lower levels of anxiety and depression, and positive mood in people of all ages (Stephens, 1988). Not only does physical activity have positive effects on well-being, but children receiving adequate, regular physical activity have been shown to have fewer mental health problems (Warburton et al., 2006; Tremblay et al., 2000). Specifically, active children are less likely to suffer from depression and low self-esteem (Warburton et al., 2006). In addition, Tremblay et al., (2000) found that children who took part in regular physical activity five to seven times per week cut the odds of having low self-esteem in half. However, these ideations are not new and have been noted previously in research by Taylor, Sallis & Needle (1985) who substantiate that physical activity increases self-confidence and self-concept in children and adolescents. Similarly, Sothern, Loftin, Suskind, Udall & Blecker (1999) found that physical activity enhanced self-esteem. These authors, however, also noted improved body image as an additional advantage to physical activity in children and youth.

In addition to the aforementioned socio-emotional benefits, physical activity can benefit classroom learning and academic success, as outlined in section 2.2.3 to follow.

2.2.3 Academic

There is a large body of evidence supporting the positive outcomes of physical activity on student academic achievement. In this section, the terms academic achievement, academic performance and student achievement will be used interchangeably. Castelli et al., (2007) looked
at 3rd and 5th graders standardized tests and found that aerobic capacity of students was positively associated with achievement. They suggest that specific components of fitness are globally associated with academic performance.

Further, a recent study conducted by Coe et al. (2006) looked at sixth graders grades in four core subjects, as well as standardized test grades. They found that students sustaining more vigorous physical activity had significantly higher grades than their less active counterparts (Coe et al., 2006). Phillips, Hannon & Castelli (2015) suggest that such increases in academic success are related to the rise in cognitive functioning following bouts of physical activity which include enhanced working memory, inhibition, and cognitive flexibility.

In contrast, Tremblay et al. (2000) found a negative relationship between student academic performance and physical activity. Although they deem this finding to be trivial and point to the positive outcomes they found, it must be noted that their findings contradict the majority of the literature.

Not only are physical activity levels positively associated with grades and test scores, but it has been found that it influences the brain and increases cognitive function (Buscemi, Kong, Fitzgibbon, Pate, & Wilson, 2009). Additionally, schools that require longer durations of physical activity perform better academically (Donnelly, Greene, Gibson, Smith, Washburn, Sullivan, & Jacobsen, 2009). Despite this significant body of evidence, few schools use physical activity as a tool to improve academic performance (Buscemi et al., 2009).

2.4 Barriers to Implementation

Current evidence suggests that the DPA policy is often not being implemented as mandated by the Ministry of Education, with teachers modifying, misinterpreting or ignoring the policy (Patton, 2012; Rickwood, 2015; Stone et al., 2012). Most often, DPA is expected to be
implemented by classroom teachers who face barriers in carrying out this policy. These barriers include time constraints, lack of knowledge, lack of program ownership, and the low priority of physical education, among others, and will be discussed in detail below.

2.4.1 Time constraints

The most commonly cited barrier for teachers when asked to incorporate DPA into their classes is time (Patton, 2012; Rickwood, 2015; Strampel et al., 2014). This barrier is multifaceted as it includes the time needed for planning DPA sessions, time to conduct, as well as the problem of taking time away from core curricular courses. Some teachers even believe that taking time away from other content areas would detract from the academic success of their students (Patton, 2012). Patton (2012) found through surveys of Ontario teachers that 25% ‘sometimes’ had time to conduct DPA sessions and 55% stated they ‘rarely’ or ‘never’ had time to plan a DPA session.

The term ‘curriculum constraints’ is widely used as a barrier to implementing the DPA policy (Rickwood, 2015; Strampel et al., 2014). Teachers feel that they are under pressure to meet the demands of the curriculum and do not have enough time to focus on physical activity (Rickwood, 2015; Strampel et al., 2014)

2.4.2 Lack of knowledge

A concerning measure outlined by Patton (2012) shows that the majority of teachers are not clear on the DPA guidelines set out by the Ontario Ministry of Education. The fact that many teachers are not aware of what is required of them is a concerning statistic when this is a mandated policy in Ontario schools.
Additionally, teachers may have a lack of knowledge around how to implement a successful program (Patton, 2012). There is often a lack of professional preparation in physical education instruction or physical activity planning, leading to a lack of knowledge for quality programming (Chorney, 2009). Almost all teachers rarely or never include a warm-up or cool down component of DPA and the majority do not use a variety of activities to sustain student engagement (Patton, 2012). This contradicts the outlook of most teachers who state they have sufficient knowledge of physical education to successfully conduct DPA (Patton, 2012).

Further, many educators still do not understand the relationship between DPA and benefits for student learning (Chorney, 2009). The program is often viewed as a burden rather than a helpful tool for teachers to influence student achievement (Patton, 2012).

2.4.3 Lack of ownership

Some teachers have acknowledged that there is a lack of ownership within the program. It was found that there is little being done to ensure the DPA program is being abided by in Ontario (Chorney, 2009). A recent study evaluated the development of the DPA policy and stated that in many ways, the program is set up for success but is still lacking sufficient evaluation plans (Robertson-Wilson & Levesque, 2009).

With little follow-up by principals, boards, or the Ministry of Education, DPA often falls by the wayside. Although principals have been found to be more favourable than teachers about implementing and sustaining the program, this does not equate to follow-up. Therefore, there is a lack of importance attached to the program and a feeling amongst teachers that it is ‘okay to omit’ (Patton, 2012).
2.4.4 Low priority of physical education

As mentioned above, there has been a shift, and a decreased focus on physical education in Ontario (Dwyer, Allison, Barrera, Hansen, Goldenberg, & Boutilier, 2003; Rickwood, 2015; Strampel et al., 2014). The current trend is cutting time spent in physical education in favour of time spent in ‘core’ curricular courses. Success plans submitted by teachers are focused on reading and writing (Rickwood, 2015).

Additionally, minutes spent in physical education classes have dropped to a recommended 150 per week, although recent data suggests only 16% of schools are reaching this target (PHE Canada, 2016). In addition to children spending fewer minutes participating in physical education classes, they are also receiving these minutes increasingly from non-specialist teachers (Faulkner et al., 2008).

2.4.5 Additional barriers

In addition to the above limitations and barriers, Rickwood (2015) highlights an extensive list of obstacles teachers cited during focused interviews. This allowed for more specific, in-depth answers than many other studies that relied on the use of surveys alone. In addition to the barriers above, teachers stated that budgetary constraints and a lack of resources were problematic when implementing the program. They also stated that high teacher and administrative turnover was a factor in the depleting priority of DPA. Interestingly, they discussed the fact that teachers have learned to use physical activity and leisure time as rewards and often see them as something they can take away from their students as punishment for classroom management (Rickwood, 2015). These barriers, alone or in combination, have led to sporadic, inconsistent implementation of DPA.
2.4.6 Recommendations

There is currently a gap in the research when it comes to solutions to the barriers teachers are facing in order to initiate and sustain the DPA policy. However, Strampel et al., (2014) highlight some teacher-reported solutions addressing some of the barriers faced when implementing DPA. Teachers have suggested that DPA should include activities that use minimal equipment and can include resources already available such as music and exercise videos. Some teachers suggest a whole-school approach to aid in adherence to the program. Additionally, others suggested the use of student leaders to run the program, taking the onus off the staff. The authors stress that the aforementioned solutions would be inexpensive and easy to implement (Strampel et al., 2014). However, further research is needed to discern feasible and effective solutions to the multitude of barriers teachers face, as there is little evidence to support current recommendations.

2.5 Current Status of the DPA Program in Ontario

The DPA program in Ontario has yet to be formally evaluated by any governing body, but research has shown there is inconsistent implementation. (Patton, 2012; Rickwood, 2015; Stone et al., 2012; Strampel et al., 2014). It has been found that many educators are simplifying, ignoring and misinterpreting the implementation of DPA (Patton, 2012). That being said, the perception of teachers is mostly positive, with the majority agreeing that it should be a permanent curriculum component (Patton, 2012).

Unfortunately, these views do not equate to implementation. Patton (2012) found that the most common frequency of performing DPA was sometimes (39% of teachers). Additionally, Stone et al. (2012) looked at Toronto District School Board schools and used accelerometers to
determine whether students were receiving DPA on a regular basis. Their study concluded that less than half of students were being exposed to daily physical activity in their classes and not a single child reached the goal of at least twenty minutes of MVPA. Therefore, the majority of schools are not meeting the requirements of the DPA policy.

As discussed earlier, lack of ownership is a barrier to implementing DPA but it is also a problem when evaluating the program. If it is not being monitored, who can say whether it is having real, substantial benefits in the health and well-being of students?

2.6 Conclusion

In this literature review I have examined research related to DPA in Ontario. This review illustrates the importance of the DPA policy and highlights the barriers faced by teachers with regard to implementation. There is a great deal of evidence suggesting that school-based physical activity interventions can be successful at increasing activity levels in children when implemented correctly (Stone et al., 2012). Although the majority of schools in Ontario are not meeting the requirements of the DPA policy, Stone et al. (2012) suggest that when the DPA policy is implemented, the intended health benefits are achievable. If, when evaluated, schools can at least meet the minimum provincial requirements of DPA, then it may contribute to fostering both healthier bodies as well as minds (Chorney, 2009).

As addressed above, there is little to no investigation into potential solutions for overcoming the outlined barriers or exploration of successful DPA programs. By focusing my research on how a sample of teachers can successfully implement the DPA policy despite the barriers they face, I will be able to contribute to the instructional practices of other educators. It is my hope to gain insight, not only for myself and other educators, but for my future students’ health and well-being.
Chapter 3: Research Methodology

3.0 Introduction

In this chapter I describe the research methodology, highlighting the methodological decisions made and a rationale for these choices, based upon the research purpose and questions. I begin with a review of the general approach, procedures, and data collection instruments. I then identify the participants of the study, elaborating more specifically on participant sampling and recruitment as well as information about the research participants themselves. I then explain the data analysis procedures, followed by an account of the relevant ethical issues and ethical review procedures. Relatedly, I speak to the methodological limitations of the research all the while acknowledging the strengths of the current research study. Finally, I conclude the chapter, briefly summarizing the methodological decision making and justification for such decisions, in light of the research purpose and questions.

3.1 Research Approach & Procedures

This research study was conducted using a qualitative research approach, including a review of the current literature in relation to the outlined research questions, as well as the use of semi-structured interviews with three teachers. Qualitative research has been gaining popularity over the last several decades, negating previous assumptions that it had little to contribute to knowledge and information (Strauss & Corbin, 1990).

Denzin & Lincoln (2011) define qualitative research as ‘a situated activity that locates the observer in the world.’ It is an attempt to understand issues from the perspective of the participant, rather than that of the researcher. Creswell (2013) explains that qualitative research is used when a problem or issue needs to be thoroughly explored or when we need a complex,
detailed understanding of an issue. By using a qualitative approach, the study takes a holistic account of a complex problem or issue under study. Researchers are not bound by cause and effect relationships, but can identify the interactions of many factors in a situation (Creswell, 2013).

As such, given the previously outlined research purpose and questions, a qualitative research study was most appropriate as it allowed for more in-depth data about teachers and their lived experiences, and ensured there was an understanding of their viewpoints without predetermination (Quinn Patton, 2002).

3.2 Instruments of Data Collection

Interviews are undoubtedly the most commonly used method of data collection in qualitative research, taking different forms (King & Horrocks, 2010). In this study, the primary method of data collection was the semi-structured interview protocol. In semi-structured interviews, the researcher is prepared with questions for participants. However, it is not so structured that further probing questions that arise cannot be asked. By outlining questions beforehand, the researcher can design and plan the interview in a way that attends to their research purpose and questions. Additionally, this process allows the researcher to guide the interview process while still allowing for genuine and organic responses from the participants. This particular instrument was also advantageous as it allowed for additional questions to emerge throughout the process, bringing up valuable information that may not have been anticipated.

Further, having the outlined questions increased the comprehensiveness of the data and made the collection of data much more systematic (Quinn Patton, 2002). When respondents are answering the same questions it increases the comparability of the responses while reducing interviewer effects and bias (Quinn Patton, 2002).
Particularly, for this study, the semi-structured interview protocol ensured that specific details of teachers lived experiences were given. This allowed for much more depth and breadth of response than quantitative approaches such as surveys. In order to develop this complex and detailed understanding of a topic, and the issues surrounding it, one must talk directly with people, allowing them to tell their stories, in no way guided by the existing literature (Creswell, 2013).

3.3 Participants

A critical step in all research is to determine the study sample. Qualitative inquiry typically focuses on small sample sizes, or even single cases (Quinn Patton, 2002). Below, I outline the criteria used for participant sampling along with a rationale for those decisions. In addition, I discuss the process of identifying and recruiting participants. Finally, I introduce each of the three selected participants.

3.3.1 Sampling criteria

The following criteria were applied to determine teacher participants:

1. Teachers must be currently teaching in Ontario.
2. Teachers must show a commitment to the DPA program by participating daily, either in their classroom, or organize DPA on a school-wide level.
3. At least one participant will have no physical education background, including post-secondary studies and additional qualification courses.
4. At least one teacher will have been working in the field of Education prior to 2005.
To address the main research question, the participants I interviewed were employed in Ontario. DPA is an Ontario program set out by Ontario’s Ministry of Education and thus, the focus of this study was Ontario educators. Additionally, the main research question asks how a sample of elementary educators are able to successfully implement DPA programs in their schools. Therefore, all participants displayed a commitment to the program and ran DPA consistently in their classrooms or schools. Furthermore, to ensure my research caters to the broader education community, one participant had no physical education background. Since DPA is most commonly put on the shoulders of regular, non-physical education specialists, the input is more valid from a classroom teacher without such a background. The research aims to show how someone with no physical education background can successfully run DPA in their classroom or school.

Finally, to gain perspective on the program over its duration since inception in 2005, two of my participants were employed in the field of Education in Ontario prior to that time. This gave insight into how the DPA program has changed over the last decade.

3.3.2 Participant recruitment

One of the greatest differences between qualitative and quantitative research are the sampling approaches. Quantitative methods typically depend on large samples selected randomly in order to permit generalization from sample to a larger population (Quinn Patton, 2002). Qualitative inquiry, on the other hand, can focus on small samples, selected purposefully in order to learn a great deal about issues of central importance to the study (Quinn Patton, 2002). Due to the methodological parameters of this study, I used a combination of convenience sampling and purposeful sampling. As a pre-service teacher with previous connections within school boards in the Greater Toronto Area, I used convenience sampling to draw from my existing network in the
field of Education. Further, the sampling was purposeful in that there were specific criteria, as noted above, used to find participants that were more likely to provide deeper insight and understanding around the topic of DPA.

As stated in Chapter 1, I was previously employed by the Heart and Stroke Foundation of Canada. In my job I worked with hundreds of schools within the Toronto District School Board (TDSB) and Toronto Catholic District School Board (TCDSB). After spending four years with many teachers involved in physical education, I had a great starting point, and connections with which to begin my sampling. I formulated multiple emails to send out to teachers and principals in my network in order to determine if they, or another they knew, fit my criteria for participation in the study. King and Horrocks (2010) describe this method as ‘insider assistance’ with recruitment, gaining access through insiders in schools that may be able to identify other members who meet the sampling criteria. By using this method, I was able to locate two participants to interview.

After I had determined my first participant I also utilized snowball sampling, in which the participants recommend other individuals who may also fit the criteria, and be leaders in this area (Quinn Patton, 2002). However, this method of recruitment did not result in any additional participants.

In addition, I employed my network at OISE to determine if there were teachers from practicum schools that were leaders in the area of DPA. Although this tactic generated several names to contact, respondents either did not fit all criteria or did not respond to email. My final participant was determined through my research of local news articles and stories on the subject of DPA in schools. A teacher that was highlighted in a local newspaper eagerly responded and fit all criteria.
3.3.3 Participant biographies

The following section will briefly introduce the three selected research participants. Individual background and teaching history will be given for each teacher, while keeping anonymity intact. In addition, the demographics of the schools at which the participants teach will be discussed.

Nicole

Nicole is currently a Full-Day Kindergarten teacher in her first full year of teaching in a public board. Previously, Nicole did supply work for the board and spent time working for a private educational institution. She works in a large school with a population of nearly 700 students, many of whom are new to Canada, and the majority of which speak a home language other than English. Although Nicole has no formal education in physical education, she has a love of activity that began in adulthood and is committed to keeping her own students active. While she suggests it is rare for teachers at her school to participate in DPA, Nicole finds ways to incorporate it into her daily plans and thus, her insights have been invaluable in answering the main research question of this study.

Gary

Gary has been teaching for the last 18 years in an urban setting for a public school board. His current position is teaching Grade 5 but he has prior experience as a physical education teacher of both primary and junior students. His school is situated in a wealthy community with over 800 students. Gary grew up loving sports and physical activity, and has since taken Additional Qualification courses in physical education. He participates in DPA with his class nearly every day. Gary is the only teacher, to his knowledge, participating in DPA within his
Kim has spent her entire 27 year teaching career at the same school, with experiences teaching Grades 1 to 6, as well as physical education. The school is located in a relatively small city and has a population size of approximately 300 students. Kim has received her specialist in Physical Education and is a leader of DPA within her school, which is committed, as a whole, to the program. Kim, having participated in DPA for many years at her school, has provided a great deal of insight on what it takes to adopt the program on a school-wide level.

### 3.4 Data Analysis

Qualitative data analysis is a much longer, more difficult process than that of quantitative data analysis (Quinn Patton, 2002). The first step before data analysis can occur is to transcribe the raw data, converting recorded material into text (King & Horrocks, 2010). This process was completed, but to ensure anonymity of all participants, pseudonyms were given, and all identifying remarks of either person or school, were removed from the final transcripts.

To begin qualitative data analysis, I used the raw data to identify patterns of text related to each subsidiary research question of this study. This is the process known as coding. To aid in the coding process, subsidiary research questions were given colours that corresponded to the codes in the interview transcripts. These codes were then sorted into categories and further organized into major themes, each befitting a subsidiary research question. However, there was significant overlap between the codes for two of the research questions and thus, one theme was sufficient to answer both questions. This process of determining themes is known as Thematic
Analysis (King & Horrocks, 2010) which determines the common themes to be subsequently analyzed in order to discuss significant findings. These findings have been determined and will be discussed at length in the following chapter.

3.5 Ethical Review Procedures

A common misconception is that ethical issues only arise during the data analysis phase of a research study (Creswell, 2013). However, ethical issues exist in all forms of research during all phases of the process (Creswell, 2013). Thus, it is imperative to proactively identify and remedy these issues wherever possible.

First and foremost, in this particular study, consent was obtained from all participants. Ethical codes of practice emphasize the importance of gaining the informed consent of all participants (King & Horrocks, 2010). Prior to the interview, all participants read and completed the consent form (see Appendix A) that addressed the ethical implications and outlined the extent of the interview. This form ensured anonymity, and assured the participants that they may withdraw at any time or refuse to answer any question. Additionally, it gave consent to being audio-recorded during the interview.

All participants were also assigned a pseudonym and any identifying markers related to their identity, school or students were excluded from the transcripts. In addition, participants have been assured that the transcripts obtained during the interview will be kept on a password protected personal laptop for up to five years, after which time the data will be destroyed. This raw data can only be accessed by myself and my professor, Angela MacDonald-Vemic.

Based on the topic of discussion, and the interview protocol created, there are no known risks to participation in this study. However, Creswell (2013) notes that the concept of reciprocity is important in qualitative research. The researcher must give back to participants for
their efforts and to review what they will gain from our studies so they do not feel abandoned. Researchers must ensure that participants do not feel exploited or uninvolved after the fact; the research should also benefit the participant (Creswell, 2013). For this reason, all participants have been given notice throughout different stages of the research process and will be sent copies of the final submitted research paper.

3.6 Methodological Limitations & Strengths

The most significant limitation of this study is the scope of the research. In order to meet the ethical parameters set out, the participants were limited to teachers and thus, data could not be obtained from other members of the education community, including principals, parents or students. In order to meet the guidelines set out by OISE, this study was limited to conducting semi-structured interviews. Although this is a particularly relevant method given the desired outcomes of the study, as outlined in section 3.3 above, it may be beneficial to include mixed methods to obtain more data. Creswell (2013), outlines that in qualitative studies, researchers typically use multiple methods and gather multiple forms of data.

Additionally, due to the time constraints of the Master of Teaching program, the number of participants was also limited. With such a small sample size, the findings cannot be generalizable to the experiences of teachers, broadly speaking (Quinn Patton, 2002). However, this is not always the most vital aspect of all research. The strength of this methodology is the transferability of knowledge, in which the findings can certainly inform, and allow for a deeper understanding of DPA (Quinn Patton, 2002). Miles & Huberman (1994) advocate that qualitative data is the best strategy for discovery when exploring a new area.

Not only has the methodology of the current study aided in strengthening the current literature on DPA, it allowed the researcher to hear from teachers in more in-depth accounts than
traditional methods. Teachers were able to speak to what matters most about the topic at hand. This not only validates their voice and experience, but it acts as a way for teachers to reflect on their own practices (Miles & Huberman, 1994).

3.7 Conclusion

In this chapter the research methodology for the current study was outlined, beginning with a discussion of the rationale for using a qualitative research method as a means to thoroughly understand and explore the DPA issue from the perspective of the participant, rather than the researcher. The instruments of data collection were then described, speaking to the strengths of semi-structured interviews, as they allow for structure yet flexibility in the data collection. Next, I outlined the criteria for participation in the study, emphasizing the need for teachers to relate specifically to DPA in Ontario and ensuring their educational background varied. The use of convenience and purposeful sampling in the recruitment process were outlined as ideal in relation to the needs and time constraints of the study, followed by a brief introduction to participants and a rationale for their selection. Next, the data analysis process used was outlined followed by an identification of any ethical concerns of the study. Lastly, the methodological shortcomings were outlined, while addressing the many strengths that this research approach exudes. In the chapter to follow, the findings of the research are reported.

Chapter 4: Research Findings

4.0 Introduction

This chapter presents and discusses the findings that emerged through the qualitative data analysis of three face-to-face, semi-structured interviews. All three interviewees were committed to implementing Daily Physical Activity (DPA) in their classrooms and have provided valuable
insight into how the program can be run and what further supports are needed. The analysis was guided by the main, over-arching research question: How do a sample of elementary educators implement successful DPA programs in their schools or classrooms despite the multitude of barriers they face? Participant responses pertaining to personal beliefs, practices and experiences with DPA revealed three key findings. In the discussion to follow, these findings are organized into the following central themes:

1. Participants recognized that their previous personal and professional experiences contributed to making DPA a priority for them.

2. Participants utilized school and community resources to support their DPA programs.

3. Participants highlighted the importance of school-based and board support in implementing a successful DPA program.

The above themes are also comprised of sub-themes to give a more complete analysis of how teachers are able to implement DPA in their classrooms. In the discussion, each theme will first be described, followed by subsequent reporting of the data, and finally, a discussion of the significance of each theme in context with current literature. Finally, the important findings will be summarized.

4.1 Participants Recognized That Their Previous Personal and Professional Experiences Contributed to Making DPA a Priority For Them.

One of the most significant contributing factors to participants’ commitment to DPA was a love of physical activity that grew out of personal involvement in athletics, past and present. This was further supplemented by the additional education and training which played a role in ensuring preparedness for implementing DPA for these teachers. Most importantly, however, were the various positive outcomes these teachers observed in their students when implementing
DPA. It is imperative to discuss and explore the commonalities of teachers that implement DPA in order to understand why they participate, and how to encourage others to do so. To begin, the personal backgrounds of participants in relation to sport and activity will be outlined, followed by their background and training in physical education. Finally, the observed outcomes related to the academics and well-being of students will be discussed to exemplify the participants’ beliefs about the DPA program and its priority to them.

4.1.1 Participants’ past and present athletic experiences contributed to a love of physical activity.

Much of the discussion surrounding teachers’ commitment to the DPA program can be traced to their love and passion for physical activity. All participants demonstrated a strong connection between their beliefs around physical activity and subsequent participation in DPA. This love of physical activity was common amongst all participants and was best exemplified by Nicole who described her physical activity journey and its relation to her use of DPA as a tool in the classroom. She noted:

It wasn’t until after teachers college that I started joining sports and I was like, ‘Oh, I actually really like this!’ I’m not good at it by any means but it creates a sense of community and I’ve gotten really into fitness so I want to give that to them.

Through interpretation of the language used, one can conclude that Nicole’s own experiences with sport and physical activity have led her to encourage the same behaviours in her own students.

In contrast, Gary and Kim began their experiences and a love of physical activity at a much younger age. When discussing his personal experiences in school, Gary explained, “I
always loved phys-ed. I always loved playing games and stuff like that.” This sentiment was echoed by Kim who stated,

I was always involved in sports. I had a twin sister so we were always very, very competitive… and then in high school I played on the sports teams… university I played field hockey. So that’s the way I got into physical activity.

All participants, thus, made a connection back to their own personal physical activity participation which, in turn, related to their need or passion to incorporating DPA into their daily teaching practice.

As the aim of this research study is to shed light on ‘how’ teachers are able to implement successful DPA programs, it is imperative to discuss the commonalities linking participating teachers. That being said, there is a gap in the current body of research related to the contributing factors that lead teachers to participate in DPA. There has yet to be a study that looks at how teachers are able to successfully implement DPA and rather, the research focuses on teacher perspectives on the program and barriers to implementation. The assumption, then, for this subtheme is that a love of sports and being physically active may have a trickle-down effect for these teachers and encourage their passion for DPA.

4.1.2 Participants indicated prior formal education and self-education led to a preparedness to implement DPA in the classroom.

Not only do personal experiences with sport and physical activity contribute to participants’ prioritization of DPA, but their education and training was an additional influence. As noted in Chapter 3, for the purpose of this research study, participant sampling criteria outlined that at least one participant must have no formal educational background in physical education. Since DPA is most often expected to be implemented by teachers without a physical
education background, this criteria helped ensure the input could be related to the broader community of educators. Nicole, as noted in Chapter 3, did not have any formal physical education training, in either post-secondary education or Additional Qualification courses. However, her education was accomplished through her own research. She attributed keeping up with current literature surrounding physical activity as motivation to participate in DPA. She said “I feel like a nerd but I’ve seen bits of research that says kids who are active actually, what’s the word? They’re more responsive to the learning that they’re doing. So it actually benefits their learning.” Although she experienced no formal training in physical education, Nicole understands the importance of DPA and the many benefits of implementing it into her daily practice through her exploration and use of current literature.

Unlike Nicole, both Gary and Kim had previous experience and training in physical education. Gary described his experience in taking additional qualification courses in physical education and, in doing so, mirrored what Nicole supposed above. He noted:

I was a phys-ed teacher for four years. I took the courses. I got [Health and Physical Education] Part One and Part Two. I never did the specialist but I did the first two parts… and you know, I saw the studies and the research that suggested that it helps you function as a student when you’re getting that physical activity.

Gary’s suggestion that student learning benefits from being physically active stems from the knowledge gained during his physical education training. This knowledge surrounding the benefits of implementing a DPA program can be assumed to be a contributing factor to his consistent implementation of the program.

Similarly, Kim was not involved in physical education throughout her undergraduate studies but took additional qualifications following the receipt of her teacher certification.
However, unlike the other two participants, she attained her specialist in physical education, consisting of three additional courses.

As noted above, there is a gap in the current body of research related to the contributing factors that lead teachers to participate in DPA. However, one of the major barriers to implementing DPA is a lack of knowledge (Patton, 2012; Chorney, 2009). Chorney (2009) suggests that many educators are still unaware of the relationship between DPA and the benefits for student learning. That being said, the findings of this study indicate that a lack of knowledge may not be a barrier for teachers currently participating in DPA as all study participants had background knowledge on physical education and the associated benefits of physical activity. Thus, although lack of knowledge is a significant barrier to DPA programming, it is not a factor for these teachers, following their education and research.

4.1.3 Participants noted the positive outcomes they observed through DPA implementation as contributing to making the program a priority.

Although participants’ personal experiences with sport and prior physical education knowledge contribute to their passion for DPA, the strongest influence on participants’ commitment to running DPA programs in their classrooms were the positive benefits they observed in their students when exposing them to physical activity. These observed positive outcomes led to an increased priority of DPA in the minds of all participants.

Kim had an interesting circumstance arise within her school in 2011. A colleague initiated a study on the effects of DPA on students and student learning. Kim’s Grade 6 class became the exercise group, running each morning for twenty minutes. The other Grade 6 class that year became the control group, receiving no additional physical activity outside of physical
education classes. When given the time to reflect, Kim described the observations and findings of the effects of DPA during that school year. She stated:

After that year we found improvements in their learning skills… in their reading, their writing, their math, and the most important thing was their self-confidence. The biggest thing for me as a teacher was I found that the kids got more done in less time. They were more attentive. Kids that I had in my class that were ADHD and on medication… there was no need for it anymore.

These findings were significant for Kim and others at her school. They exemplified the need to get students active and have inspired her to continue DPA in her classroom for the last five years.

Similar benefits were noted by the other participants. Gary discussed direct benefits to learning in his students and asserted:

The most direct thing that I can see is it helps them to learn. It activates their brains. I do DPA first thing and sometimes we need to skip it if we’re really behind in something and I can see the difference in how well the kids can focus. How well the kids can sit and how successful their day is based on when we do the DPA.

He expanded further to conclude “I see the benefits. I think it works and I totally believe the long-term effects will be something great for the kids.” This is yet another example of a teacher observing the positive effects of DPA and being motivated by this to continue the program.

This view is echoed by Nicole who not only expressed her thoughts on the learning benefits of DPA but also the aid in classroom management that physical activity provides. She indicated, “It really helps with the discipline, but once we get moving, they’re listening. They then don’t fidget as much… so if I get them moving for a little bit they’re a lot better with their
sitting which is really helpful.” She mentioned that a lack of focus and fidgeting are significant issues in her classroom and the use of DPA helps her with classroom management.

All of these observations have also been noted and supported in current literature. As addressed previously, there are a multitude of benefits to DPA participation; physical, socio-emotional and academic (Buscemi et al., 2009; Janssen & Leblanc, 2010; Warburton et al., 2006). All participants described either benefits to learning or increased academic grades. Phillips et al., (2015) suggest that such increases in academic success are related to the rise in cognitive functioning following bouts of physical activity which include enhanced working memory, inhibition, and cognitive flexibility. Further, Kim’s identification of a pronounced increase in the self-confidence of her students, following the DPA study, is a well-documented observation. It is known in the literature that active children are less likely to suffer from depression or low self-esteem. Specifically, Tremblay et al., (2000) found that children who took part in regular physical activity five to seven times per week cut the odds of having low self-esteem in half. Thus, the findings of this study suggest the continued relevance of research into the positive aspects of physical activity and validate previous findings in the literature.

It is through DPA participation that these teachers were able to observe such positive changes and behaviours in their students’ abilities and readiness to learn. These benefits are in addition to the life-long enhancements of being physically active that are the surest motivators for continued passion and participation in DPA for these teachers.

4.2 Participants Utilized School and Community Resources to Support Their DPA Programs.

While the previous theme explored teachers’ prior experiences with physical education and DPA, this section explores participants’ use of resources to support their DPA programs. A
common complaint that participants shared was that their schools or classrooms were not always adequate for performing DPA, based on available space. It is important to explore how teachers can overcome barriers such as this in order to further promote DPA with all classroom teachers. To negate this particular barrier, participants utilized both school and community resources that were available to them. These teachers took advantage of school physical education equipment, as well as spaces outside their classrooms, to aid in their implementation of DPA. Further, teachers utilized community resources to ensure the success of their DPA programs.

4.2.1 Participants utilized school physical education equipment and spaces outside their classrooms to support their DPA programs.

Interview participants noted that classroom space and resources were issues when implementing DPA, as these factors limit the types of activities that can be performed. Gary reflected upon the kind of resources available at his school and acknowledged that they are lucky because they are a “rich school”. He goes on to discuss the benefits of having two gymnasiums in the school:

The spaces and resources are great when it’s nice weather ‘cause generally what happens are the phys-ed programs that are going on in the gyms will go outside. We have access to those in the fall and maybe the spring and summer months.

He was able to go beyond the physical space of his own classroom, which he described as the biggest barrier to implementing DPA, and use what was available in the school. Additionally, he discussed going outdoors in the winter when gym space was not available. These were just some of the ideas enacted to negate a common barrier to DPA.

Kim also acknowledged that physical space can be a factor and explained “I have close to thirty desks in this class so the actual physical makeup of your class is a big deal.” However, she
recognized that her school does have multiple spaces to use and went on to emphasize that space should not be a limiting factor. She described:

We have two gyms at our school. Makes it a little bit easier. So you can use the gym for DPA but you have to realize you don’t need a gym. You can do it in your classroom. You can do it outside in the yard. You can do it, like, anywhere! It’s just running around and being fit and having fun. That’s really all it is.

Kim also pointed out that resources are often an issue for schools when implementing DPA but her school does not want for equipment to promote participation in DPA. Her school highly values physical activity and the physical education staff, along with the parent council, ensure they have equipment to support “any kind of activity”.

Nicole, although working at a school within a less affluent community, utilized the spaces and equipment available to her. She consistently used physical education equipment to support different activities within her DPA program. For example, she stated: “We always use a lot of equipment from the gym to supplement whatever they are doing. Like when we were doing Jump Rope for Heart this year I took out jump ropes and they were just practicing.” Not only did Nicole use school physical education equipment but, if it is available, she used the gymnasium when classroom space is insufficient. However, most of the time she would go outside or “move shelves or desks to open up the class”.

Much of this thinking parallels current research pertaining to barriers faced by teachers in implementing DPA. Rickwood (2015) highlights an extensive list of barriers to DPA participation including a lack of resources (equipment) or space. It is vital to note that all participants used not only their classrooms but other spaces in their schools as well. They were able to run activities with the use of equipment or little to no equipment. Kim felt particularly
strong about the ease of running the program. When elaborating on the barriers teachers face, she countered “some people say ‘what happens when it’s raining?’, ‘what happens when we don’t have a gym?’, ‘what happens when we don’t have the equipment?’ Well, do something with nothing!” Kim’s statement in this instance provides evidence that the barrier of resources and space can be overcome in many different ways by regular classroom teachers. This thinking corresponds to solutions cited in a study by Strampel et al. (2014) which include using minimal equipment and incorporating resources that are already available to make DPA implementation easier.

**4.2.2 Participants tapped into community resources and programs to supplement and support their DPA programs.**

Not only did participants utilize school resources to aid in implementing DPA with their classes, but they tapped into community resources as well. Nicole’s strategy was simple; she talked to teachers outside of her school that taught the same grade to share ideas and discuss different games and activities to incorporate into the class. She also looked to the online teaching community to seek out resources and ideas through Pinterest and other online sources.

Conversely, Gary used the local community as a direct means of implementing DPA. He took his class on a ‘brisk’ morning walks almost every morning as their DPA session. This walk, no matter the season, allowed students to interact with the local and natural world around them, meet community members and get their heart rates up.

Similarly, the entire student body of Kim’s school participate in a school-wide DPA run once a week. She elaborated, “So 150 kids to 200 every week… we run a kilometre and a half through our neighbourhood and it’s quite a sight to see!” This run has not only connected the
students to their own community but has inspired parents to get involved in healthy living initiatives in the school as well.

In addition to directly performing DPA within the local community, Kim also reached out to community organizations to support DPA at her school. She described this idea as her biggest learning:

I think the thing I learned is that all you have to do is ask. When I asked for community organizations to come and volunteer their time we had more people than we had space for... so just asking… getting some connections… having people come in and do activities for your class.

In this way, Kim was able to provide a variety of activities for her students to participate in, such as karate, cricket and cycling.

This particular finding was significant in that the use of community resources aided teachers in overcoming particular barriers to DPA. For instance, much of the literature agrees that time is a substantial concern for teachers when planning for DPA (Patton, 2012; Rickwood, 2015; Stone et al., 2012). Kim’s method of incorporating community programs into her DPA alleviates some of the planning time associated with the program by having someone else leading the students. The notion that teachers could use outside community members to help facilitate their DPA program is a new finding. However, Strampel et al. (2014) had previously suggested using students as leaders to take the onus off individual teachers to run the program. Further, as outlined in the previous subtheme, school space can be a barrier to DPA (Rickwood, 2015). By using available outdoor, community spaces, regardless of the weather or season, teachers can overcome this barrier. These findings align with current research and validate previous explorations of barriers teachers face when implementing DPA. Some of the strategies used,
however, add to the current body of literature, as very few studies have looked at solutions to common barriers.

4.3 Participants Highlighted the Importance of School-based and Board Support in Implementing a Successful DPA Program.

While the previous theme explored participants’ use of resources, the following section encompasses two important questions guiding the research around the effects of administrative and colleague support, as well as the future needs of the program. There was a great deal of overlap between participants’ views on what is necessary for the DPA program going forward and the importance of the support of school staff and, thus, this theme comprises both questions. All study participants, having either the support or lack-thereof from administration for DPA in their classes, asserted that such support is a vital component of a school-wide approach to implementing the program. Additionally, the support of colleagues was also correlated with the participation in DPA on a school-wide basis. Finally, participants noted that more support from the board was needed in order to train and ensure readiness of teachers to implement DPA in their schools. It is vital to recognize the ways in which teachers believe DPA can be further supported in order to grow participation in the program.

4.3.1 Participants indicated the support of administrators was crucial for school-wide DPA participation.

Administrative support was the single most indicative factor of whether or not DPA was implemented at a school-wide level. The supports from administration for participants ranged from none to direct involvement, which corresponded to the frequency of DPA participation within the school.
Nicole, when reflecting upon the support she received from administration for DPA, bluntly replied “none”. She went on to reveal that it was not something that is a priority within the school. She reflected:

I think schools should do more. This school I think doesn’t do enough. I think schools should be at the forefront of getting kids active. Never has someone from admin or other teachers come in and been like, ‘Oh, how’s your physical movement? Like, what are you doing to get them moving?’

This lack of check-in and support Nicole felt was reflected throughout the school. When asked how often DPA was implemented in her school, she noted that she did not see any other teachers participating in the mandated program. One of the ways Nicole desired support from administration was through time-tableing. She asserted:

I think there should be time slotted into the timetable. You know how they give you the timetable and you have to do math in this chunk or you have to do music in this chunk. They should have it so you also have to do DPA… so teachers have to plan for it.

She felt that more should be done on the part of the schools, particularly support from administration. Overall, there is no administrative support currently at Nicole’s school regarding DPA and this equates to rare participation in this mandated program.

When considering Gary’s situation, the support he received from administration is slightly different than Nicole. He began by noting that the priority in his school, as well as the surrounding family of schools, is very much literacy and numeracy focused. That being said, Gary still received more support from his principal than Nicole. When discussing the kind of support he receives from admin when it comes to DPA, Gary explained:
In terms of support I don’t think he’s directly supporting… he’s acknowledging and appreciating and understanding that we’re actually doing our DPA and I think he’s had some positive feedback from parents as well, but, you know, he’s in a difficult position because if they make too much of a big deal out of it then people get resentful. So I think he supports me as much as he can, but in terms of getting a pat on the back or using me as an example, I don’t think that’s going to happen.

It seems as though Gary’s principal believes that doing DPA is a positive thing and appreciates his actions but will not directly support or encourage participation in a school-wide manner so as not to put other staff members in an uncomfortable position. His statement makes it clear why DPA is not a priority within the school and when commenting on the frequency of DPA participation in his school Gary claimed “there’s no DPA going on.”

Parallel to Nicole’s thoughts, Gary also acknowledged the importance of timetabling. He said “I think it starts with the admin. If you have an admin team that doesn’t value physical activity and phys-ed they can have a huge impact because they are responsible for timetabling in particular.” Again, it is emphasized that the support of administration can go a long way in encouraging participation in DPA.

Kim’s experiences also illustrate the importance of administrative support in DPA participation. However, in her circumstance, there was a great deal of support. She began by stating “definitely, the support of administration is a big one.” The support she receives from administration she describes as much more than just a “thumbs up”. When asked to elaborate, she explained:

First of all, timetabling the DPA. I know that it would be a chore when you have to timetable everything else, like literacy, social studies and math. I think that’s really the
main support and also allowing us to do these things and knowing it’s important. That it’s not just us going out to run just to run. It’s because overall it will help our school in the long run.

Kim’s example of support from her administrative team exemplifies what the other participants were not receiving, although both noted its importance. For Kim, the value of DPA began at the administrative level and permeated the entire school community. DPA became part of the school identity, supported by the staff, as well as families, and takes place “all the time”.

Current views on physical education, as reflected in the research, place a much higher status on literacy and numeracy, with far too few schools making physical education a priority (Rickwood, 2015). Nicole sums up what is suggested in the research when she insisted, “They see math or English or science as more important. I think they need to recognize that everything is just as important in the classroom.” It has been noted that there has been shift and a decreased focus on physical education in Ontario (Dwyer et al., 2003; Rickwood, 2015; Strampel et al., 2014). This lack of importance can be seen in administration, all the way up to the Ministry level in Ontario, with a cutting of physical education time in favour of ‘core’ curricular courses (Rickwood, 2015). In addition, it is suggested that although administrators are more favourable than teachers when it comes to implementing and sustaining DPA programs, this has not equated to follow-up or success of the program (Patton, 2012). When physical education importance is not reinforced by administrators and there is no follow-up, many teachers share the feeling that it is ‘okay to omit’ DPA (Patton, 2012).

The experiences of both Gary and Nicole support the aforementioned research suggesting that physical education is not being made a priority in many schools, and the mandatory DPA policy is being overlooked and not consistently implemented. Their viewpoints confirm the
The importance of support and buy-in from administration in order to ensure DPA can be successfully implemented on a school-wide level. In contrast, Kim, who has a supportive principal, suggests that this is a major reason for the success of DPA in her school. Thus, previous research stating that administration can be a barrier to DPA participation is very relevant and in alignment with teacher experiences. This current study, however, adds to previous research by suggesting that administrative support is a necessary component of successful DPA programming in a school.

4.3.2 Participants noted that having the support of other colleagues aided in the successful implementation of DPA.

Successfully engaging an entire staff to get onboard with any project can be difficult. Implementing DPA is no different; staff are often resistant to the concept, and the program is inconsistently demonstrated across Ontario (Patton, 2012; Rickwood, 2015; Stone et al., 2012). Participants’ experiences with their colleagues were varied and, without staff buy-in, the program was not implemented.

To begin, a school at which DPA is done consistently by all staff members will be discussed. Following the success and the noted benefits from the 2011 study of their Grade 6’s noted in 4.1.3, teachers at Kim’s school began to get onboard. She stated “We started taking it more seriously… because the teachers bought in.” In congruence with section 4.1.3, these teachers observed, or were made aware, of the multitude of benefits that implementing DPA had on their students physically, socio-emotionally and academically. This encouraged their commitment to ensuring DPA was implemented across the entire school. However, this is not often the case.
As noted above, Gary worked at a school in which he was the only teacher that participated in DPA. He went on to discuss some of the reasons behind this fact and responded:

A lot of them are doing what’s easiest for them. A lot of them are doing what they’re comfortable with and what they want to do. If they know they’re not being policed and they’re not being checked up on, and it’s something they don’t want to do, then they simply won’t do it… and if you try to tell them the kids would benefit from it… I guess the reality is that you have to be doing your program for the right reasons. You have to care about the kids. You have to believe there is a benefit to it and if that isn’t there I think… and it’s not being policed… then I don’t think you can make people do it.

Gary’s strong feelings about this subject were clear and illustrate several problems. First, teachers are reluctant to add something to their already busy schedules when it isn’t being followed up on. Second, unlike at Kim’s school, these teachers may not have not seen the benefits first hand.

Unlike Gary, Nicole had some support within her school. The physical education teacher at her school was described as a great support and resource for her when implementing her DPA program. He was a huge physical activity advocate and provided her with tools, ideas and support to ensure the students were as active as they could be. However, Nicole found that most other teachers at her school were not participating in DPA.

Participants’ observations about colleague support and behaviour mimic what is found in current literature. They note that there may be a lack of education which is leading to the lack-luster commitment to DPA. Patton (2012) suggests that teachers may have a lack of knowledge around how to implement a successful DPA program. Additionally, participants also acknowledged the sense of time pressure on teachers. This is the most commonly cited barrier
for teachers when implementing DPA (Patton, 2012; Rickwood, 2015; Strampel et al., 2014). Some teachers even feel that taking time away from other content areas would detract from the academic success of their students (Patton, 2012). The experiences of participants’ with regard to teacher participation in DPA confirm and validate current research that summates the perceived barriers to implementing the program. In addition, this study posits that a supportive staff can encourage successful participation in DPA.

4.3.3 Participants identified further training and instructional resources as necessary for ensuring the successful implementation of DPA.

When considering what further supports the DPA program needed, participants tended to focus on further training or instructional resources to not only better their own practice, but to encourage others to participate as well.

Kim described the onset of DPA in 2005 and insisted that, although there were a lot of DPA workshops to begin, teachers were, for the most part, left on their own. She recommended that future workshops for teachers be run by the Ministry of Education and individual school boards to ensure there is continued support in running a DPA program. Nicole echoed this view of DPA program needs when she advised:

I really think they need to do more PD on it, professional development on it, so that we know what to do. More support doing it. Like maybe more discussions about how we can do it. Like success things. Like what works and what doesn’t work so we can do it.

She further explained, “I don’t know a lot of teachers who love it. I’m wondering now if they just don’t know what to do. Maybe they just think it’s running around outside. Maybe if they were more educated…?” This posits that the need for further education stems from a lack of knowledge of DPA amongst teachers.
In addition to further resources and training, Gary asserted that DPA is something that needs to be embraced beyond just the individual school level. His school works in a ‘family of schools’ and he believed it could make more of an impact if taken on at this level. He suggested:

If there was training that could occur for teachers. If the board was willing to pay some money and have classroom teachers, especially senior classroom teachers. A mini workshop or like half a day where they talked about the benefits of DPA or even give them ideas or strategies on how to implement it… because I think that right now a lot of the sort of negativity or lack of buy in might simply be because people don’t know how to do it and they’re not willing to take the time and energy to look up and figure it out.

Many of the aforementioned suggestions for further support require additional professional development. This finding is indicative of current research and is shared by Patton (2012) who showed the majority of teachers are not yet clear on the guidelines on DPA set out by the Ministry of Education. He also suggests that teachers have a lack of knowledge of how to implement DPA successfully. This finding, supported by current literature, offers a rationale for providing further professional development and training for teachers around DPA and its implementation. Patton (2012) shares this view and suggests that DPA should be run by physical education specialists but, in the absence of such specialists, further professional development is needed in addition to education and training in teacher education programs. Participants’ experiences suggest there is a lack of knowledge around the resources that are currently available, and the implementation of further training and professional development could address this knowledge gap.

Moreover, there is a significant body of research describing a lack of accountability as a strong factor in determining the success of DPA (Chorney, 2009; Robertson-Wilson & Levesque,
2009). However, only Nicole spoke to this fact when she stated, “It’s so frustrating. The board is like ‘everyone has to do DPA’ but they don’t follow up on it”. A recent study evaluated the development of the DPA policy and argued that in many ways, the program is set up for success but is still lacking sufficient evaluation plans (Robertson-Wilson & Levesque, 2009). Further, Chorney (2009) found that there is little being done to ensure the program is being abided by in Ontario. Although not all participants made note of the need for evaluation and follow-up of DPA, it is a significant finding suggesting that future research must consider program evaluation as an important factor in successful DPA implementation.

4.4 Conclusion

In conclusion, this study found that classroom teachers can implement successful DPA programs despite the barriers they face. Regardless of their divergent backgrounds and school demographics, many connections and correlations can be shown across the practice of the three interviewees. All participants’ recognized that their past and present personal and educational experiences have encouraged them to participate and to commit to running DPA in their classrooms. By building a base of common characteristics of teachers participating in DPA, this study adds new information to the current body of research that mainly focuses on the barriers to implementation. Further, these teachers explained various ways they were able to utilize school and community resources to overcome barriers to the implementation of DPA. Their experiences confirm that commonly cited barriers, including space and resources can be overcome through different means. Finally, participants’ spoke to the current supports and additional needs for DPA in order to ensure the future success of the program. Their suggestions illustrate many of the current problems teachers face when implementing DPA. In addition, participants put forth
some possible solutions, both explicitly stated and implied through discussion of their own successful practices.

As mentioned above, much of the current literature focuses on barriers to DPA implementation and the reasons behind the failures of the program. The findings of this study, then, make a substantial contribution to the literature by bringing educators one step closer to comprehending the necessary steps to overcoming such barriers and successfully implementing DPA. In this way, teachers can aid their students’ learning and well-being for years to come. In the following chapter I will discuss and dissect the overall significance of this study by highlighting the implications for the broader educational community concerning the DPA program in Ontario, including recommendations for future practice and study.

Chapter 5: Implications

5.0 Introduction

This chapter expands upon the findings in Chapter 4, outlining the overall implications and significance of this research study. To begin, the key findings will be delineated and summarized, followed by a discussion of the implications of these findings for both the educational research community and my own professional identity and practice. With this in mind, recommendations for educational professionals and stakeholders will be reported upon. Finally, unanswered questions will be outlined and directions for further research will be suggested.

5.1 Overview of Key Findings and their Significance

As discussed in the previous chapter, teachers implementing DPA programs in their classrooms share common characteristics and experiences. First, they have, at some point in their
lives, developed a love for physical activity and keeping themselves active. Additionally, all participants have relevant knowledge of the benefits of physical activity for their students, from previous formal education, completing Physical Education additional qualifications, or through self-education, completing their own research. Finally, all participants have experienced the benefits of DPA participation with their students, whether physical, socio-emotional, or academic, as supported by current research. These common experiences and attributes play a vital role in their continued commitment to implementing DPA in their classrooms, and may be common among other participating teachers.

Not only did participants share common characteristics, but they also used specific strategies to negate common barriers to DPA participation. These teachers stressed the use of available resources, both in school and community-wide, to support their DPA programs. Teachers made use of their own classroom spaces, as well as gymnasium space in the school and outdoor space, in order to ensure their DPA activities varied, and to ensure ‘space’ did not negatively influence their ability to participate. Additionally, participants used community resources to support their implementation of DPA by utilizing community space, outside programs, and others in the teaching community. By accessing community resources, these teachers were able to negate such barriers as time constraints, lack of space, and lack of resources.

Finally, a finding of immense significance is the importance of school-based and board support in ensuring successful DPA programs. Participants’ experiences showed that administrative support was the single most indicative factor in whether or not DPA was implemented on a school-wide level. Schools with little to no support had rare implementation by staff, whereas strong administrative support was associated with a school-wide DPA
approach. Colleague support was also discussed, and participants suggested some explanations for a lack of support amongst fellow staff members. This section also illustrated future needs and supports necessary for the program, including time-tableing of DPA, board follow-up and evaluation, as well as further professional development and learning opportunities from individual school boards.

The findings of this study, then, go beyond what has been previously discussed and examined in current research on DPA to influence implications and recommendations for the educational community and outline where future needs in research lie. These implications and recommendations will be discussed in the sections to follow.

5.2 Implications

In this section, the implications of this study for the educational research community, including school boards, schools and educational professionals, is outlined. Additionally, the implications for my own identity as a teacher-researcher and development as a new teacher are touched upon.

5.2.1 Broad: The educational research community

One of the most important implications for the educational community is the understanding of the benefits of physical activity for students and teachers. Much of this knowledge has been documented in previous research, however, these first-hand accounts of the benefits teachers experienced when implementing DPA into their daily teaching practice should be noted by educators from the Ministry of Education, school boards, administrators and classroom teachers. Not only did participants observe benefits to students’ physical and socio-emotional health, but there were benefits for their learning as well, including focus, attention and
increased academic success. These not only benefit the students themselves, but aid teachers in classroom management.

Further, educators should note some of the strategies these participants used to overcome barriers to DPA. Teachers must understand they have the ability to use spaces and resources beyond their own classroom, including community resources to engage students in DPA. Additionally, time-tableing their own DPA can ensure adherence to the program as well. By using such strategies, teachers can successfully incorporate DPA.

Finally, it is important for administrators to note their own role in supporting DPA and therefore, the overall health and well-being of their students. The findings of this study make clear the vital role principals and other administrators play in aiding or hindering the implementation of DPA in their schools. Administrators must understand that without their explicit support, involvement or follow-up, DPA is unlikely to occur within their school.

5.2.2 Narrow: Professional identity and practice

Along with the implications for the educational community, this study has also influenced me personally in relation to my own professional identity. The study findings confirmed much of what I had originally garnered through research: that there are a myriad of benefits to implementing DPA and that it is an important policy in Ontario with the intention of holistically developing children. I have always had a strong commitment to health and physical education, as noted in Chapter 1, and feel that DPA can be a contributor to the health of my students. After conducting research with teachers that successfully run DPA programs, I have become more aware of strategies to overcome several barriers teachers face when implementing DPA, and am committed to using them in my own classroom.
Additionally, I feel connected to my study participants because I share their love of physical activity and the knowledge base to understand the importance of incorporating this program into my own teaching practice. This has been the beginning of my journey as a teacher-researcher as has sparked in me a thirst for knowledge. As much as I gained from the findings of this study, there is still so much to be uncovered in the realm of DPA and physical education. Therefore, I feel that the main implication for my own personal identity and teaching practice will be the continued reflection and research to influence my development as a teacher with regard to this area of study.

5.3 Recommendations

In addition to many of the implications mentioned, several recommendations for educational stakeholders have arisen upon completion of this study. The Ministry of Education introduced DPA as a mandatory program in 2005, but, since that time, there has been little to no evaluation or follow-up. A major recommendation, influenced by participant suggestion, would be to institute a method of evaluation for DPA in school boards across Ontario. This would have to take place at the Ministry level to ensure all Ontario boards take part. The absence of follow-up and ownership was noted by participants as a reason for both the lack of administrative support and the lack of participation by colleagues. For this reason, such a policy would be necessary to ensure that someone is responsible for ensuring DPA takes place in all schools. Such a policy would have a trickle-down effect from the Ministry of Education to individual boards, with some responsibility falling to school administration to evaluate the program.

Additionally, based on participant responses around program needs, it is recommended that further training or professional development be available for teachers to take part in. As suggested in the previous chapter, many teachers may not feel prepared to implement DPA or be
educated enough on the topic to understand the benefits of taking part. This professional
development would then have to be twofold: learning how to structure and run a successful
classroom DPA program, and an introduction to the benefits of physical activity participation for
students physical and socio-emotional well-being, as well as the academic benefits. As noted
above, study participants’ knowledge of such benefits led them to continue implementing DPA
in their classrooms. By allowing for the same type of learning for all Ontario educators, one can
posit that others would likely begin incorporating DPA into their classrooms.

Beyond further education for current educators, teacher education programs must also
work to ready pre-service teachers to implement DPA. Although this training need not be
expansive, it is necessary to provide resources and strategies to new teachers in order to cover
this important curricular component in their future.

One of the major findings of this study was the correlation between administrator support
and the incidence of DPA participation within the school. All participants mentioned one
strategy that was, or would be, helpful, stemming from the administrative team: timetabling. Kim
noted that having DPA in the schedule each day ensured accountability from teachers and
promoted participation within the school. However, both Nicole and Gary affirmed that this
would be a helpful practice to increase accountability of their colleagues in successfully
implementing DPA. Thus, the final recommendation is for administrators to ensure DPA is
scheduled into the timetable for all classroom teachers.

5.4 Areas for Further Research

This study went a long way in adding to the current body of research, indicating
commonalities of teachers participating in DPA, highlighting strategies to overcome barriers to
DPA, and indicating some of the future needs of the program. However, needs for future research have become apparent upon completion of the study.

While reviewing current research into DPA it became apparent that little evaluation of the program has been completed. A select few studies looked at physical activity participation in Ontario schools and concluded that meeting physical activity recommendations is a rare occurrence (Rickwood, 2015; Stone et al., 2012). Several other studies interviewed teachers for their perspectives on the program and how often they participate, concluding that the policy is not being implemented successfully (Patton, 2012; Strampel et al., 2014). However, these studies were completed with smaller community-specific samples and there has been no formal evaluation or study completed to conclude the rate at which DPA takes place across Ontario, in order to concretely confirm the success, or lack there-of, of the program. For this reason, quantitative analysis must take place to confirm what has been suggested in this study and others: that DPA is rarely implemented across Ontario. Only by confirming this fact can some of the above recommendations be implemented to aid in the success of the program.

Although several successful strategies were revealed in this study to negate common barriers to DPA, including lack of time, lack of space and lack of resources, future study must build on this start to determine additional strategies for successfully implementing DPA. Strampel et al. (2014) suggested some solutions but their respondents were not actively participating in the program unlike those in the current study. By focusing future research purely on successful strategies for implementing DPA and overcoming barriers, research can build a well-rounded answer for any obstacle that teachers may face. Specifically, more attention must be given to a teachers’ lack of time and potential strategies to support in overcoming this barrier. Finally, as discussed in Chapter 2, a barrier to DPA implementation has been the low priority of
physical education. Teachers’ perspectives in this area must first be explored if a shift in priority is to take place. Participants in this study agreed that this is a problem but were not able to shed light on potential solutions.

By gathering a more thorough understanding of the current status of DPA in Ontario in addition to furthering the development of strategies to negate barriers to DPA, one can begin to form a better idea as to the next steps for the policy.

5.5 Concluding Comments

This research study has helped to promote a better understanding of the complexities of implementing DPA in classrooms across Ontario. Despite its standing as a mandatory curricular component, and the support from various stakeholders, including all study participants, implementation is inconsistent at best. Through exploration of the literature and interviews with three educators committed to DPA in their classrooms, findings have emerged to support further development of the program in Ontario. In addition, this study has further cemented the importance of DPA as a teaching strategy to benefit all students and has uncovered various strategies for ensuring successful implementation. Finally, the experiences and viewpoints of all participants have uncovered numerous implications and recommendations for further development and implementation of DPA. Although the status of DPA in Ontario currently looks grim, this study aids in promoting solutions and next steps to enhance the program and promote the well-being and success of all students.
References


Appendix A: Letter of Consent for Interviews

Date:

Dear _______________________________,

My Name is Laura Stewart and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on how elementary teachers are successfully implementing DPA in their school or classroom. I am interested in interviewing teachers who show a commitment to DPA and have some background in physical education. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one 45-60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates. I may also present my research findings via conference presentations and/or through publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. Any information that identifies your school or students will also be excluded. The interview data will be stored on my password-protected computer and the only person who will have access to the research data will be my course instructor Angela MacDonald-Vemic. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question during the interview. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks to participation, and I will share a copy of the transcript with you shortly after the interview to ensure accuracy.

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,

Laura Stewart
Email: lc.stewart@mail.utoronto.ca

Course Instructor’s Name: Angela MacDonald-Vemic
Contact Info: angela.macdonald@utoronto.ca

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 from this research study at any time without penalty.

I have read the letter provided to me by Laura Stewart 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

Introductory Script: Thank you for agreeing to participate in this research study, and for making time to be interviewed today. This research study aims to learn how a sample of teachers are able to successfully implement DPA programs in their classrooms despite the barriers they face. This interview will last approximately 45-60 minutes, and I will ask you a series of questions focused on your background and experiences with the DPA program. I want to remind you that you may refrain from answering any question, and you have the right to withdraw your participation from the study at any time. As I explained in the consent letter, this interview will be audio-recorded. Do you have any questions before we begin?

Background Information

1. How long have you been teaching?
2. What is your current position?
   a. What grades and subject areas do you currently teach?
   b. Is that different to what you have taught previously?
   c. Do you have any other roles in your school? (e.g. coach? Advisor? Resource?)
3. Can you tell me more about the school you work in? (e.g. size, demographics, program priorities)
   a. Does your school have a whole-school approach to implementing DPA? If yes, can you tell me more about it?
   b. How common is it for teachers in your school to implement DPA? (e.g. implemented all the time, often, sometimes, rarely, never?)
   c. How many years have you taught at this school? Have you taught at other schools?
4. What experiences contributed to developing your interest in health and physical education, and what experiences helped prepare you for implementing DPA in your everyday teaching practice?
   a. Personal experiences? (e.g. own experience in K-12, own commitment to healthy and active lifestyle)
   b. Educational experiences? (e.g. university course work, certifications, teachers college, additional qualifications, professional development)
   c. Professional experiences? (e.g. teaching experience, employment positions)

Teacher Perspectives/Beliefs

5. In your view, what are some of the key challenges confronting students’ physical health?
6. What do you believe is the role of schools in fostering healthy and active lifestyles?
7. In your experience, how well are schools doing in this endeavour?
8. What do you think are some of the key barriers getting in the way? How do you think these barriers could be addressed?
9. How do you understand the role of DPA in addressing the challenges facing students’ health and schools’ capacity to foster healthy and active lifestyles?
10. What does Daily Physical Activity mean to you? What do you include and exclude from this practice and why?
11. In your view, what are some of the primary goals of DPA?
12. How long have you been using DPA as a tool in your classroom?
   a. Why do you feel this is an important practice?
   b. What inspires you to continue this practice?
13. What benefits have you seen through incorporating a DPA program?
14. In your experience, what are students’ attitudes toward DPA?
15. And teachers’ attitudes?

Teacher Practices
16. What does DPA look like in your classroom? (How often, duration, time of day)
17. What are the goals of your DPA program?
18. What types of activities do you perform with your students? (examples)
19. What are some key resources that you use to support your DPA program? (e.g. equipment, space, music, websites, videos, manipulatives)
20. How do you find the time to implement DPA into your everyday teaching practice?
21. Do you find yourself incorporating DPA cross-curricularly? If so, how are you able to do this? (specific example(s))
   a. What curriculum do you connect to and how?
   b. What have been your learning goals?
   c. What opportunities for learning have you created?
   d. What resources have you used?
   e. How did your students respond? What outcomes of learning did you observe from them?
   f. What did you assess and why? How did you assess your students during these lessons?
22. Given how little accountability there is from the school system for ensuring that DPA is being implemented, how do you find the momentum to consistency integrate it into your teaching practice?
23. How do you hold yourself and your students accountable to implementing DPA?
   a. How are you able to assess the success of your program? (How do you ensure all students are working at moderate to vigorous levels?)
24. What benefits have you seen in your students while implementing this program?

School Climate
25. What kind of support, if any, do you receive from your school administration for DPA? (Does your principal/vice-principal support the program?)
26. What kind of resources and spaces are available within the school to aid in your DPA program? (Are these resources / spaces adequate?)
27. What does DPA buy-in look like in the rest of the school? Are other teachers as committed as you?

Supports & Challenges

28. What kind of barriers and challenges do you encounter when planning for and implementing DPA in your classroom/school?
29. How have you responded to the challenges you face?
30. What range of supports would help you further address the barriers and challenges you face? What further supports do you feel the program requires? (perhaps at the school/board/governmental level)

Next Steps

31. What are your goals for developing your DPA program?
32. What advice would you give a beginning teacher who is interested in implementing DPA in his/her classroom on an everyday level, and who is committed to fostering whole school implementation of DPA?

Thank you for your participation in this research study.