Daily Physical Activity: Teachers’ Strategies for the Implementation of a Consistent and Effective Program

By

Anne Bubienczyk

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Abstract

Physical activity is an integral part of a healthy lifestyle. In 2005, the Ontario
government announced that publicly funded schools from grades 1-8 would be required to
implement Daily Physical Activity (DPA), a program where students are to engage in physical
activity for twenty minutes a day. This qualitative research project details teacher perceptions of,
and strategies for, the consistent and effective implementation of the Daily Physical Activity
program. Teachers report improved student behaviour, a greater level of student engagement,
and an overall positive classroom atmosphere after their students have engaged in a session of
DPA. The purpose of this paper was to detail the implementation strategies of teachers
committed to promoting the DPA program and instilling values of physical activity and
wellbeing in their students. Through semi-structured interviews with three educators, this paper
has brought to light the techniques and strategies teachers can integrate into their practice in
order to actively implement DPA. When implemented consistently, DPA has the capacity to
promote habits of a physically active and healthy lifestyle, promoting student wellbeing. This
paper details ways to engender these values, and promote the program through one’s teaching
practice.

Key Words: Daily Physical Activity (DPA), Wellbeing, Student Engagement, Healthy
Lifestyle, Implementation Strategies
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Chapter 1: Introduction

1.0 Research Context

In 2005, the Ontario government announced that publicly funded schools from grades 1-8 would be required to implement Daily Physical Activity (DPA), a program that demands an allotment of a minimum of 20 minutes a day in each classroom to “sustained moderate to vigorous physical activity each school day during instructional time” (Ontario Ministry of Education, 2005). In present-day North America, there is great concern over the physical health of children, largely due to a sedentary lifestyle (which has only been promulgated through the presence of electronics, such as iPhones, iPads, and various online games and activities), and a lack of healthy eating habits. Ontario, following Alberta, and preceding British Colombia, represents the second Canadian province to instill a mandated DPA program for elementary school students (Chorney, 2009, p. 12). This implementation marks the government’s recognition of the importance of physical activity in the health and development of children. The government recognized that although Health and Physical Education are integral in the Ontario curriculum, there are certain days when students do not engage in actual physical activity. The days when students have scheduled physical education classes, the DPA requirement is fulfilled (Patton, Overend, Mandich & Miller, 2014, p. 12). Hence, DPA programming would ensure that students engage in at least several minutes of physical activity every single day (Ontario Ministry of Education, 2005).

In the Policy/Program Memorandum, the Ministry promulgates the merits of DPA, stating that the regular and positive exposure to physical activity can “help lay the foundation for healthy, productive lives” (Ontario Ministry of Education, 2005). In the Memorandum actualizing DPA, reference is made to the serious physical and social wellbeing consequences of
childhood inactivity. For example, children who lack engagement in physical activity are at greater risk of developing serious illnesses, such as heart disease and diabetes (Ontario Ministry of Education, 2005). The fact that trends of childhood inactivity have seen a significant increase in the past 25 years emphasizes the necessity for intervention, which has been actualized in the form of DPA (Ontario Ministry of Education, 2005). However, despite mandated DPA programming across Ontario, teachers report the failure to fully implement DPA. A packed curriculum means that oftentimes, little emphasis is placed on DPA, despite it being a required component of the Ontario Education Curriculum.

1.1 Research Problem

Since DPA programming engages children in physical activity for a minimum of 20 minutes per day, one of the main preventable causes of obesity, the lack of physical activity, is addressed in the school curriculum (Strampel et al., 2014, p. 14). Yet despite the introduction of DPA as a required component of the Ontario Curriculum in 2005, teachers report that DPA largely fails to be carried out as an integral element of daily school lessons. Research shows that DPA is not enforced to Ontario Ministry standards (Stone, Faulkner, Zeglen-Hunt, & Bonne, 2012, p. 12). Teachers report several reasons explaining the difficulties and barriers in implementing regular DPA programming into the classroom. For example, teacher-reported barriers to DPA’s implementation include, “lack of time due to other curriculum pressures; lack of resources; lack of space; and lack of staff and student “buy-in”” (Strampel et al., 2014, p. 15). Thus, in spite of the positive effects that DPA programming can engender in students, this mandated program appears to be variably implemented, meaning students may not benefit from its potential health and wellbeing merits.
1.2 Purpose of the Study

Based on a review of past literature suggesting that DPA is not being fully implemented despite it being a Ministry requirement, the purpose of my study was to learn how DPA can be better integrated as a daily component of the learning environment, in order to improve the overall wellbeing of children. I examined whether the discrepancy between the positive effects of DPA and its lack of implementation is being addressed by teachers, and how. Seeing as a sedentary lifestyle has become an increasingly problematic reality in school-aged children in North America, through qualitative study, I also sought to examine how the implementation of daily mandatory physical activity has impacted the wellbeing of students. Through teacher perspectives, I examined the potential of DPA programming to affect child development, in terms of several variables, including: physical health, mental health, and behaviour. I gained a greater understanding of how teachers are able to implement the DPA program as an integral, daily component of their teaching, by inquiring if factors such as resources, time, and special conditions affect their ability to implement DPA as a daily reality.

My research examined ways that teachers are addressing the lack of DPA implementation. The purpose of my research was to raise awareness of the strategies that can be implemented to fulfill the daily mandated physical activity each day, in order to promote child wellbeing. In response to findings that illustrate and discuss barriers that teachers perceive in implementing DPA, my own research sought to determine how to better engage students in DPA, and how to address the lack of student, and overall school interest in DPA. I investigated whether teachers have implemented any specific methods or techniques that help them consistently and effectively implement DPA in their classrooms. Encompassing their efforts, I
sought to find out whether changes in implementing DPA are being made at the teacher, principal, or school-wide level, and how these efforts are being accepted or challenged.

1.3 Research Questions

Research indicates that DPA is not being implemented fully, meaning its associated potential health benefits are not being attained by students. Therefore the primary question guiding my research is: What sort of changes (ie. teacher resources, curriculum expectations, daily school planning, school-community integration) can address the lack of DPA implementation?

Subsidiary questions relevant to my research asked:

• How are elementary school teachers implementing the DPA program as a part of their daily classroom routine?

• In what specific ways do teachers attribute DPA as impacting their students (ie. physical health, mental health, behaviour, interpersonal relationships, academic performance, etc.)?

• Are there factors that prevent teachers from implementing DPA?

• What resources may assist teachers in being able to better implement DPA into their daily lesson plans?

• How do teachers think DPA can be reorganized, in order for it to be run more consistently and efficiently?

1.4 Background of the Researcher/Reflexive Positioning Statement

Having been an elementary school student when the DPA program was first implemented, I recall the enthusiasm and interest that the new program generated amongst my classmates and I. Over the course of my undergraduate degree, the completion of several research papers has sparked my interest in the relationship between individuals’ engagement in
physical activity, and their physical and mental health and wellbeing. This greater understanding
led me to reflect upon the impact that my own school-facilitated physical activity experiences
may have had on the development of my interests and character. In society, there is a great
awareness of the health risks that a sedentary lifestyle and unhealthy habits can pose on child
wellbeing, as well as the health implications they have later in life. This has me reflecting on the
potential of school-facilitated physical activity, which was introduced during my own time as an
elementary school student, to address this serious health problem. Furthermore, my own
interests and hobbies, most notably my experiences as a ski instructor, have strengthened my
desire to promote the importance of physical activity in children.

1.5 Preview of the Whole

My MTRP refers to past work on my topic, as well as my own qualitative research, to
gain a greater understanding of the implications of school-facilitated physical activity for
children. Specifically, I examined whether, and how, elementary school teachers in Ontario are
implementing the DPA program as an integral part of their everyday teaching. Chapter 2
consists of a literature review. I present the work of past researchers and highlight their findings,
and make connections to my own research questions and goals. Additionally, I highlight the
themes and key ideas that present themselves, and may potentially guide my own research. In
Chapter 3 I present the various aspects of my qualitative research design, while in Chapter 4 I
analyze the meanings of my research findings. Finally, in Chapter 5 I suggest how my research
can impact the way educators can apply the implications of my findings in their teaching practice
in the classroom.
Chapter 2: Literature Review

2.0 Introduction

In this chapter I review the literature supporting the implementation of Daily Physical Activity (DPA), as well as the research that points to the fact that DPA largely fails to be implemented. I start by reviewing the literature exhibiting the positive attributes accredited to DPA. Specifically, I examine literature in the area of the physical and mental health benefits of several minutes of physical activity each day, and I seek research that examines plausible links between DPA and student behaviour, as well as student performance in school. Next, I review research that primarily reveals that DPA implementation is inconsistent, and oftentimes nonexistent in classrooms. In order to gain an understanding of why researchers report that DPA is largely not put into effect on a large scale despite research on its positive effects, I review the findings on the competing curricula demands that teachers face. Finally, I examine research that studies whether a lack of resources, and lack of adequate preparation and training for teachers can account for the shortcomings of DPA.

2.1 The Benefits of Daily Physical Activity

DPA was implemented in Ontario in 2005. This portion of my literature review seeks to uncover why DPA became a mandated component of the Ontario Curriculum. Existing research on regular child engagement in physical activity tends to agree on the corresponding positive health effects on children, contributing to their overall wellbeing.

2.1.1 Physical health

The Ontario Ministry of Education (2006) is a firm proponent of DPA, for the links between regular physical activity and “children’s growth and development,” as well as “students’ physical, mental, and social well-being” (p. 7). The Ontario Ministry of Education, in its
implementation of DPA in 2005, allotted 9 million dollars to school boards, as well as a further 1.7 million “invested in development, translation, and printing of resource guides” (Allison et al., 2014, p. 7).

In a very disconcerting statistic, less than 10% of children achieve Canada’s recommended physical activity guidelines as measured by number of steps (Robertson-Wilson & Levesque, 2009, p. 125). Moreover, in 2004, 26% of Canadian children (1.6 million), aged 2-7, were overweight (Strampel et al., 2014, p. 14). Childhood obesity translates to countless health issues, including orthopedic problems, liver disease, and other metabolic complications (Strampel et al., 2014, p. 14). Arguably, of equal significance are the psychosocial problems associated with childhood obesity, which include issues of stigmatization, self-esteem, depression, and bullying, as these issues can have serious effects on child development and mental health (Strampel et al., 2014, p. 14). Given that this statistic means that approximately a quarter of our nation’s children are susceptible to future diseases, and may face serious health consequences, if DPA is actualized and consistently applied in schools, the policy has the potential to address the alarming data on rates of childhood inactivity and childhood obesity.

Stone et al. (2012) conducted a study of students across 16 different schools in the Toronto District School Board, and found that students who participated in DPA were also more likely to engage in physical activity outside the classroom, indicating a positive relationship between the frequency of DPA and total physical activity (p. 173). Moreover, they found that students who did engage in DPA were less likely to be overweight or obese (Stone et al., 2012, p. 173).

Kall, Malmgren, Olsson, Linden and Nilsson’s (2015) work agrees with the findings of Stone’s study and has positive implications for their findings, as their work maintains that the
school environment, being the prime location where children spend the majority of their days, has the capacity to instill good habits, and initiate changes, meaning it is the prime location where positive health habits may be successfully established (p. 705). Regular positive health activities, habits, and routines, which can be introduced and carried out through DPA, can serve as a basis for engendering healthy habits in children, and instill “the foundation for healthy, productive lives” (Ontario Ministry of Education, 2006, p. 7). By ensuring that children are engaged in regular physical activity at school, DPA can promote the physical health of children, specifically, by contributing to the “growth of strong bones and muscles, help[ing] to develop good posture and balance, [and] strengthen[ing] the heart and lungs” (Ontario Ministry of Education, 2006, p. 7). By providing students with the opportunity for aerobic exercise, DPA can help improve the fitness levels of students and, “hav[e] a mediating influence on appetite, food intake, basal energy levels and on the cellular metabolic processes,” all promoting the physical health of students (Keays & Allison, 1995, p. 63). Moreover, “improved health and fitness can also result in improved self-esteem and self-confidence” (Ontario Ministry of Education, 2006, p. 7).

However, the necessity of incorporating moderate to vigorous physical activity when leading students in a session of physical activity is of utmost importance. Past research has found that the positive health and social benefits of physical activity can only be achieved when students are actively involved in the physical activity; this means that “the challenge for physical educators is not only incorporating movement skills and games to promote vigorous physical activity but also to target low SES children,” as children of lower socio-economic background tend to have less exposure to extra-curricular physical activity and organized sports and activities (Stevens, To, Stevenson & Lochbaum, 2008, p. 383). Thus, if implemented consistently and
equitably, DPA has the capacity to pass on positive health and social benefits to all children, regardless of their family background and socio-economic status. Moreover, when taking into account the studies highlighting the positive relationship between physical activity and academic achievement, this means that DPA may help students of lower socio-economic backgrounds receive the same positive benefits of physical engagement as students of higher socio-economic backgrounds.

2.1.2 Mental health

Although there is little existing research on the effects of physical activity on child mental health, “research involving adults consistently shows positive correlations between physical activity and mental health,” suggesting the need to conduct further research to explore whether a possible similar correlation exists (Lagerberg, 2005, p. 1699).

However, existing research does suggest a positive relationship between child physical activity and mental health. In a study of 10 year old boys and girls, where their physical activity was measured by a pedometer, followed by a questionnaire-based assessment of their mental health, Lagerberg (2005) puts forth that Parfitt and Eston found that children in the study who were more physically active reported less anxiety and depression, and higher self-esteem than the children who were less physically active. Moreover, the positive relationship between physical activity and self-esteem was especially evident for girls (Lagerberg, 2005, p. 1700). However, this finding represents only one study, and other causal links must also be considered, such as the fact that this demographic has not yet reached puberty, meaning they may be less susceptible to other issues of self-concept and self-esteem that are associated with puberty (Lagerberg, 2005, p. 1700). Reviewing their findings suggests the pressing need to conduct further research to determine to what degree physical activity can contribute to the mental health of children. In
addition, the work of Keays and Allison (1995) likewise implies the positive mental health attributes which may be correlated with regular physical activity, as they note the “significant improvements in attitudes, discipline, behaviour and creativity” that have been associated with daily physical activity in children (p. 64). If future studies corroborate the consensus that physical activity contributes to positive mental health, perhaps DPA will hold greater stature, and will be prioritized and implemented at a more consistent level.

In a somewhat contradictory view, Lagerberg (2005) suggests that in certain contexts, compulsory child physical activity may have counterproductive effects, placing children at risk of peer judgment, and teasing (p. 1700). If physical activity is forced on students, in certain instances, it may have unintentional negative effects on children. For example, if children are forced to engage in an exercise or activity that they do not perform well in, they may experience a sense of reluctance towards school facilitated physical activity (Lagerberg, 2005, p. 1700). My review of existing literature on DPA’s effects has not found any additional studies nor sources suggesting negative outcomes of DPA on students’ feelings of self-esteem. Nonetheless, as both a researcher and Teacher Candidate, I firmly believe that DPA’s implementation must be carried out in a manner that is inclusive and supportive.

2.1.3 Student performance in school

Trudeau and Shephard’s (2008) data found that “adding time to “academic” or “curricular” subjects by taking time from physical education programmes does not enhance grades in these subjects and may be detrimental to health” (p. 1). Fedewa and Ahn (2011) echo this point, as their “comprehensive, quantitative synthesis of literature” from 1947-2009 on the relationship between “physical activity and cognitive outcomes” has highlighted the positive relationship between the two (p. 521). Like Trudeau and Shephard, Fedewa and Ahn (2011)
maintain that physical activity has a positive effect on “children’s cognitive and academic achievement” (p. 530). Specifically, Fedewa and Ahn (2011) found that physical activity interventions that included “aerobic exercises,” and were conducted in small groups (for reference, classroom sizes are classified as medium group size) were especially effective in positively influencing children’s cognition (p. 530). Possible explanations for this relationship lie in the fact that the structure of smaller groups can facilitate more opportunity for play, and “both researchers and educators have argued that young children acquire particular cognitive skill sets through play and movement” (Fedewa & Ahn, 2011, p. 531). In fact, “increased activity may enhance arousal and minimize fatigue and boredom” (Fedewa & Ahn, 2011, p. 531). Additionally, “more neurological theories tout that changes in brain structure, function, and neurotransmitter concentrations occur in individuals who are more physically active” (Fedewa & Ahn, 2011, p. 531). Moreover, children who were measured as having high levels of physical fitness were also found to have “higher cognitive functions and academic achievement” (Fedewa & Ahn, 2011, p. 530). Thus, as Fedewa and Ahn (2011) highlight, children’s school engagement in physical activity should “be viewed as enhancing—not impeding—children’s academic achievement” (p. 532).

Paralleling the findings of Fedewa and Ahn, Trudeau and Shephard (2008) agree that physical activity specifically has “positive influences on concentration, memory and classroom behaviour” (p. 1). This relationship can be understood by the fact that “chronic exercise favourably influences the hippocampus” in various ways including through “heightened neurogenesis,” meaning an “increased formation of new neurons after chronic PA [physical activity]” (Trudeau & Shephard, 2008, p. 8). Likewise, the work of Stevens et al. (2008) agrees: “it appears that physical education with the aim of improving physical fitness in children will
add in improved academic performance” (p. 386). “Physical fitness, a result of consistent and vigorous physical activity engagement,” has been related to “enhanced neuronal indicates of cognitive functioning in children compared to unfit children” (Stevens et al., 2008. p. 385).

The findings of a Swedish study also suggest “curriculum-based physical activity in school may improve the academic achievement and psychological health of children, particularly for girls” (Kall et al., 2015, p. 704). For example, the elementary school aged girls who attended the “intervention schools” in Sweden (i.e. where physical activity programs were implemented as a part of the curriculum) performed better on national tests than did students attending the control schools (Kall et al., 2015, p. 704). Moreover, the behavioural and academic benefits of physical activity on grade 4-6 aged girls can be explained by the decrease in hyperactivity, stress, and boredom which girls exhibited as a result of school-implemented physical activity (Kall et al., 2015, p. 711).

Finally, DPA has the potential to instill an increased sense of school community, as “school sport or PA programmes [have been linked] with other psychosocial outcomes, such as school satisfaction and school connectedness,” and “both school connectedness and school satisfaction are factors preventing drop-out from school” (Trudeau & Shephard, 2008, p. 6).

2.2 Challenges in the Implementation of DPA

Despite DPA being integrated into the Ontario Curriculum, as well as studies highlighting the benefits of regular physical activity in children, existing research and studies reveal that DPA, in practice, tends to be disregarded or inconsistently actualized in schools. This part of my literature review turns to existing research to examine the reasons behind the limitations of DPA.

2.2.1 Competing curricula demands
As Fedewa and Ahn (2011) discussed, DPA can be viewed as a “threat to academic subjects,” taking time away from core subjects such as math, reading, and science (p. 522). While teachers, understandably, have the challenging task of ensuring that they adhere to the curriculum as closely as possible, and extensively cover materials with their students, DPA is a part of the curriculum as well. Strampel et al. (2014) found similar outcomes; in their study of 137 teachers in the Simcoe Country district in southern Ontario, teachers reported the difficulty of fulfilling curriculum requirements within the school day as the first major barrier to implementing DPA, meaning the additional 20 minutes taken from other subjects’ curricula (especially literacy and numeracy) would further strain their tight schedules (p. 17; 19). In fact, more than half of the participating teachers in Strampel et al.’s (2014) study reported “there are too many time demands for DPA” (p. 18).

Patton et al. (2014) also examined how teachers can affect DPA; they address the practice whereby teachers retract DPA from the class schedule as a form of “punishment” for student misbehaviour (p. 16). In their Ontario-based study of student perceptions of DPA, 90% of senior students (grades 7-8), and 58% of intermediate students (grades 4-6) reported that their teachers would withhold DPA in response to student misbehaviour (Patton et al., 2014, p. 14). Patton et al. (2014) raise an important point: DPA is a government-mandated component of the Ontario Curriculum, and “teachers would not eliminate a government-mandated subject area from a school day as a punishment for student behaviour; therefore, it is worth considering why teachers would view the government-mandated program of DPA any differently” (p. 16).

Patton et al. (2014) suggest, “if teachers devalue the DPA program it is possible that the students will adopt a similar outlook” (p. 14). One of the purposes of DPA is not only to physically engage students in activity, but also to instill an understanding of the importance of an
active and healthy mindset and lifestyle. Thus, if students perceive that their school environment does not place significant value on physical activity, they may internalize such values. As a researcher, this leads me to suggest that certain curricula demands be revaluated in order to determine what is most important for child development (taking into consideration intellectual and social needs, as well as physical health needs). Reviewing the findings that highlight teachers’ challenges in finding time to fulfill varying curricula demands relates to the common theme outlined by other researchers: difficulty finding daily time to implement DPA.

2.2.2 Time limitations

Patton et al. (2014) conducted a study of student perceptions of DPA based on grade 4-8 students selected from 25 schools across Ontario (p. 13). They found that “many students are not active for a long enough period of time during the DPA session to gain the optimal benefits” (Patton et al. 2014, p. 17). The study found that competing curricula demands, as well as lack of time, were the most commonly stated obstructions to implementing the DPA program by teachers (Patton et al., 2014, p. 14). The teachers in Patton et al.’s (2014) study reported that implementing DPA was equated with “taking valuable time away from other academic classes” (p. 16). Following the pattern of Patton et al.’s findings, Stone et al.’s (2012) study of 856 children across schools in the TDSB found that less than half (49%) of participants took part in DPA every day of the school week (p. 172). Children wore accelerometers to measure the length of bouts of moderate-to-vigorous physical activity (Stone et al., 2012, p. 171). Of the 16 schools involved in Stone et al.’s (2012) study, it was found that only 3 schools consistently provided students with the opportunity to engage in physical activity for 20 minutes each day (p. 171). In other words, of the schools involved in this study, only 19% implemented DPA as required by the Ontario Ministry of Education. Further, no child reported having been engaged in the
“sustained moderate-to-vigorous physical activity,” (MVPA) as outlined by the ministry, for the mandated 20 minutes (the longest bout of MVPA lasted 18 minutes) (Stone et al., 2012, p. 172). Stone et al. (2012) suggest that DPA implementation may need to be re-strategized, so that DPA takes place over a series of shorter periods of physical activity, rather than one long period (p. 173). The authors present that the physical activity data of children tends to find that children engage in short sporadic periods of physical activity, rather than longer and continuous periods (Stone et al., 2012, p. 173). This finding may prove to be helpful in redesigning DPA programming, so that it may be reorganized in a more productive and beneficial method, addressing the needs of more children.

2.2.3 Lack of resources

Teachers report the lack of space and facilities for indoor DPA as a major detriment to its implementation. Strampel et al.’s (2014) study reveals that teachers noted safety issues that were associated with a lack of space, particularly for higher elementary grades, with more students in a classroom, and students with larger bodies (p. 17). Teachers also reported that a lack of equipment, ideas and classroom instructional resources for DPA activities and games could account for its lack of implementation (Strampel et al., 2014, p. 19).

However, a possible solution lies in a school-wide DPA implementation, or alternatively, a school-wide program whereby intermediate (grade 7 and 8) students are trained as leaders to provide DPA activities to specific classes (Strampel et al., 2014, p. 20). This arrangement would work to alleviate the individual teacher agency required to enable DPA, as well as alleviate planning pressures, although it would still require teachers to allocate 20 minutes of each day for DPA. In addition, a school-wide DPA approach fosters an environment that encourages the engagement in physical activity by the entire school community, and promotes active habits
Likewise, Patton et al. (2014) also suggest that DPA be scheduled into the school timetable rather than left to “the discretion of the teacher to fit it in,” as this would address the problem of scheduling conflicts and time and planning constraints (p. 17). Moreover, in the study conducted by Strampel et al. (2014), four teacher participants reported the effectiveness of “the whole school DPA approach, whereby the whole school does the same physical activity at the same time” (p. 19). The respondents commended the whole school approach for instilling a “sense of ‘school spirit and community,’” as well as ensuring that DPA is scheduled in regularly (Strampel et al., 2014, p. 19). As an additional point, one participant noted their own physical and emotional benefit from regular DPA walks, and made note of the health benefits they observed among one of her/his students who was overweight (Strampel et al., 2014, p. 19). Further, Strampel et al.’s (2014) study participants suggested possible solutions to address the problems associated with the successful actualization of DPA, including designing and organizing activities that require minimal resources and equipment, and facilitating school-wide DPA (p. 15). Strampel et al. (2014) suggest fairly easy and inexpensive ideas to help teachers implement DPA: “activity banks, music, and instructional DVDs” (p. 22). Their study also found that “new games with minimal equipment and set up time was ranked as the most helpful solution to breaking down barriers to DPA” (Strampel et al., 2014, p. 17). Strampel et al. (2014) infer that such effective solutions can help teachers approach DPA with greater enthusiasm, translating to positive physical health and social benefits for both students and teachers (p. 22).

The Ministry of Education’s Daily Physical Activity Resource Guide (2006) seeks to inform school boards, principals, teachers, and other educators of the importance of regular physical activity for children, as well as the logistics of the newly mandated program. For
example, the Resource Guide (2006) includes a section dedicated to the possible challenges of carrying out DPA in schools (ie. lack of space), along with associated solutions (ie. suggested activities that can be carried out in minimal space) (p. 38). However, based on the research that reports that teachers struggle to carry out DPA in practice, I am left wondering about the discrepancy between the Ministry’s seemingly thorough resource guide, and its failure in practice.

Similarly, the Ontario Ministry of Education (2015), in seeking to fulfill the government’s Healthy Schools Plan, has also launched an online interactive module, entitled “E-Learning Module – Daily Physical Activity: Active today. Active for life!” This particular government-run website includes helpful resources to aid the implementation of DPA, including plans for varying teaching environments (ie. the classroom, gym, outdoors), as well as very thorough, detailed DPA plans (including possible variations) organized by grade level (Ontario Ministry of Education, 2015). The site’s lesson plans even include video demonstrations, offering a visual presentation of how teachers can lead DPA in their own classrooms (Ontario Ministry of Education, 2015). Nevertheless, as reviewed above, teachers report the lack of resources, including ideas, lesson plans, and alternative activity arrangements as a key reason revealing why DPA’s implementation is largely difficult and inconsistent. Thus, I can infer that there is a lack of awareness about the resources that are available to help teachers plan, organize, and facilitate DPA in their classrooms. Online resources, easily and readily accessible to teachers (and the public), such as this E-Learning Module, if spread and shared among the educational community, can help teachers efficiently plan how to integrate physical activity into their curricula, and fulfill the DPA mandate. On one hand, the Ministry has created documents and accessible online resources. On the other hand, teachers continue to report a lack of support,
ideas, and plans to actually physically implement DPA. This suggests that either teachers are unaware of the existing resources to help them plan DPA within their classrooms, or that the existing Ministry documents do not suffice, or are not directly helpful in assisting teachers with DPA’s implementation. Moreover, this discrepancy fuelled my own research, as I sought to examine which resources and methods teachers employ (and in contrast, fail to employ) to help them facilitate DPA.

In addition, Fogel, Miltenberger, Graves and Koehler (2010) explore a unique method of implementing DPA. While one of the main reasons behind children’s sedentary lifestyles is technology, and time spent in front of televisions, computers, and video games, a potential solution may also be associated with technology. Engaging children in physical activity using video games, “exergaming, has been designed to capitalize on the reinforcing effects of video games to increase physical activity in children” (Fogel et al., 2010, p. 591). Exergaming combines “video games or various auditory or visual stimuli” with “different types of exercise equipment and activities,” to physically engage students in an interactive way, having them be active participants of the game or activity they are a part of in the stimulation (Fogel et al., 2010, p. 592). A study of four students who engaged in exergaming during instructional time found that exergaming engaged children in physical activity for longer periods than regular physical education instruction (Fogel et al., 2010, p. 595). In the same study, both student participants and teachers responded well to the interactive video game, both reporting positive experiences (Fogel et al., 2010, p. 596). Additional benefits of exergaming include less instructional demands on the part of the teacher, and improved student behaviour and response to directions, as well as increased student engagement in physical activity (Fogel et al., 2010, p. 596). Nonetheless, with constant changes and innovations in technology, exergaming remains a
relatively new concept with research of its long-term effects on children yet to be conducted. Moreover, as teachers widely refer to the lack of standard resources (ie. sports equipment such as balls, skipping ropes, etc.) to engage their students in DPA during instructional time, implementing exergaming as a way to reinforce DPA is associated with complex issues of funding, and availability of resources.

2.2.4 Lack of teacher training

Strampel et al.’s (2014) work reveals that not all teachers are supportive of DPA programming and implementation. For instance, teachers reported a lack of student and staff “buy-in,” where certain students were unmotivated to engage in physical activity or disinterested (Strampel et al., 2014, p. 19). One participant even revealed that students failed to take DPA seriously, perceiving it as “playtime” (Strampel et al., 2014, p. 19). Five teachers also noted the “lack of staff training and “buy in” to DPA,” with a specific respondent “resent[ing] the imposition of the Ministry mandating that DPA SHALL occur in the schools” (Strampel et al. 2014, p. 19). As a researcher and future teacher, this has me asking whether a lack of awareness, exposure to data (demonstrating DPA’s benefits) or thorough training and a sense of preparedness can account for such attitudes.

Upon announcement of DPA’s implementation in 2005, the Ontario Ministry of Education allotted “several million dollars for DPA implementation resources and training” (Robertson-Wilson & Levesque, 2009, p. 126). This includes “resource guides for teachers and guides (with implementation strategies) for boards and principals, and an online training resource” (Robertson-Wilson & Levesque, 2009, p. 126). However, “a long-term funding strategy to sustain the resources and training required for continued DPA implementation is not apparent” (Robertson-Wilson & Levesque, 2009, p. 126).
As researchers and academics acknowledge, without following up if DPA is being implemented, and if “no one admits that they are monitoring this initiative, then who can say whether it has any real benefit?” (Chorney, 2009, p. 12). Thus, a question of follow up and accountability remains, in terms of both measuring, and ensuring the effectiveness of DPA (Chorney, 2009, p. 12).

A retrospective analysis of DPA’s “initial development” suggests that improving teacher knowledge and ability to instill DPA begins early on in the teacher preparation process (Allison et al., 2014, p.1; p. 15). This is an especially relevant point to my dual identity as a Teacher Candidate and researcher, and suggests that in the future, the ameliorated and enhanced implementation of DPA lies in greater awareness, and preparation, starting from training and instruction in teacher preparation programs.

2.3 Conclusion

In this literature review I looked at research on the positive effects attributed to DPA programming. At the same time, this literature review has highlighted the shortcomings of the DPA policy, attributed to the fact that the majority of existing research finds that it fails to be consistently applied in schools. This review raises questions about why a discrepancy continues to exist between the knowledge of DPA’s benefits for children, and DPA’s actual implementation. Additionally, it also raises questions about what measures can be put into place, perhaps at the higher organizational or Ministry level, to address this discrepancy, and determine how to help teachers ensure the implementation of DPA. It also points to the need for further research in the areas of whether, and how, teachers are addressing this discrepancy. In light of this, the purpose of my research was to learn if, and how, teachers are creating strategies to better
implement DPA, in order to benefit the health and wellbeing of students. In Chapter 3, I detail my research methodology, and describe the procedures of my qualitative research design.
Chapter 3: Research Methodology

3.0 Introduction

In this chapter I describe the details of my research methodology, and the logistics of my study of teachers’ experiences implementing the Daily Physical Activity (DPA) program. I begin by reviewing the overall details of my qualitative research design, including research procedures, and my instruments of data collection. Next, I describe my participant sampling, as well as recruitment. I describe the process of conducting semi-structured interviews with three educators. At this point, I include the biographies of the participants in my study of the DPA program in practice. I also examine the ethical considerations relevant to my study. Further, I consider the characteristics of my research methodology, which includes its limitations, as well as strengths. Finally, I conclude this chapter with a summary of my methodological decisions, and offer a brief preview of the next chapter of my research.

3.1 Research Approach and Procedures

My research of teacher understanding, implementation, and innovations pertaining to the DPA program was based on a qualitative research design, where I used semi-structured interviews to collect data. I began my research study with a qualitative literature review. In Chapter 2, I detailed the existing work of other scholars on my topic. Qualitative research, as defined by Kitto, Chesters and Grbich (2008), is “concerned with the systematic collection, ordering, description and interpretation of textual data gathered from talk, observation or documentation” (p. 243). Thus, my research approach was based on interviews I conducted with three participants, followed by the transcription, coding, and analysis of my documented oral interviews. As Kitto et al. (2008) highlight, procedural rigour is one of the elements of a comprehensive and precise qualitative research design. Procedural rigour entails a description of
how the research was conducted, including how the data was “collected, recorded, coded and analysed” (Kitto et al., 2008, p. 244). This chapter of my research is dedicated to describing and explaining elements of my research design, including ethical considerations, and implications for my research study.

3.2 Instruments of Data Collection

The primary tool of my qualitative data collection was semi-structured interviews. Maxwell (2012) makes a case for the strengths of qualitative research, asserting that, “educational research desperately needs qualitative approaches and methods if it is to make valid and useful claims about what works” (p. 655). Moreover, “high-quality qualitative research,” can be described as a garnering a “rich complexity of abundance—(in contrast to quantitative research that is more likely appreciated for its precision)” (Tracy, 2010, p. 841). By interviewing three participants who have extensive experience working as teachers in the Greater Toronto Area, and are familiar with the implementation of the DPA program, I gained the expertise, observations, opinions and insight of three first-hand encounters to inform my research. Therefore, through semi-structured interviews as my means of collecting data, I firmly believe I have learned a great deal from individuals with first-hand understanding and experience of my research topic.

“Qualitative researchers do not put words in members’ mouths, but rather attend to viewpoints that diverge with those of the majority or with the author” (Tracy, 2010, p. 844). The fact that my instrument of data collection was semi-structured interviews, rather than for example, survey or questionnaire, is a great asset of my research design. Through semi-structured interviews, where I had a series of well-organized and thought out questions prepared,
my participants were able to elaborate on their knowledge, thoughts, and ideas relevant to my research.

My interview questions were structured in a comprehensive and coherent manner, arranged by the following subheadings to guide the interview process: Background Information, Teacher Perspectives/Beliefs, Teacher Practices, Supports and Challenges, and Next Steps (Appendix B). As the interview was semi-structured, and I designed my interview questions in an open manner, I left room for my participants to share their own feelings, opinions, and expertise, rather than be swayed by a pre-suggested answer. In fact, the semi-structured nature of my data collection permitted my participants to share any knowledge or information that may have been unforeseen, but nonetheless beneficial to my research study.

3.3 Participants

In this section I review the process of decision-making related to my research participants. I present my process for participant recruiting, as well as participant sampling. I also include the biographies of my research participants.

3.3.1 Sampling criteria

The sampling criteria for my study participants are described in this subsection:

• Teachers have taught in the Greater Toronto Area.

• Teachers have taught grades 1-8.

• Teachers have a minimum of 10 years of teaching experience.

• Teachers have experience implementing and participating in the DPA program mandated by the Ontario Ministry of Education in 2005.

I interviewed candidates who have worked in the Greater Toronto Area, as I sought research findings that relate to a learning environment that encompasses the experiences of a wide student
and teacher population. As education is under provincial jurisdiction, and the DPA program has been introduced and organized by the Ontario government, the candidates I sought to interview have working and teaching experience in Ontario. Moreover, I interviewed candidates who have worked in the GTA, as I believe my research findings will be especially relevant, insightful and helpful for the future teaching practice of educators working in this vast and diverse area.

The teachers I interviewed have experiences teaching grades 1 through 8. The Ontario Ministry of Education has mandated the DPA program for elementary school aged students in grades 1-8; thus, my research pertains to teachers who have experience teaching students in these grades.

I sought to interview teachers with at least 10 years of teaching experience. I was interested in learning about the range of strategies that teachers with extensive experience have accumulated throughout their teaching careers, and how they apply their expertise and methods in terms of the DPA program. Further, educators with at least 10 years of teaching experience have been teaching and leading the program from the very outset of its implementation in 2005. Their expertise, I believed, would be invaluable to my research on teacher perceptions of the program and their implementation strategies.

In order to attain pertinent and rich information about DPA’s implementation and practice for my research study, I interviewed candidates who were familiar with the DPA program in Ontario. I interviewed teachers who were familiar with DPA implementation, who were cognizant of how DPA affects both students and teachers, and who actively promoted the DPA program. I believe that interviewing teachers who are familiar with how DPA impacts their students, as well as their teaching environment, who are aware of the techniques, strategies or resources available to integrate DPA into the classroom, and who actively integrate DPA in their
school environment were able to offer me great insight. Interviewing such candidates informed my research immensely, and helped further my understanding of how the DPA program can be structured, promoted, or organized in a way to implement it more consistently and efficiently in all classrooms.

3.3.2 Participant recruitment

Purposeful sampling is ubiquitous in qualitative research, and is used by researchers “for the identification and selection of information-rich cases related to the phenomenon of interest” (Palinkas et al., 2015, p. 533). The phenomenon of interest fueling my research study was the [lack of] DPA implementation. I engaged in purposeful sampling, and actively sought participants who were familiar with, and engaged in the fulfillment of the DPA mandate. I actively networked among my peers, colleagues, and acquaintances in order to recruit participants who were familiar with my research topic.

I networked among my colleagues, professors, and acquaintances that I met through previous school and teaching experiences, and conducted interviews with three different participants. The educators who participated in my research have had prior extensive teaching experience working in the Toronto Catholic District School Board at the elementary school level (grades 1-8). Moreover, I sought to recruit participants that were familiar with the DPA program implemented in Ontario schools in 2005.

3.3.3 Participant biographies

All of my participants have been given a pseudonym in order to protect their identities. My first participant was Nathan, who currently serves as the principal in a Toronto Catholic District School Board school, and has had about 30 years of teaching experience in the junior and intermediate divisions. Nathan’s belief in the power of sport to help student wellbeing
was evident throughout my interview with him. He is enthusiastic about promoting a physically active and healthy lifestyle. He has a passion for running, as exhibited through his promotion of the ‘Road Runners Club’ in various schools he has worked at.

The second teacher I interviewed was Francis, who works in the TCDSB. Francis has worked as a teacher for over 20 years. He currently works as a French teacher in the Extended French program. Francis has had multiple coaching roles throughout his teaching career, serving as the coach of the cross-country and track and field teams. Francis introduced the ice hockey program to the school he currently works at. Francis is a firm believer in the effectiveness of the DPA program on student health and wellbeing. In his discussion of his strategies for effectively implementing DPA, Francis emphasized the importance of being familiar with your students.

My final research participant was Blair, a teacher in the TCDSB with 20 years of teaching experience. Like Francis, Blair also currently works as a French teacher, specifically in a French Immersion school. Blair works in the primary division, most recently teaching grade 1 students. Blair has expressed her belief in not only instilling habits of physical activity among her students, but also the importance of healthy eating habits. Further, Blair integrates a multitude of different and recent resources in implementing DPA, in order to keep her young students fully engaged in the program.

3.4 Data Analysis

The stage of data analysis proved fundamental to my Research Project, as I translated my research and interview process into implications for my topic of DPA programming. The analysis of my data commenced with a transcription of my research data (audio-recorded semi-structured interviews with 3 participants), followed by coding. Since the coding approach I took was descriptive, as I was reviewing transcripts, I searched for key terms, repetitive words, and
distinguished words and statements, which I could later analyze in the next step of my research. When analyzing the data of my interview results, I looked for patterns, as well as divergences in my findings. I highlighted major themes across my data, including the support for the DPA program, and its associated tangible effects on students. I also pointed out the common themes in order to look for the ‘big ideas’ found in my data, including various implementation strategies, and teacher suggestions for how to ensure that DPA is implemented consistently and effectively.

A further stage of my data analysis had me referring back to my literature review, where I studied existing scholarly work on my topic. I showed similarities among my own research findings with those already existing, as well as highlighted new information and insights emerging from my research data.

### 3.5 Ethical Review Procedures

To protect the identity and privacy of my interviews, all of my research participants were assigned pseudonyms. Thus, aside from my course instructor and I, no one I share my research with will be informed of my participants’ names or identities. Their identities remain confidential, and no identifying markers were included in the research findings I share. As described by Tracy (2010), this constitutes procedural ethics, where as a researcher, I “safeguard participants from undue exposure by securing all personal data” (p. 847). Moreover, I shared a consent form (Appendix A) with my participants, outlining the details of my research design. My participants have the right to withdraw from participation in my study at any point in the research case. Thus, my participants understood that they could retract their participation from the study even after the interview has been conducted. There were no known risks to participating in my research study. I shared a copy of my interview questions prior to
conducting the interview, in order to allow my participants to prepare or simply be aware of what
to expect from my research questions.

My research topic is based on the implementation of the DPA program in Ontario
schools. This is arguably a topic that is not emotionally charged, and will most likely not elicit
an emotional response nor make my participants vulnerable. However, through the consent letter
I sent prior to the interview, as well as the interview questions I shared with my participants
ahead of time, my participants were cognizant of the fact that they have the right to repeal their
participation in my research study. Finally, after 5 years, all interview data will be destroyed.

3.6 Methodological Limitations and Strengths

Arguably the primary limitation of my methodology is a small sample size. My research
study was based on semi-structured interviews with three different educators. Although my
interview questions have been researched and well thought out and designed, I interviewed three
participants, which means I had a first-hand understanding of the experiences of three different
candidates. Hence, it was challenging for me to generalize the results of my findings based on
interviewing 3 participants. This small sample size translates to the need for further studies to be
conducted, in order to ensure how representative my findings are of other teachers and their
practices. In addition, ethical review restricts me from studying student perspectives. Having
first-hand student testimonials or statements regarding their opinions, thoughts, and ideas
regarding the DPA program would indubitably be very insightful. Since the DPA program is
dependent upon active student participants, having student participants in the research study
would provide me with an additional and valuable perspective. Alternatively, observing student
participation in DPA, or simply observing various DPA sessions could also serve to be very
helpful and informative if applied as a part of my research study. However, based on the ethical
guidelines and approvals of this Master of Teaching Research Project, the research I conducted was required to be solely based on the interviews I conducted with teachers.

Nonetheless, a significant strength of my methodological design is the thorough and in-depth interview design. The interviews I conducted were approximately 45 minutes, and the research questions that I prepared well in advance were very thought out. My interview consisted of questions that were both more general and open, allowing my participant to share anything they thought was relevant, as well as questions that were more meticulous and refined, where I sought a more specific answer. Thus, I believe that the design of the interviews I conducted reaped very constructive and beneficial responses, which helped me understand more about teacher experiences of the DPA program, proving to be invaluable to my research. Further, I supported my interviews by making connections to the resources I discussed in Chapter 2, to better integrate my findings and strengthen my research.

3.7 Conclusion

In this chapter, I reviewed the research methodology behind my study of the state of DPA implementation in Ontario. I reviewed my research approach and procedures, as well as outlined the instruments of data collection, and my plans for participant recruitment. I highlighted the fact that my study of DPA’s implementation, and teacher strategies for its implementation, was based on semi-structured interviews I conducted with teachers, in order to fulfill the stipulations of my qualitative research design. Moreover, I reviewed the ethical considerations of my research study, particularly pertaining to the confidentiality of the participants involved in my study. In addition, I reviewed the methodological strengths, including in-depth understanding of teachers’ perspectives of the DPA program, and limitations, such as the small sample size of my
research design. Next, in Chapter 4, I report the research findings of my qualitative research design.
Chapter 4: Research Findings

4.0 Introduction

This chapter discusses the findings of my study about teachers’ experiences implementing Daily Physical Activity (DPA). On the basis of my findings, I describe how teachers are addressing the lack of DPA implementation, by consistently working to integrate it into their teaching practice. All three participants have extensive experience integrating DPA in their practice, and I present their observations, insights, and suggestions. I highlight and discuss the main themes that emerged from my interviews: The Effects of DPA on Students, Teacher Challenges in Implementing DPA, Teachers’ Experiences of Support, and Teacher Implementation Strategies. In this section, I emphasize the commonalities, as well as divergences in findings between my three interviews. I also refer to previous research, as discussed in Chapter 2, to make connections between past scholarly work and my own research findings. This discussion and analysis of my research findings will enable me to present the implications of my study in Chapter 5.

4.1 The Effects of DPA on Students

All three participants reported that DPA had tangible effects on their students. All three teachers spoke to a positive relationship between the implementation of DPA and outcomes on their students. In addition to promoting general wellbeing by providing students with the opportunity to actively engage in physical activity and get their heart rates up, the main effects teachers reported were expressed in the form of classroom management, student engagement, and overall positive class environment.

4.1.1 Classroom management
As emerged from my interviews, DPA has the capacity to affect teachers’ experiences of classroom management. Nathan spoke to the ways that DPA impacts management in the classroom: he reported that there is “more control in the classroom.” In my interview with Nathan, he explained that physical activity can have a calming effect on students, with DPA providing them with an outlet to release excess energy. Paralleling this discussion, Blair discussed how she integrates DPA into her practice depending on the needs of her students. She shared that there was a noticeable relationship between conducting DPA with her students and a shift in their energy levels. As she presented, after DPA students are “calmer,” and their participation in the class increases. As Kall et al. (2015) discussed in their research, a positive relationship exists between school-based physical activity and student behaviour, which may be explained by the impact of physical activity on “alleviat[ing]” stress and enhanc[ing] their concentration,” as well as “reduc[ing] boredom” (p. 711). Blair spoke to the helpfulness of DPA, as it serves as a tool to provide students with a break from stationary tasks. By providing students with the opportunity to engage in physical activity, and a break from the conventional classroom routine, teachers can integrate DPA as a tool to manage their students, and control their levels of energy and engagement.

4.1.2 Student engagement

Teachers revealed that student engagement significantly improved after a session of DPA. Among my questions asking participants how DPA affects students, noticeable improvements in student engagement was a major outcome teachers attributed to the DPA program. A positive relationship between active participation in DPA and both student concentration and energy levels was revealed in my interviews. Nathan spoke about how DPA was associated with “higher levels of concentration,” which as he stated, “is huge.” Blair
revealed that student focus was better after a session of DPA. Similar to Nathan’s discussion on increased concentration, Francis presented how DPA “refreshes” students, and that students come back from DPA “fully energized.” Blair too stated that DPA helps students “feel fresh.” By providing students with an opportunity to get physically active, and increase their heart rates, DPA can have tangible effects on student levels of attentiveness, and active participation in the classroom. Moreover, Blair discussed how she integrates DPA as a tool to engage her students. She spoke about how her strategy for addressing student fatigue and disengagement was by getting them involved in physical activity. Blair highlighted the fact that “change,” [from the regular classroom routine and subject classes] is “good,” and DPA is a central provider of this change. As highlighted as a recurring theme through all three of my interviews, DPA has positive effects on student engagement by increasing student focus and concentration.

4.1.3 Class environment

Teachers reported that in addition to tangible effects of increased focus and engagement, and improved behaviour, an improvement in the general tone in the classroom was attributed to DPA. All of my participants revealed that DPA was perceived and welcomed positively, and with enthusiasm by students. Nathan highlighted the fact that DPA resulted in a “greater sense of positivity in the school,” and he described a presence of “much more energy—positive energy,” in the school. Nathan offered further details about the class environment, revealing that parents and students would report their enthusiasm for the DPA program, and their eagerness and anticipation in going to school.

Similar to Nathan’s description of a “positive energy,” Francis spoke about a “spirit in the class” that emerged following DPA. As Francis described, through DPA, students feel “willing to take more risks.” In contrast to engaging in team sports or group physical activity at
recess or during an extra-curricular activity, Francis spoke about how conducting DPA as a class offers a more intimate setting, where students feel comfortable to try new activities, exercises, and games. Again, the point that DPA was very popular among students came up throughout my interview with Francis. Blair, too, described an increasingly positive, energetic, and focused classroom that emerged after engaging in a session of DPA.

My interviews with all three of my participants reflect Trudeau and Shephard’s (2008) presentation of the “psychosocial outcomes” of DPA, notably, “school satisfaction” (p. 6). The consensus among all three of my research participants was overwhelmingly positive in support of the DPA program. By providing students with a physical and mental break from the task at hand, DPA can serve to not only strengthen and renew student focus and attentiveness, but creates an overall sense of positivity and enjoyment in the classroom.

4.2 Teacher Challenges in Implementing DPA

While all three of my participants agreed on the positive outcomes of DPA on students, my interviews revealed that the implementation of DPA also has its challenges. The two main challenges reported by teachers were time constraints, and the lack of adequate space for DPA.

4.2.1 Time constraints

One of my participants reported that DPA can be seen as a waste of time by teachers who do not have confidence in the tangible benefits of the program. As Francis spoke to, “time is tight” in the classroom. Given time limitations, it can be “difficult” to consistently implement the program. Francis elaborated on the issue time constraints pose, in terms of academic and assessment pressures, particularly for grade 6 teachers who tend to focus their efforts on the end of the year EQAO assessment. This experience aligns with Strampel et al.’s (2014) research that reported, “EQAO puts pressure to focus on math and language at the expense of DPA” (p. 18).
4.2.2 Lack of adequate space

Like Strampel et al. (2014), Blair also highlighted the safety concerns that can become an issue when executing DPA. Blair spoke to the restraints that space can have on running DPA with her class. As she relayed, “space is important.” With her students being in the primary division, she cautioned that students must always be aware of personal space boundaries, as restrictive space to conduct DPA can lead to accidents. In response to the lack of adequate space to conduct DPA, Blair presented ‘Walking Wednesdays’ as the school initiative to address the lack of space. This is a strategy where every Wednesday students would go outside and walk around the school community. Due to the fact that in the previous year, the school she worked at was under construction, the principal encouraged teachers to do ‘Walking Wednesdays’ with their students. ‘Walking Wednesdays,’ Blair added, is an idea and initiative that remained in the school even after the completion of construction in the schoolyard. Thus, time constraints, especially when considering competing academic pressures, and a lack of enough space to lead DPA sessions were presented as the two main challenges teachers experienced while promoting the program.

4.3 Teachers’ Experiences of Support

Experiences of support proved to be an important topic for teachers seeking to implement DPA. Two of my participants reported support in implementing DPA, on the part of both school and parents, while one of my participants did not feel supported in his commitment to implementing DPA. Teachers also reported mixed perceptions of the available resources that can help with DPA’s implementation.

4.3.1 School support
Teachers reported mixed experiences of school support on the part of consistently engaging in DPA. As Nathan pointed out, “if you’re not into it, it’s very difficult to buy into. If [you don’t practice DPA] yourself, then it’s very difficult for you to see the benefits of it.” As he described, this was the type of “pushback” he would sometimes experience, whereby not all teachers and staff promoted the program, as they themselves were not firm believers in its advantages. Similarly, Francis’ experience of other educators’ perceptions of DPA parallels that of Nathan’s; Francis stated, “the problem is that people don’t realize how important it [physical activity] is.” As Nathan acknowledged, the importance of physical activity does not take precedence for all educators and administration, with focus often being placed on other topics, such as math scores. Thus, Nathan highlighted the importance of having a ‘champion’ in the school, who serves as a figure to help promote and lead the DPA program. The importance of leaders within the school who encourage and advocate for the DPA program proved to be a very important topic. As Nathan emphasized, “you need someone who believes in it.” Without a figure who genuinely believes in the positive effects of DPA on students, it is very difficult to promote a consistent and regularly implemented DPA program. This stance relates to Strampel et al.’s (2014) view: “teachers will not be able to successfully implement programs in schools unless they are educated and on board with the latest public health information” (p. 22). Educators must truly believe in the benefits of promoting regular physical activity as part of a healthy lifestyle in order for the program to be run consistently and successfully. Moreover, when promoted from the top-down, where support for DPA is led on a large scale, support for the program is especially meaningful. Thus, as Nathan brought to light, DPA’s support at the board-wide level, and in schools, from the principal, is very critical to the program’s consistent implementation and effectiveness in practice.
Francis reported a lack of support, while Nathan and Blair expressed their experiences of school and administrative support in implementing DPA. Francis revealed that DPA is not really “well seen” by other teachers, and some teachers are simply not inclined to engage in sport. If the sentiment among teachers working at a given school is negative towards DPA, that makes it difficult to consistently implement the program, without a culture of support established in the school. In an ideal environment, teachers would work to motivate, encourage, and support one another as they implement the DPA program.

4.3.2 Parent support

Two of my research participants attested to the benefits of receiving parental support for the DPA program. Nathan discussed how he would receive feedback from parents asking him to help implement the DPA program in other classes, in order for their children to receive the benefits of physical activity, as they had observed in other classes. Blair, paralleling this experience of parental support, noted the fact that “parents really encourage” teachers in implementing and engaging students in DPA. The parent council at her school helps provide materials for teachers to incorporate into DPA, including new equipment. Thus, the general sentiment that emerged from these two discussions was that parental support is affirmative, and reinforces the positive efforts that educators are making in promoting a healthy lifestyle in students. In contrast, Francis suggested that a lack of parent conviction in the program can serve as a deterrent for teachers implementing DPA. He gave the example of parents who would observe DPA taking place outside or in the school yard, and revealed that if an injury or accident took place, parents would occasionally provide negative feedback, leading that teacher to be discouraged from continuing to implement the program.

4.3.3 Teachers’ perceptions of support resources
My research participants were all familiar with the Ministry of Education’s Daily Physical Activity Resource Guide (2006), which is a series of instructional guides organized into the primary, junior, and intermediate divisions. As Nathan described, it can serve as a useful basis, as it “provides some basic routines.” Meanwhile, Francis notes that official resource guides can be informative, but he points out that “DPA is not something that can be done like you’re teaching a math lesson and everybody’s doing the same thing.” For Francis, the emphasis on leading DPA should be based on knowing your students and what works best to engage them in physical activity.

### 4.4 Teachers’ Implementation Strategies

My participants offered their insights and strategies for how to actively and consistently implement DPA in practice. Four main subthemes emerged from my discussions about implementation techniques and strategies. One of my participants strongly promoted the whole-school approach to implementing DPA, presenting its benefits of accountability and consistency. The need for teachers to be adaptable and aware of their students’ needs in implementing DPA came up as a key topic in my discussions, as did the possibility of integrating technology. Finally, my participants spoke to the relationship between promoting a healthy lifestyle in the classroom and school, and the implementation of DPA.

#### 4.4.1 DPA as a school-wide initiative

One of the main strategies that had come up through my research and interviews was the school-wide approach to the DPA program. Nathan spoke to the benefits and advantages of a whole-school DPA approach, whereby DPA is scheduled into the daily instructional timetable, and the entire school participates in the program at the same time each day. A school-wide DPA initiative benefits both students and teachers. As Nathan emphasizes, the “biggest difference” is
that student leaders lead DPA. This, in turn, also takes the “pressure off the teachers themselves.” At the beginning of the school year, students, supported by administration and teachers, work to establish routines that can be used when leading DPA. This can include a variety of exercises, activities, as well as using resources such as the outdoors and the gymnasium. After working to establish routines with students leaders, as well as holding regular meetings with DPA leaders, Nathan reveals the program “pretty much runs itself,” a phenomenon which is “very rewarding.” While Blair’s school does not currently integrate a school-wide approach, she likewise discussed the benefits of a school-wide DPA approach she experienced in a past teaching environment. She spoke about her positive experience working at another school where older intermediate students served as leaders who worked to actively implement DPA. Like Nathan, she detailed the powerful impact student DPA leaders have on the facilitation of the program, levels of engagement, and overall positive experience of the program when students are given the autonomy to serve as positive figures in the school. Students are provided the opportunity to emerge as leaders, and are able to participate in an important role where they serve as positive role models for younger students, and help the school environment as a whole. This positive role reinforces values of leadership and initiative, and encourages younger students to get involved as well.

Further, a school-wide approach may be the key to ensuring a truly effective and consistent implementation of the program. As Nathan pointed out, once “the day is already in progress it becomes more difficult to stop things, and then run DPA. It’s so much easier when it’s done right from the opening exercises.” Thus, the scheduling of DPA as a school-wide activity first thing in the morning, as a part of opening exercises can help ensure that all classes and students engage in the program. This approach would certainly address the issue of
accountability, as a school-wide approach removes the onus from the individual discretion of the teacher. Strampel et al.’s (2014) suggestion of DPA as a school-wide initiative corresponds with Nathan’s advocating of DPA as a school-wide initiative. As one of the participants in Strampel et al.’s (2014) work noted, a school-wide approach led by DPA leaders benefits students by instilling values of responsibility, while making “programming easier” (p. 19). Likewise, Patton’s et al.’s (2014) belief in scheduling into the school-wide schedule aligns with my findings from my interview with Nathan. As Nathan spoke to, a school-wide regular scheduled time for DPA addresses the issue of accountability. DPA programming scheduled as a part of the instructional school day “would be helpful to reinforce the importance of the program and increase participation in DPA” (Patton et al., 2014, p. 17).

4.4.2 Necessity for adaptation to student needs

Francis spoke largely to the necessity of knowing your students in order to engage them in DPA. He presented using various strategies, including different equipment and different games as his main strategy for implementing DPA. As he pointed out, “if you do something very rigid, like making kids run, the kids won’t get into that…you have to use strategies to get them involved.” He added that he does not allow students to “withdraw” during DPA, but strives to organize activities and games so that students will be responsive. Further, he notes that in order to get students involved, DPA also “has to be structured.”

Blair also discussed how important change and variety are for her students. She noted her use of “different techniques,” and the necessity of incorporating different activities and exercises, in order for DPA to remain “interesting.” Thus, she notes that “change” can help to ensure that students remain engaged in DPA throughout the year. Further, ensuring variety while leading DPA can include “a little bit of everything,” including yoga, dance, as well as games that
can be “funny,” a feature which she noted can be very helpful for ensuring students in the primary division remain engaged throughout DPA sessions. Depending on the day and her students’ needs (ie. level of tiredness, energy in the class), she would adjust her DPA schedule accordingly. Music was another factor that was very important in Blair’s implementation of DPA. She discussed how her students were very responsive to music, and depending on their needs and energy levels that day, she would adjust her choice of music accordingly, and play either upbeat or more relaxing music, depending on her goal for that day’s particular DPA session. Furthermore, she spoke to the benefits of making “connections between DPA and different parts of the curriculum,” so that it can “feed in to your program.” She offered the example of how she would incorporate aspects of the science curriculum throughout ‘Walking Wednesdays,’ whereby she would have her grade 1 students observe various natural elements, objects, and seasonal changes, and incorporate this into her science lessons.

4.4.3 Implementing technology into instruction

Integrating technology as an implementation practice came out as a strong theme in my research. Nathan strongly recommended the integration of the GoNoodle website as an easy-to-implement technology to support DPA. GoNoodle is a website that offers animated follow-along exercise videos of various lengths and themes. As Nathan describes, students are highly responsive to GoNoodle, in turn meaning they are engaged in DPA. Nathan emphasized how integrating GoNoodle can work to make the DPA program “successful.” This technique, once again is beneficial to both students and teachers. It helps students actively engage in the program, while providing teachers with a simple and consistent way of implementing the program with their classes.
Blair, likewise, detailed her integration of technology into her DPA practice. She incorporates YouTube videos, DVDs, and websites, such as ‘5 a Day,’ which presents a variety of entertaining and engaging videos for students to follow along with into her DPA program. The ‘5 a Day’ website is particularly relevant to Blair’s students, as it offers exercise and activity videos in both English and French, proving to be very informative for her French Immersion class.

An innovative DPA implementation strategy that emerged from one of my discussions detailed the use of QR codes to carry out DPA. Nathan spoke about his acquaintance with an implementation technique that was based on QR codes. This innovative method would have students going to various stations around the school and scanning QR codes with their phones, which would instruct them which exercise to engage in at the given station. However, as Nathan emphasized, DPA does not need to be that “complicated.”

4.4.4 Promoting a healthy lifestyle

It is evident that all three research participants truly believed in the power of the DPA program to help their students by promoting physical activity, and thus healthy habits. As Francis stated, “it’s a lifestyle—a healthy lifestyle.” By consistently engaging students in the DPA program, teachers are instilling healthy habits in their students, and ensuring that they are engaging in healthy practices that can benefit them physically and socially, as well as impact their overall school experience and wellbeing.

Thus, Francis spoke to the need to “break the cycle” that DPA is a waste of time. He emphasized the benefits of explaining to your students why doing DPA is important. This will allow them to understand why a physically active lifestyle is important, and hence why DPA is important and beneficial to them. Francis compared the importance of informing students about
the necessity for a physically active lifestyle to the same reason that teachers discourage their students from consuming unhealthy foods in school. As he states, “it’s all related…tell [your students] what’s the goal.” Paralleling this view of a holistic approach to healthy habits, Blair discussed the importance of promoting healthy and active choices, and also healthy food choices. Blair attests to the important role of the teacher in promoting and modeling healthy practices and decision-making for their students. She spoke to the necessity of “talking about the importance of physical activity, and encourg[ing] it in different ways.” This commitment to promoting healthy habits in students can have a truly powerful impact on children’s habits later in life. As Patton et al. (2014) advise, “if teachers devalue the DPA program it is possible that the students will adopt a similar outlook” (p. 14). Consequently, teachers’ active promotion of the DPA program, and active and healthy habits and choices can have tangible outcomes on students’ approaches to their health and lifestyle choices.

4.5 Conclusion

The sentiment among all three of my participants strongly spoke to the benefits of DPA on student wellbeing. All three teacher participants agreed that DPA affected not only student behaviour, engagement, and classroom management, but had tangible outcomes on the classroom environment and experience as a whole. While all three teachers are strongly in favour of the DPA program, two of the teachers experienced challenges in carrying out the program, including time constraints and the lack of sufficient physical space. Likewise, teachers’ experiences of support in implementing the program were varied. Support on the part of other teachers and administration, as well as parents, was very well received and encouraged teachers. While my participants were all aware of the resources to help with the program’s implementation, only two of my three participants reported the positive influence of school and parental support on their
DPA implementation. Finally, my participants offered insightful ways of carrying out the DPA program, including a school-wide approach, adjusting DPA instruction on the basis of student needs, as well as by integrating technology. In Chapter 5, I discuss the teaching implications of my research study, as well as my recommendations for educators on the basis of my research findings.
Chapter 5: Implications

5.0 Introduction

In this chapter I review the implications of my research on teacher experiences of, and strategies for implementing Daily Physical Activity (DPA) as a regular component of their teaching practice. I begin by reviewing my main findings, particularly focusing on the specific strategies and techniques teachers incorporate in order to promote physical activity with their students. Next, I look at both broad and narrow implications of my qualitative research study. I also go over recommendations I have for other educators, administrators, and the Ministry of Education, and suggest areas where additional research could prove to be fruitful for understanding how to ensure the consistent carrying out of the DPA program. I suggest strategies to help educators, as well as ways that administrators and the Ministry can further support teachers while implementing the program. Finally, I speak to the significance of my study, and the tangible effects that promoting physical activity in children through the DPA program can have in promoting healthy habits and student wellbeing.

5.1 Overview of Key Findings and their Significance

My interviews with three teachers provided me with the opportunity to gain first-hand insights of educators with direct and current experience with the DPA program. Their insights proved to be fundamental to my study and understanding of DPA’s implementation strategies. The key themes that emerged from my research include: The Effects of DPA on Students, Teacher Challenges in Implementing DPA, Teachers’ Experiences of Support, and Teacher Implementation Strategies.

All of my participants reported the positive effects of the DPA program on their students, and on the impact to their classroom environment as a whole. In light of the literature in the
field, my research is important as it confirms that the DPA program has tangible effects on student behaviour, engagement, and classroom environment. Since teachers in this study reported tangible effects of DPA on their students, including improved classroom management, and increased concentration and focus, this suggests that a consistent implementation of the program could translate to an overall improved positive learning environment. While not all participants reported experiencing barriers in their implementation of the program, the challenges reported included time constraints and a lack of adequate space to implement the program. Pressures to fulfill academic and assessment priorities, as well as the risk of accidents in restrictive or inadequate spaces, were viewed as the main challenges reported by those teachers who were dedicated to engaging their students in DPA.

The theme of support in implementing the program was noted as important by my interview participants. Teachers’ experiences of support were also quite diverse. As my participants revealed, a school environment where all teachers and administrators are supportive and believe in the merits of the program certainly helps promote the program, and ensures its consistent implementation. At the same time, my participants discussed that not all teachers are convinced of the program’s value, and thus experiences of support in the school are varied. Parental support in promoting DPA was a major asset for teachers. All of my participants were familiar with the Ministry of Education’s Daily Physical Activity Resource Guide (2006), and agreed that it served as a basis for providing guidance for leading physical activities and exercises. However, the DPA Resource Guide was also described as serving as a basic instructional guide, and that it was not entirely practical. Given that DPA cannot be led as a rigid lesson, the program must be tailored to promote student engagement. Thus, my research has emphasized the important role that schools and parental support have in promoting the DPA
program and in encouraging teachers. The real outcomes, however, include promoting a culture that values physical activity and healthy habits, and lifestyle choices that play a significant role in student wellbeing.

Moreover, my research has highlighted ways for the DPA program to be integrated as a part of daily instruction, emphasizing the fact that regular implementation of the program is very plausible despite the barriers that exist. A whole-school approach to DPA emerged as a key implementation strategy throughout my research. The participants spoke of an approach whereby the entire school participates in DPA at a regularly scheduled time every day and where intermediate students take on a leadership role, assisting younger students during DPA. This can prove to be very effective. A school-wide approach, while also providing students with leadership opportunities, and releasing a certain amount of pressure from teachers, also addresses the issue of accountability as it ensures that all students are participating in DPA. The importance of adapting DPA instruction to the needs of students proved to be an important topic, as adapting DPA exercises and activities can work to increase their engagement in the program. Finally, my participants discussed how the use of technology, including specific websites, such as YouTube videos and music, can help facilitate DPA. The strategies that my participants brought into their own practice may serve to inspire or encourage other educators to likewise incorporate DPA as a part of their regular classroom instruction. The fact that teachers integrate these strategies and practices into their daily classroom routine and engage their students in DPA means that all elementary school students can, and should, be able to benefit from the effects of this program.

5.2 Implications
In this section I discuss the implications of my study of DPA implementation strategies on the broad educational and research community, and in regards to narrow implications, particularly in terms of my own professional identity and practice.

5.2.1 Broad: The educational community

As all three participants involved in this study revealed, DPA has positive effects on student engagement and class environment. This finding can have very meaningful implications for teaching practices. Thus, my research findings can serve to inform and encourage educators to promote physical activity as a regular component in their classrooms, due to its positive impact on student wellbeing and student classroom experience. If more educators were aware of the effects of DPA on student engagement, perhaps the program would be integrated to a higher extent. This study suggests the tangible benefits that a wide-scale physical activity program can have on students, and may entice policy makers, educators, and administrators to seriously consider the role of physical activity programs in their schools.

My findings are meaningful for the educational community, as they present that while factors such as time and space constraints may pose a challenge, regular, consistent, and effective DPA implementation can be a reality. For school boards and the Ministry, this finding may encourage a more top-down support for the DPA program. A board-wide, and school-wide culture of support for physical activity and healthy habits can be the determining factor in governing the success of the program. As discussed with my research participants, support from colleagues, administration, and parents encourages DPA implementation. This point may be pivotal in instructing key players at the Ministry, board, and school wide levels on how to better facilitate and lead the program. As two of my research participants discussed, a whole-school approach to DPA addresses the issue of accountability, encourages leadership from older
students, and ensures that all students participate in regular DPA, which is scheduled into the school-wide timetable. Greater discourse on this approach may encourage more schools to organize and implement DPA through this effective method. Ultimately, the chief implication that the educational community can take away from my research is that DPA has tangible effects on student wellbeing and on the classroom experience and environment for both students and teachers; educators and the educational community should work to support the program, as well as consider the various implementation strategies for engaging students in DPA, in order to promote healthy habits and overall student wellbeing.

5.2.2 Narrow: Professional identity and practice

Discussing with my research participants how DPA affects their students, and the classroom and school community, has further corroborated my belief in the importance of childhood physical activity. Thus, the research I have conducted has encouraged and motivated me to be an educator that helps my students understand the importance of healthy choices and habits. In my own teaching practice, I will seek to instil habits of a healthy and physically active lifestyle. The insights, experiences, and practical implementation strategies presented by my research participants have highlighted various different ways to approach DPA, and integrate it as a regular component of my teaching. Above all, my research has emphasized the tangible outcomes of DPA on students and learning environment, as well as revealed that consistent and effective DPA implementation is not, and should not be an abstract nor unattainable concept. Despite the challenges that teachers may face in seeking to implement DPA, the implementation techniques and advice of my research participants have offered practical suggestions and methods of implementing consistent physical activity within the classroom. This information is something I seek to bring with me into future teaching environments, in order to promote the
positive effects of the DPA program on student overall wellbeing, and students’ classroom experience.

5.3 Recommendations

By speaking with three educators who actively integrate the DPA program into their practice, I have a fuller understanding of how DPA could be reorganized or approached, in a way to ensure a more consistent implementation of the program. On this basis, I have developed several recommendations for the educational community, in the aim of supporting the program, and its positive effects on student wellbeing. My recommendations include: the need for a culture of greater support for the DPA program at the Ministry, board, and school community levels, a greater awareness of accessibility to resources that can simplify implementation for teachers, and a consideration of a school-wide approach to DPA as a strong implementation strategy.

One of my main recommendations pertains to the importance of promoting a culture of support for DPA. This support should come from the Ministry of Education; it should be promoted at the board-wide level, and a culture of support should exist among teachers and administrators within individual school environments. Based on my research and discussion with three educators with in-depth experience carrying out DPA, I think that both teachers and students would benefit from additional top-down and widespread support for the DPA program. Moreover, continued Ministry support, updates, and resource suggestions could also serve as a way of supporting boards and teachers. While the Daily Physical Activity Resource Guides serve as a basis for providing teachers with basic activity suggestions, updated, brief, and easy-to-implement resource guides, exercise activities, or updated information sheets can support teachers in engaging their students in DPA. Board-specific support resources, including
manuals, activity and exercise suggestions, could also support teachers. Finally, this study points to the meaningful role of the principal in the school. A culture of support, exhibited by all members of the school community, helps promote engagement in the program, and addresses implementation accountability. Without strong leadership that supports physical activity and healthy habits in students, engagement in DPA will be more difficult to achieve.

Professional development, workshops and opportunities for educators to learn about simple implementation strategies could be very beneficial and helpful for teachers. Technology can be a major asset in helping the teacher efficiently implement the program. Additionally, integrating technology into instruction can be as simple as having a device connected to a projector, and integrating a website such as GoNoodle, or follow-along videos on YouTube. Further, the support resources available to teachers should be made easily accessible, and widely known (ie. accessible on line, and hard copies in the school) to show teachers that DPA implementation does not need to be difficult, time-consuming nor laborious, and to highlight that DPA implementation is important and within reach. As Strampel et al. (2014) highlighted, teachers value inexpensive and easy to implement resources and ideas, such as “activity banks, music, and instructional DVDs” to help them facilitate DPA (p. 22). Improved and increased awareness and availability of resources to support teachers in DPA instruction could improve levels of participation and engagement in the program. This awareness of resources that support teachers and the DPA program should be organized on a variety of different levels, including from the Ministry, and Board-wide, as well as in teacher education programs. Teacher Candidates should be entering the profession with an understanding of the importance of not only core subject curriculum expectations, but additional Ministry-mandated programs, including DPA, and how to effectively engage their students in it.
I also suggest that more schools consider a school-wide approach to DPA. As emerged from multiple discussions within my research, a whole-school DPA approach can be a very effective implementation strategy, and one that addresses many challenges and topics, including accountability. While this would require individual schools to make administrative and organizational scheduling decisions, it is an approach that could arguably cause a positive shift in terms of ensuring all students are able to access the benefits of DPA.

5.4 Areas for Further Research

Based on my research of teachers’ experiences and perceptions, I think it would be beneficial to learn more about how collegial support affects teachers’ active and consistent implementation of DPA. Educational researchers should direct their attention on how to establish learning communities where physical activity and healthy habits are promoted. Further research on the impacts of collegial support as a means of promoting and supporting DPA’s implementation could prove to be very informative. Since teachers report that a lack of complete support can hinder the implementation and school engagement in the program, additional research on the values and ways of promoting collegial support, perhaps through regular staff meetings, or emphasizing a community among teachers themselves may provide additional insights into the theme of how teacher and school support helps facilitate the program.

Moreover, research on student perspectives of the DPA program would be very beneficial and insightful to educators seeking to improve the implementation of the program. The ethical review procedures for this research project did not allow for the inclusion of student perspectives. Student voice and the student experience are important. Given that for the program to be successful, students must be active participants of the program, exploring student
perceptions of the program could be very informative and beneficial for educators seeking to consider how the program could be restructured or reorganized in a more effective manner.

5.5 Concluding Comments

This study has brought to light the ways that the DPA program affects students, and the means by which teachers can consistently and effectively support the program into their teaching. In addition to the positive physical health benefits of regular exercise, teachers may be able to refocus student efforts and attention, and promote a positive and engaging classroom culture by leading a session of DPA. This qualitative research has focused on the implementation strategies that teachers integrate to actively and consistently participate in the DPA program. The findings suggest that a school-wide approach to DPA implementation, adapting the DPA program on the basis of student needs, and integrating technology into DPA instruction are the main strategies teachers incorporate while seeking to actively promote physical activity with their students. When implemented consistently, DPA has the capacity to promote habits of a physically active and healthy lifestyle, promoting student wellbeing; this point is critical and speaks to the importance of the program.
References


Kitto, S. C., Chesters, J., & Grbich, C. (2008). Quality in qualitative research: Criteria for authors and assessors in the submission and assessment of qualitative research articles for


Appendix A: Letter of Consent

Date:

Dear ______________________________,

My Name is Anne Bubienczyk 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 seeks to examine ways that teachers are addressing the lack of Daily Physical Activity implementation. I seek to find out whether changes in implementing DPA are being made at the teacher, principal, or school-wide level, and how these efforts are being accepted or challenged. I am interested in interviewing teachers who are familiar with, and have implemented the Daily Physical Activity program mandated by the Ontario Ministry of Education in 2005. 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. 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,
Anne Bubienczyk
anne.bubienczyk@mail.utoronto.ca

Course Instructor’s Name: Rose Fine-Meyer
Contact Info: rose.fine.meyer@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 Anne Bubiencyk and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: _______________________________________

Name: (printed) _______________________________________

Date: _______________________________________


Appendix B: Interview Protocol

Thank you for agreeing to participate in this research study, and for making time to be interviewed today. This research study aims to learn the methods and strategies teachers are applying in the implementation of the Daily Physical Activity program. The purpose of this study is to examine how Daily Physical Activity can be better integrated as a daily component of the learning environment, in order to improve the overall wellbeing of children. This interview will last approximately 45-60 minutes, and I will ask you a series of questions focused on how teachers are able to implement the DPA program as an integral component of their teaching. 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?

To begin, can you please state your name for the recording?

**Background Information**

- How many years have you been teaching in Ontario?
- What grades and subjects do you currently teach? Which have you previously taught?
- Are you engaged in any programs or positions that involve, or promote physical activity (ie. coaching, running a club, sitting on a council, etc.)?
- What experience have you had implementing the Daily Physical Activity Program in the teaching environment you work in (both classroom, and school-wide)?

**Teacher Perspectives/Beliefs**

- What role do you think the school has in instilling a healthy and active lifestyle in students?
- Do you think that the Daily Physical Activity program is effective?
- In what specific ways do teachers attribute Daily Physical Activity as impacting their students (ie. physical health, mental health, behaviour, interpersonal relationships, academic performance, etc.)?
• Are students responsive to Daily Physical Activity, and engaged in the program?
• Are there factors (i.e. resources, money, time, the availability of plans, etc.) that prevent teachers from implementing Daily Physical Activity?
• Are there any negative consequences associated with the Daily Physical Activity program?

**Teacher Practices**

• How do you see elementary school teachers implementing the Daily Physical Activity program as a part of their daily classroom routine?
• Which methods of implementing DPA are you familiar with?
• Do you use technology to help implement DPA?
• What resources/changes may assist teachers in being able to better implement Daily Physical Activity into their daily lesson plans?
• Are you familiar with any unique ways of implementing DPA (can be unique to either your classroom personally or the school community. For example, upper grade DPA leaders, school-wide DPA, integrating apps, etc.)?
• How can DPA be reorganized, in a way to be run more consistently and efficiently?

**Supports and Challenges**

• Are you familiar with the Ministry of Education’s Daily Physical Activity Resource Guide (2006) (which seeks to address the logistics of the DPA program, including a section dedicated to the possible challenges of carrying out DPA in schools, along with associated solutions)?
• If yes, do you think it is a comprehensive, effective, or pragmatic tool that can help teachers consistently instill DPA, addressing the challenges that teachers face in DPA’s implementation?

• Do you feel supported by the school community, administration, and board, to implement DPA? (prompt: can be in the form of resource guides or physical resources, discussions/reminders at staff meetings, etc.)

• Do you experience any enthusiasm, encouragement or support on the part of parents, in implementing DPA specifically, and generally in terms of a healthy lifestyle?

Next Steps

• As a Teacher Candidate eager to promote a healthy and physically active lifestyle in my future teaching practice, what advice do you have for me?

Thank you sincerely for your time and participation in this research study.