Middle School Students Perceptions of a Physical Education Program

by

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Dedication

This dissertation is dedicated to my beloved grandmother, Helen G. Todd (1905 - 2002). Her faith, love, compassion, understanding and her insatiable drive to never stop learning are my inspiration. I love you and I miss you.
Curriculum Vitae

The author was born and raised in Bath, New York. She attended Bath Haverling Central School, a rural public school. She attended SUNY Brockport and graduated with a B.S. in Physical Education, Teacher Education in 1994. She graduated from SUNY Brockport in 1996 with a M.S. in Physical Education with a concentration in adapted physical education and early childhood. She holds a permanent certification in Physical Education. She earned additional credits from Mississippi State University to obtain a permanent certification in health education from the State of New York in 1997. The author completed her Certificate of Advanced Study in Educational Administration from SUNY Brockport in 2005.

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Abstract

Best practice, developmentally appropriate physical education is specifically designed to meet the unique needs of all students. It is particularly focused on attending to all learning domains and should be an integral component in students’ schooling (Gallahue & Cleland, 2003; Graham, 1995). A need for physical education that is developmentally appropriate and reflects best practice is important for all students; it is even more significant for students with special needs (Winnick, 2005).

Rising issues around childhood obesity further emphasize the vital need for this type of programming in physical education (United States Department of Health and Human Services Centers for Disease Control, 2008). In addition, a significant body of research points to a positive direct relationship between physical activity and learning, as well as, academic achievement (Blaydes-Madigan, 2003; DeKorp, 1998; Eastin, 2003).

Middle school students are particularly at risk; individuals who are physically active during their adolescent years are more likely to be active adults (Dishman & Dunn, 1988; Kuh & Cooper, 1992). Further, Wallhead (2007) suggests it is important that students enjoy physical activity to continue to use motor skills on their own time. Unfortunately, student perceptions are rarely considered in physical education program development (Carlson, 1995; Graham, 1995; Krouscas, 1999).

Therefore, under the umbrella of a socio-constructivist lens and through a qualitative analysis, the purpose of this study was to understand physical education from a middle school student perspective. This study required students to complete a critical incident survey, the Middle School Physical Education Critical Incident Survey (MSPECIS) (Krouscas, 1999). This study sought to answer the overarching question, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the satisfaction and activity level of middle school students? In order to answer the overarching question and the additional research questions, question one below was the initial course of action in framing the study and is addressed in the literature review. The study itself was not designed to answer question one.

1. How have social discourses and ideologies impacted physical education?
2. What is the significance of physical education these for middle school students?
3. How do these middle school students perceive their physical selves?
4. How do these middle school students perceive their physical education experience?

Based on the data reviewed, most students are satisfied with their middle school physical education experience. Most students consider themselves to have an average body build, consider themselves in good physical condition and good at sports. These students do, however, offer some suggestions for making their experience more meaningful. They suggest competition, fun, friends, student voice and more time in physical education are important components.

If used within the parameters of current laws, mandates and standards, it is hoped that the inclusion of student perception data into planning for physical education may lead to increased student engagement and satisfaction in physical education. In doing so, it may potentially promote increased health, wellness, and academic achievement.
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Chapter 1: Introduction

1.1. Statement of the problem and goals of the study

This study has explored various discourses and issues that have impacted or influenced physical education in schools. Current research has been reviewed together with an analysis of student perspectives of a physical education program. Although many of the ideologies contained within pertain to all children, this study has focused on middle school students in grades six to eight.

Throughout history, various social discourses have prompted creation of educational laws and mandates in an attempt to protect children, raise their academic achievement and provide them with the best possible educational experience. These include learning standards, federal and state laws, and federal and state regulations. Unfortunately, it appears that not all efforts have produced productive, positive or enduring results, particularly in the field of physical education (Amerin & Berliner, 2002; Ballard, 2005; Graham, 2004; Keyes-Kun, 2004).

One example of a shortfall in efforts for reform in the area of physical education in education law is No Child Left Behind. NCLB calls for increases in test scores and performance in school districts (United States Department of Education, 2001). The mandates of the law tend to overshadow and inadvertently devalue physical education by shifting primary focus to the academic areas (Graham, 2008; Tracy, 2007; Kamla, 2007; O’Connell, 2005). Under the NCLB law, if districts do not meet their adequate yearly progress (AYP) goals, there are severe consequences for the district including the loss of funding (2001). As a result of negotiating time, human and financial resources, and energy to meet the goals of NCLB, special area classes such as physical education have
the potential to be overlooked. Thus, special area classes are often not monitored, often have neglected or curtailed programs, and they are not required to meet AYP goals (Amrein & Berliner, 2002; Dwyer, Blizzard & Dean, 1996; Graham, 2004; Tracy, 2007; Keyes-Kun, 2004). The resulting consequence is children may not always receive the benefit of research based, developmentally appropriate physical education to meet their needs (O’Connell, 2005).

A second discourse can be found in New York State Education Law. The law\(^1\) outlines specific criteria districts are to meet in order to provide appropriate physical educational experiences for children. Additional factors such as the physical education standards\(^2\) attempt to provide direction in creating opportunities for children to be active and physically educated. This could assist in combating the negative health related issues currently plaguing our nation’s children. The premise of the physical education standards and laws are to provide a foundation for districts to provide a developmentally appropriate physical education program in schools to meet the needs of all students, thus preparing them to be healthy and active throughout their lifetime (Regents of the State of New York, 1996). Unfortunately, as a result of external pressures and mandates in academic areas, such as NCLB and tight budgets, to name a few, physical education is often not monitored and adjusted, nor held accountable to meet the physical educational needs of the current generation of children (Castelli & Rink, 2003; DiNapoli, 2008).

\(^1\)New York State Education Law – Part 135 §135.2, 135.4: All schools under the jurisdiction of New York State shall provide physical education for all students and shall provide physical education experiences as prescribed. (See Appendix C.1. for Part 135 Regs).

\(^2\)New York State Physical Education Standards – provides three foundational standards designed to enhance the overall health and wellness of students (See Appendix C.2. for New York State Physical Education Standards, 2006). All New York State Standards are designed to meet the criteria in the National Physical Education Standards (See Appendix C.3. for National Physical Education Standards [NYSPEs], 2006).
Chapter two further explores additional discourses relating to programming and mandates for providing physical education programs that are developmentally appropriate for all students.

In addition to the above mentioned discourses and mandates impinging on physical education, there are many governmental reporting agencies, professional associations, and current research reporting that there is a growing problem with heart disease and other health related problems stemming from and inactivity in both adults and children. They further report that heart disease is being found in children as early as seven years of age (American Alliance for Health Physical Education Recreation and Dance [AAHPERD], 2007; American Medical Association [AMA], 2008; American Obesity Association [AOA], 2008; National Association for Sport and Physical Education [NASPE], 2005; United States Department of Health and Human Services Centers for Disease Control [CDC], 2008). In fact, some suggest, children today may have a shorter life expectancy than their parents for the first time in 100 years (Klish, 2009; Olshansky et al., 2005). This is an incredible and bold statement to make. Could it possibly be true? This statement was made in response to the growing obesity epidemic and the increasingly sedentary lifestyles of children (Anderson, 2009; United States Department of Health and Human Services Centers for Disease Control, 2008; Wallhead, 2007). Developmentally appropriate physical education has the capacity to address these important health issues to benefit children (Eastin, 2003; Gallahue & Cleland, 2003; Kamla, 2007).

In order to focus, contextualize, and ground the preceding information, the professional organizations such as AAHPERD and NASPE have gathered current
research findings and have infused information from current laws, mandates, standards and best practices in teaching to provide a definition of developmentally appropriate physical education programming designed to meet the needs of all children (AMA, 2008; Blaydes-Madigan, 2003; Bredekamp, 1992; United States Department of Health and Human Services Centers for Disease Control, 2008). The generally accepted definition of developmentally appropriate physical education is defined as inclusive, connected and individualized (1992; NASPE, 2005). Breaking down the definition further, inclusive is further described as “targeting every student…active participation…these being the foundational practices to program development” (2005, p. 154). The term connected is used to define developmentally appropriate physical education as an avenue to guide students to desire lifelong activity and to be able to generalize those activities to real life. Finally, individualized, means that activities are both age and developmentally appropriate so as to enable every child to be successful and benefit from the activity regardless of ability or disability (2005). The final concept, individualized, signifies one of the pivotal points districts may need to consider carefully when designing a physical education program to truly, successfully meet the needs of all students.

As physical education is frequently not monitored, teachers in districts are generally not compelled to verify or be accountable for meeting standards and best practice (Castelli & Rink, 2003; DiNapoli, 2008). The application of valuable current research to teaching physical education seems to be largely untapped. The result of the lack of the application of current research is that children may not always be receiving adequate, developmentally appropriate physical education to meet their individual needs. In fact, it has been suggested that activities in physical education are more often chosen
The place vs. context ([LRE]) and developmental appropriateness (Rueda, Gallego & Moll, 2000) are the confounding issues. Reflecting on the laws and standards, it would seem that the emphasis should be placed on providing students with a safe and successful physical education experience in which to learn the skills and attitudes that would benefit them for a lifetime (Regents of the State of New York, 1996).
a synonym for LRE. This kind of placement can place students of varied ability levels in uncomfortable, unsafe and educationally and physically counterproductive situations. Additionally, for some students, placement in a developmentally inappropriate physical education program can be so significant that it may even have impact on a student’s life expectancy and or quality of life (AMA, 2008; United States Department of Health and Human Services Centers for Disease Control, 2008). This would suggest that some students do not regularly receive developmentally appropriate physical education designed to meet their unique needs, nor are they systematically placed in a safe and successful educational environment that is in the best interest of the child in the development of their overall health, well-being and educational experience.

All the above issues can be exacerbated by a lack of common understanding of and appreciation for developmentally appropriate physical education programming. As a result of the synthesis of the literature, there is a gap in understanding between developmentally appropriate, best practice in physical education, laws, mandates and standards, as well as, an understanding of student perspectives and the application of the same. This can result in negligence and or a continued misunderstanding regarding the importance of a developmentally appropriate physical education program in the lives and general educational experience of all children. Unfortunately, this notion is particularly true during adolescence as individuals who chose to be active during adolescence are more likely to be physically active in adulthood (Dishman & Dunn, 1988; Kuh & Cooper, 1992). As a result of student perception data, this study focused on defining adjustments that could be made in a physical education program to provide a more developmentally appropriate physical education program designed to meet student needs. The goal is to
potentially enhance the satisfaction and activity level of these middle school students thereby potentially increasing engagement, exercise adherence, health, wellness and academic achievement (Dwyer, Sallis, Lazarus, Blizzard & Dean, 2001).

1.2. Theoretical frameworks

The conceptual and theoretical framework for this study was primarily grounded in a social constructivist perspective of learning and development. Given this focus, the study has given much consideration to the physical, mental, and social-emotional state of the child (the whole child) in relation to their learning and development processes. Some particular models that informed this study are briefly highlighted below.

**Piaget** – Piaget’s theories play an important part in understanding learning and development and were largely founded upon movement and actions. Piagetian theory consistently discusses the brain-body connection (Blaydes-Madigan, 2003; Lee, 2000). Physical education and specifically developmentally appropriate physical education focuses on developing and strengthening the critical nature of brain-body connections.

**Social Cognitive** – Students must be understood and viewed from a global perspective. Learning does not occur in isolation. Learning occurs as a result of interactions with others. This is an important consideration in teaching and learning (Martin, 2004; Zimmerman, 1989). This is as true in physical education as it is in any academic subject.

**Socio-cultural (historical)** – Understanding and focusing on the individuals and experiences in his or her past is a critical piece of understanding learning. Learning cannot be targeted correctly without consideration of the person and their background and experience (Vygotsky, 1987).
**Situated Learning**—Situated learning theory is critical to understanding the learning process as individuals are products of environment and experience. These experiences are critical to developing learning whether it is mentally, physically, or social-emotionally. A student placed in an inappropriate learning environment can be equated to the learning not occurring or at the very least not occurring to develop the student’s full potential (Lave & Wenger, 1991).

**Self-Efficacy**—Bandura’s self-efficacy theory suggests an individual’s self-efficacy is a critical component fueling learning and success. It is particularly significant in physical and movement competence (Skinner & Piek, 2001). Children placed in the incorrect learning environment may not learn to be successful, competent movers to the degree they could in a developmentally appropriate environment (Bandura, 1986).

**1.3. Overview of study design**

Collectively, it is the foregoing tensions of understanding the significance of and application of developmentally appropriate physical education programming, together with understanding and attending to student perspectives that prompted this study. A shared understanding of developmentally appropriate physical education, standards, laws and best practices, as well as student perceptions, served as the foundation of this study. An incomplete understanding of student needs can complicate the appropriate focus of physical education programs and the results that can potentially be attained. It is imperative that schools provide a developmentally appropriate physical education program specifically designed to meet the needs of all students (Anderson, 2009, Gallahue & Cleland, 2003; Keyes-Kun, 2004). In order for this to be effective, there is a need for continued attention and scrutiny applied to physical education programs.
The primary component of this research proposal sought to engage students in completing a survey which was designed to bring to light their perceived needs, concerns and desires in physical education. Students in grades six through eight were invited to participate voluntarily in a short survey. The survey was analyzed using a qualitative analysis approach. Student perceptions were coded and categorized to reach a set of conclusions and initial recommendations with the intent for potential reform.

The students were provided with all necessary human subjects’ documentation and given an overview and goals of the study. Students were invited to complete a modified Middle School Physical Education Critical Incident Survey (MSPECIS), (Krouscas, 1999). See appendix B.1. This survey was completed during the students’ regular physical education classes.

The overarching question upon which this study was framed was, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the satisfaction and activity level of these middle school students? In order to frame the study the first course of action was to answer question one below, which is contained solely in the literature review. The study itself is not designed to answer question one. With that understanding, the following research questions were explored:

1. How have social discourses and ideologies impacted physical education?
2. What is the significance of physical education for these middle school students?
3. How do these middle school students perceive their physical selves?
4. How do these middle school students perceive their physical education experience?
Although some quantitative data is derived from this study, qualitative data analysis methods have primarily been employed for analyzing the student perception data in this study. I purposefully did not conduct a statistical analysis of difference among gender and grade. The data is presented for informational purposes only. A more detailed explanation is outlined in chapter three.

1.4. Potential contributions of the study

There are numerous contributions that may result from this study. The data presented in this study provides insight into student perceptions of their physical education experience. The data contained in this study, used within the framework of laws and standards, provides an opportunity for

- analyzing the current physical education program and potentially creating an enhanced developmentally appropriate physical education program to meet the needs of students in the district
- developing common goals for the district physical education program

In addition, if the physical education department chooses to undertake some form of programmatic reform in physical education, the literature review provides a significant current research base from which to develop their rationale to present to key stakeholders.

At its core, this study could provide the framework and example for

- opportunities for collegial conversation and professional growth
- improving teacher practice
- other departments in the district to assess their programs

Beyond the immediate local benefits, this project has the potential to impact the larger professional community by providing data and models that may be helpful in other
districts to institute similar processes to enhance teacher practice, as well as, student satisfaction and engagement in physical education. As teacher practice in the district changes and develops, this knowledge may be shared with the local college students who come to the district for their student teaching experience. This may, in-turn, impact other educators.

If the key stakeholders come together to react to student perceptions, and potentially redefine the physical education program in the district, this project provides a research based document to inform the district of the particular needs and issues in physical education. All student data results will be shared with the district in an executive summary. As a result, teachers may strive to continue to provide and refine their developmentally appropriate program to further enhance the physical education experience of all students. Used as a catalyst, it is my hope that it will be the impetus for not only change, but ongoing change and development over time as needed. This may include and require, but is not limited to, the following:

- Attending to regular curriculum updates
- Promoting accountability for students
- Ongoing communication among stakeholders
- Ongoing staff development
- Updating equipment and making space assessments and improvements
- Participating in continued collegial conversations
1.5. Overview and organization of the study

This introductory chapter has provided a statement of the problem, goals of the study, theoretical frameworks that have framed the study, a brief overview of the study design and potential contributions of the study.

The remaining portions of this study are as follows. Chapter two details several of the assumptions driving this research. The first section a) applies background information including key terms and assumptions; b) addresses laws, mandates, and standards to add clarity and focus; c) contains a historical perspective; and d) describes the significance and value of providing a developmentally appropriate physical education experience. The second section of chapter two provides a literature review detailing the theoretical frameworks focusing the research. Finally, the third section of chapter two discusses gaps in knowledge and how they may be addressed.

Chapter three is the research design which a) provides details of the proposed research study including rationale for design choice, b) explains the basic tenets of the survey choice (critical incident survey) and rationale, c) provides a context for the study, d) provides the details as to the execution of the study to address the research questions, e) illustrates the recruitment and selection of participants as well as ensuring all human subjects’ regulations are met, and f) explains the interventions. Finally, chapter four is the data analysis and reporting results, and chapter five is the discussion.
Chapter 2: Literature review

2.1. Introduction and overview

Included in this chapter are detailed results of the literature review pertinent to understanding and conceptualizing this study. This literature underscores and articulates the assumptions driving and defining this study. The body of information contained within is sub-divided into five sections to provide increased clarity and focus. In addition, although students with special needs are mentioned as important considerations in development of a physical education program, it is not the intention of this study to specifically identify and attend to students with special needs. Therefore, beyond what is presented in the literature review, the specific needs of these students are not presented as part of this study.

Section A defines various key terminology and assumptions in education, and specifically physical education. Section B provides a survey of the significance of physical education and physical activity throughout history. It further provides documentation of several laws, mandates, reports and standards that were designed to impact or had an impact on physical education. Section C details current research outlining the need to provide a research based physical education program which is developmentally appropriate: designed to meet the individual needs of all students. Section D describes the theoretical frameworks framing this study and their significance. Section E addresses the importance of developmentally appropriate physical education for the middle school child. Finally, the chapter concludes with some closing thoughts and rationale to provide further focus for the study.
2.2. Section A. Key terminology and assumptions

In order to provide understanding and clarity to this study there are a number of terms specific to education and or physical education that bear defining.

**A.1. Defining developmentally appropriate physical education**

Developmentally appropriate physical education was previously defined in detail in chapter one on page four as inclusive, connected and individualized. In addition, the National Association of Sport and Physical Education suggests the following goals for attaining a developmentally appropriate physical education program and adapted physical education program. Each and every student [with and without disabilities] will:

- Demonstrate competency in many movement forms and proficiency in a few [movement forms]
- Apply movement concepts and principles to the learning and development of personal motor skills
- Have an active lifestyle
- Exhibit health-enhancing levels of physical fitness
- Develop and maintain positive personal and social behaviors which occur in activity settings
- Understand and have respect for differences in individuals which will be evident in their behavior
- Participate regularly in physical activity thereby providing opportunities that include enjoyment, challenge, self-expression and social interaction

(NASPE, 2005; Virgilio, 1997)
A.2. Defining adapted physical education

Following a similar framework as developmentally appropriate, adapted physical education is defined as an “individualized program involving physical and motor fitness, fundamental motor skills and patterns, skills in aquatics and dance, and individual and group games and sports to meet the unique needs of individuals” (Winnick, 2005, p. 4). Again, meeting the needs of individuals is key.

A.3. Defining least restrictive environment

Least Restrictive Environment (LRE) is a legal term used in the Individuals with Disabilities Education Act (IDEA) and follows a philosophy of inclusion. LRE requires that students with disabilities, to the maximum extent appropriate [emphasis mine], be educated with their non-disabled peers (Winnick, 2005).

The term LRE may often be a misunderstood term as is maximum extent appropriate. LRE is not and should not be based solely on serving all children, able bodied or disabled, in a regular physical education class (Block, 1999; Block & Burke 1999; Greenwood & French, 2000; Seaman, 2003). The best interpretation of LRE is to place students in an environment appropriate to their [the student’s] overall needs rather than simply looking at LRE as the regular educational environment. When LRE and regular educational environment are taken as equal, the regular physical education class tends to become a child’s physical education dumping ground (Winnick, 2005). In that scenario, unfortunately, for some children, it is possible that the regular physical education class may be a most restrictive environment (Block & Krebs, 1992; Rueda, Gallego & Moll, 2000).
Based on the social constructivist theories framing this study and the notion of educating the “whole child”, some school districts may need to refine the focus of their physical education program. In doing so, they may be able to offer a more developmentally appropriate physical education program designed to meet the varied and changing needs of all children.

**A.4. Physical education via the New York State Learning Standards**

Further following the social constructivist model, is physical education as defined by the New York State Learning Standards. They describe physical education as developing the students’ [all students] knowledge and skills to do the following:

(a) acquire and maintain physical fitness, participate in activity, as well as maintain personal health

(b) establish and maintain healthy environments

(c) understand and manage both personal and community resources (Regents of the State of New York, 1996)

Although these standards are consistent with the whole child approach, there is often little accountability to implement them adequately, appropriately, and consistently (DiNapoli, 2008).

**A.5. Defining obesity and overweight**

Overweight and obesity are highly related and often used interchangeably (Jackson, Morrow, Hill & Dishman, 1999). However, there is a difference. One can be overweight (too much body weight) without being obese (too much body fat). Thus, there are several, somewhat varying, definitions of overweight and or obesity. One source describes overweight as being at or above the 95th percentile of weight for the
height (1999). It is noted that the prevalence of overweight children has risen to a point where 25% of all children are now overweight. This figure has increased 11% from a decade ago (Gallahue & Cleland, 2003). Another author suggests overweight is defined when weight exceeds height and frame size by an arbitrary figure assigned to individuals according to their height and frame size (known as a height/weight chart); one is generally considered to be overweight when their weight is about 20 percent over the recommendations for their weight when compared to their height. Conversely, obesity, which tends to be a truer measure, is defined as 25 percent or more body fat. With more body fat, there is an increasingly higher risk of mortality (Bass, Moore & Stewart, 1999; Jackson, Morrow, Hill & Dishman, 1999). Body fat and lean tissue can be accurately measured to determine the level of obesity. Regardless of the exact measure or terminology used, overweight and obesity are significant problems in society and particularly in children (United States Department of Health and Human Services Centers for Disease Control, 2008). This is particularly significant as there is a strong correlation between overweight children and overweight adults (Jackson, et al., 1999, p. 97). The following illustration produced by the United States Health Department, Center for Disease Control provides a graphic representation of the obesity problems which exist in the United States and have significantly increased over time. It should be noted that the Centers for Disease Control is using the figure of greater than 30 percent body fat for their statistics in this chart rather than the 25 percent as is previously mentioned as the standard.
At their foundation, all of the foregoing definitions are child centered and follow the tenets of the overall social-constructivist paradigm which frames this study. The theories and definitions embodied under the social-constructivist umbrella are critical to viewing this study and focusing the intention of the study to best meet the unique physical education needs of all students, particularly those at the middle school level. The social constructivist paradigms are inherently able to focus on and attend to all areas of student development of learning. Focusing on the whole child in all areas of development, mentally, physically and social-emotionally is critical to understanding best practices in physical education and developmentally appropriate education in general.
They further assist in understanding and critiquing school programming in an effort to enhance the potential of the student. Further attention is given to the theoretical frameworks underscoring this study in the “theoretical framework” section of this chapter.

In sum, the overarching goal of developmentally appropriate physical education is to provide students with the understanding, skills, assessment tools and techniques to plan, develop and motivate themselves to be active throughout their lifetime at a level which meets their individual needs. These premises are the foundations for development of common understandings and a platform on which to begin iterative discussions around assessing the current physical education program within a district to ensure it is consistent with being developmentally appropriate for all students regardless of their ability or disability.

2.2. Section B: Key laws, mandates, and reports impact physical education

Public Law 101-336, the Americans with Disabilities Act was also enacted in 1990 (2005). In 1997 there were more amendments to the Individuals with Disabilities Education Act, Public Law 105-17 which included an emphasis on results and reporting (2005). All of these documents target improvements to more effectively serve children in their educational experience.

The signing of the 2001 Public Law 107-110, now known as No Child Left Behind, was an additional law designed to bring reform to education (United States Department of Education, 2001). There has been another name change and amendments to the Individuals with Disabilities Education Act of 2004; now referred to as Individuals with Disabilities Education Improvement Act (United States Department of Education, 2004). Once again, in 2005, NCLB was reauthorized. Without reiterating all the details of the law, the contents of NCLB drastically forced a change in the nature of education, testing and reporting. With these new educational criteria now enacted, educational leaders in various fields needed to react. Unfortunately, often physical education and especially adapted physical education tended to be overlooked given that attention to meeting standards went predominately to the academic subjects (Graham, 2008; Kamla, 2007; Keyes-Kun, 2004).

Despite all the laws and policies that have been enacted in recent years, many of which are mentioned in this study, in most districts, physical education and adapted physical education remain largely unaffected by the growing network of new laws and policies (Kamla, 2007; Keyes-Kuhn, 2004). Unfortunately, the laws and regulations, particularly in terms of the impact felt in the field of physical education, can be considered to join the ranks of “ideas, practices and policies that were never enacted”
(Gore, 1998, p. 231). Enforced may be a more accurate term than enacted, however the results are the same. Based on the literature review, the basic tenets and spirit of the law(s) may have been overlooked when applying them to a child’s physical education experience. In fact, in a recent physical education audit conducted by the New York State Comptrollers Office, only one in the twenty districts audited were meeting the New York State Physical Education mandates (DiNapoli, 2008). The overarching goal of this study is to begin to define:

- the disconnect that may exist between the current laws, regulations and policies related to physical education and current practice
- the current research in best practice in teaching physical education
- student perspective data

A further goal resulting from this study is to heighten awareness regarding physical education and assess programming and student needs thereby beginning the process to identify potential steps to improve physical education programming to increase satisfaction and activity levels and meet the needs of all children.

2.2. Section C. Historical significance of physical education

As is shown by this part of the literature review, physical education has a long history of significance as it applies to individuals with and without disabilities. A thorough search of literature reveals that the roots of physical education can be traced to 3000 B.C. in China, then called therapeutic exercise (Winnick, 2005). The ancient Greeks and Romans also recognized the virtues of medical and therapeutic exercise (2005). The development of physical education in the United States can be traced back to the early 1800’s as physicians’ prescribed remedial exercises to ameliorate weaknesses or
deficiencies (Davis, 2003). Unfortunately, the above views take a deficit model approach, and do not focus on serving the entire population. The views look only at what is perceived as problematic for individuals and or society. However, even through that limited lens, society clearly understood that exercise and physical activity could assist the individual in either reclaiming a more functional level of health or lessening the negative effects of injury or disability. Physical education has a positive impact on individuals.

Moving forward in history, 1838 is accepted as marking the beginning of physical education for children with special needs in the United States. Specifically, it began with the Perkins School, Boston, Massachusetts as a result of the school’s director advocating for health benefits of physical activity (Winnick, 2005). In the first half of the 1800’s physical education was primarily for individuals with special needs and was considered to be “medically oriented, preventative, developmental or corrective” (Wessel & Dummer, 1999, p. 7).

Toward the middle of the century, the economic impact of the industrial revolution and political impacts of the rapidly expanding boundaries of the United States provided a backdrop for a similar type of physical education as was found in the early 1800’s to continue. Society’s need to have healthy, strong male bodies was felt to be imperative to continue the growth and development of the United States (1999). Additionally, schooling was thought to be the answer to all societal ills or the “great equalizer” (Cremin, 1957, p. 8).

Although physical education was previously provided to the blind, as well as to those with other disabilities in the early 1800’s, adapted physical education historians recognize that medically oriented gymnastics and drills began in the latter part of the 19th
century (Winnick, 2005). At this time, there was also a movement in education in general toward more child-centered education (Pinar, Reynolds, Slattery & Taubman, 2002). However, this caused little change in the nature of physical education. As time went on, the Civil War, expansion of the railroad, continued westward geographic expansion, and the United States blossoming as a world power prompted the continued need for the physically adept (Wessel & Dummer, 1999). Additionally, physical education at that time was used to provide post-war rehabilitation (2005). According to the socio-cultural nature of the time, there seemed to be a continued recognition of the need for the physically adept to carry on the task of building, securing, and governing the homeland. Once again, physical activity served as the method to ameliorate societal issues.

As the United States approached the end of the century and continuing on into the 1930’s, programs were making a shift to more sports-centered physical education. It was in this era, specifically starting in 1896, that the United States regularly participated in the Olympic Games. Even then, the state of physical education remained largely unchanged; fitness, sport-centered and rehabilitative exercises were the norm (Winnick, 2005).

Post-depression recovery in the nation was occurring and in the 1940’s there was another World War (USA History in Brief, 2005). Physical training was critical once again in preparing boys for war. A school was developed specifically to develop boys to meet criteria for war (2005). Physical education at this time was not at all inclusive as it was targeted mainly for males. In the 1950’s physical education consisted of regular corrective classes for students. Post-war found many individuals needing correction of deficits or injuries that resulted from the war. Students were assigned to physical
education classes based on a medical examination which sent them to a regular class or corrective program. The corrective programs involved limited, restricted and or modified activities and were, interestingly enough once again, always related to health, posture or fitness problems (Winnick, 2005).

There were major initiatives in the 1960’s that began to impact physical education and more specifically, adapted physical education. The launching of the Project on Recreation and Fitness for the Mentally Retarded began (2005). By 1968, the focus of the program evolved to encompass all disabilities and the name was changed to Unit on Programs for the Handicapped. Shortly thereafter, the Special Olympics were initiated. There was a growing concern at this time for individuals with emotional and learning disabilities. These youngsters began to be included in adapted physical education programs (2005).

The 1970s, with the Vietnam War, once again prompted continuation of the historical form of physical education programming. Again, there was a need for ameliorating disabilities as a result of mental or physical injuries. The civil rights movements prompted a new awareness and concern for individuals with disabilities (USA History in Brief, 2005). There were several laws, or parts thereof, developed which have been tremendous forces in impacting adapted physical education. These are more clearly defined in the next section, B, of this chapter. Additionally, the 1970’s heralded a major shift in educating children with disabilities from separate schools to a least restrictive environment (Wessel & Dummer, 1999).

As the United States moved into the 1980’s, the government became heavily involved in the development of adapted physical education. A series of laws and
government documents were produced highlighting the shortcomings of not only the educational system, but the physical health and well-being of its citizens. There was a particular concern for children’s health and well being. In 1986, there were more amendments which extended the physical education benefits to infants, toddlers and preschoolers with disabilities. This was a new ideology that physical education was to be available to all students, including preschoolers. Physical education was, further, to be provided to all students in a way to best meet their needs (Winnick, 2005).

As early as 1991, the National Consortium for Physical Education and Recreation for Individuals with Disabilities, together with the National Association of State Directors of Special Education, and Special Olympics International participated in a conference with leaders of advocacy groups and individuals with disabilities. The conference had two goals 1) identify barriers preventing full provision of appropriate physical education services to individuals with disabilities, and 2) establish an action agenda to ameliorate the issues (Davis, 2003). Interestingly, the barriers identified by the conference attendees were: not knowing what adapted physical education consisted of nor its goals, nor how individuals with disabilities could benefit from appropriate programming, as well as, what competencies were required by teachers to appropriately deliver these services (2003). Unfortunately this scenario often continues to remain true. Even with the development of National Standards in Physical Education (National Association for Sport and Physical Education, 1994) and National Standards in Adapted Physical Education (Kelly, 1995), inaccessibility to developmentally appropriate physical education for all students tends to be a continuing issue in education today (Block, 1999; Block & Burke, 1999; Seaman, 2003). Shortly after the national physical education standards were
developed, in 1997, the New York State Education Department began developing laws, rules, standards and regulations to provide definition to physical education and adapted physical education, as well as, adherence to the components of the federally mandated laws (Winnick, 2005). New York State Part 135 regulations, as well as, New York State Physical Education Standards can be found in appendix C.1 and C.2 respectively.

As can be clearly seen and understood, the importance of physical education has remained a significant initiative throughout many changes in history. As society has moved from being an agrarian society to a post-industrial society, and now to an information society, the significance of physical activity in the lives of individuals has remained a constant. Physical activity throughout history clearly has not been detrimental to those served. However, based on the literature, it has seemingly generally held a place of being reactionary rather than proactive. Some might suggest that physical education holds an even more critical place in today’s society than ever before (American Obesity Association, 2008; United States Department of Health and Human Services Centers for Disease Control, 2008; National Association for Sport and Physical Education, 2005). Based on current research findings, a proactive approach to physical education seems imperative. Exclusion from physical education for anyone is unnecessary if the program is appropriately designed. Unfortunately many disabled as well as able bodied students are often left out of developmentally appropriate physical education on a daily basis (Winnick, 1988).

2.2. Section D. The value of developmentally appropriate physical education

Another avenue of support for this study found in current literature is the impact physical education has on individuals and particularly on children. This section of
supporting literature further assists us in gaining a focus in thinking towards developmentally appropriate physical education and the imperative nature of providing this for children. Results that have been uncovered in this study support the value and importance of physical education and further conform to the socio-cultural paradigm which undergirds this study. A developmentally appropriate physical education program impacts the whole child (i.e., physically, mentally and social-emotionally), not just the physical part of the child.

**D.1. The physical impact of physical education on the child**

Multiple reports from our own governmental reporting agencies, the Report to the President from the Secretary of Health and Human Services, the report from the Secretary of Education in the fall of 2000 (U.S. Department of Education, 2001), and Healthy People 2010 (United States Department of Health and Human Services, 2000), have identified the significant problem of the inactive, unfit, and increasingly overweight status of the nation's young people (United States Department of Health and Human Services Centers for Disease Control, 2008). There are numerous impacts the nation’s overweight and or obesity status has had on society. There is an unprecedented epidemic of childhood obesity that is currently plaguing the United States (United States Public Health Service, 2000). Countless sources, including the Centers for Disease Control (CDC), have reported that the percentage of young people who are overweight has almost doubled in the past 20 years (2008; Hedley, et al., 2004). Obesity-related diseases once seen almost exclusively among adults, like type-two diabetes and high blood pressure, are increasingly being diagnosed in adolescents. It has been observed that cardiovascular diseases are now actually beginning in childhood (Klish, 2009; Virgilio, 1997).
The lack of physical activity contributes to an increasing health burden of obesity and type-two diabetes in youths in the United States (Colditz, 1999; Katzmarzyk, Gledhill & Shepard, 2000, Klish, 2009; McGinnis, 2008). We must also note that this is a particular problem for females as “physical activity declines in adolescence and especially in girls” (Dishman, Motl, Sallis, et al., 2005, p.16). Therefore, it is important to uncover appropriate potential interventions to increase adolescent physical activity levels (2005).

According to a WebMD Health report, America's Kids at Risk …researchers have begun to focus on the early teen years as the most critical time to keep kids' interest in physical activity from flagging. The right interventions during adolescence…will give kids the best chance of developing an exercise habit that will stick with them for life (Web MD Medical News, 2004). For most children, the negative effects of poor physical education programs need to be addressed as children develop a lasting hold of activity habits at about the age of 12 (Health First, 2003). This is the middle school child.

The human skeleton is a significant area of concern. The structure of the human skeleton is determined in part by genetics and in part influenced by adaptive mechanisms (i.e., physical activity) (Bailey, 2000). This is, and has been, common knowledge for hundreds of years. It is also a common understanding that positive influences on bone mass occur much more readily in the growing bones of children than in adults. The peak bone mass is a significant determinant of bone mass in old age (2000). Ninety percent of the bone mass is achieved by the end of adolescence. Lifestyle and nutritional patterns are highly influential factors during this time as well (2000). Childhood is the critical, foundational place to begin to instill healthy lifestyle habits.
In that there is a significant correlation between physical activity and bone mineral accrual, this reinforces the fact that it is highly important that children not only eat properly, but also get appropriate amounts and kinds of physical activity during adolescence and childhood (Bailey, 2000). There have been several studies on various bone sites in both male and female children and adolescents (2000). It is clear from those studies that there was a significant difference (increase) in bone mineral accrual in adolescents when they engaged in regular daily physical activity as opposed to those who were not involved in physical activity. The same relationships can also be proven in plants and animals (2000).

The absence of loading (e.g., physical activity that gradually increases over time as muscle strength improves) relates directly to bone mass declines. The general findings are that children are less physically active than in previous generations (2000). Health professionals are predicting an epidemic of skeletal failure in older adults (2000). Children need to be engaged in physical activity so their bodies will “stand the test of time” (2000, p. 247). Exercise is particularly important for females to fight the rising risk of osteoporosis (2000). The bottom line is that an inactive child or adolescent will grow bones necessary to only support a sedentary lifestyle. The American Alliance for Health Physical Education Recreation and Dance Research Consortium (2007) reports that maximizing class time for regular physical activity is essential to the effort of reversing the negative trends in the unhealthy lifestyles of today's youth (2000; McKenzie, Marshall, Sallis & Conway, 2000). Developmentally appropriate physical education has the unique ability to address, instill and provide opportunities to practice healthy lifestyle habits suitable for the individual.
With the noted increase in overweight children, several contributing factors have been identified (but are not limited to): the built environment (buildings, food sources, and recreational facilities), media exposure and use, food access and availability, school settings and home and family settings. It has been observed that children get less than the minimum (60 minutes) of physical activity per day (Burton & VanHeest, 2007). In recent studies, when physical activity increased there was a commensurate decrease in overweight children (2007).

Furthermore, children in low educated neighborhoods tended to have fewer activity settings; these children were more overweight. In higher income areas, the opposite scenario is true. Additionally, minority children tend to spend more time playing video games and also showed an increased frequency in obesity. These children were also noted to eat more energy dense foods: carbohydrates (2007). Again, developmentally appropriate physical education seems critical to reversing these negative trends and issues.

Additionally, it has also been shown that children in poverty are also more likely to underachieve academically when compared to higher income families (Burton & VanHeest, 2007). An illustration is that urban districts have been more acutely impacted by No Child Left Behind (NCLB) and have subsequently “narrowed” their curriculum (2007). A casualty as a result of NCLB has often been physical education and recreation in the school day (Keyes-Kun, 2004). The minority students are now exposed to fewer subject matters in an effort to raise test scores. Unfortunately, these are the same students who have been identified as being overweight more often. I concur with the authors that the scenario of trying to meet NCLB tends to perpetuate and exacerbate the
problem of obesity (Ballard & Howard-Vital, 2005; Graber, Locke, Lambdin, & Solomon, 2008; Locke & Graber, 2008). In schools' attempts to raise scores, they may have inadvertently aided the increasing problem of obesity and inactivity. This trend needs to be reversed. Reversal can be accomplished as we seek to achieve the goal of providing developmentally appropriate physical education programs designed to promote healthy lifestyles in children and meet individual needs (2005; 2008; 2008).

**D.2. The mental impact of physical education on the child**

As has been repeatedly illustrated through the theoretical lens framing this study, it is important to look not only at the physical aspects of the child; we need to look at the whole child. According to "Whatever Happened to Gym Class", an article published on the WebMD Medical News website, growing body of research shows that physical exercise is a sort of Miracle-Gro for the brain. Movement fosters brain development and growth, and physical activity prepares children to learn (WebMD Medical News, 2004). Studies show that children participating in quality physical education fare better physically and mentally than children who are not physically active (2004). Yet, attention given to developing and improving many physical education programs tends to be minimal (Graham, 2008; Kamla, 2007).

Various authors have concluded that there is a significant positive relationship between physical activity and cognitive functioning (Shepard, 1997; Eastin, 2003; Jensen, 1998; Ratey, 1999). Aerobic activity is found to be positively associated with attention and working memory (1997). There have been several assessments of the relationship between activity and cognitive functioning. These assessments show there is a constant increase in cognitive ability as fitness increases. The highest gains in
cognitive ability were found in children who met the minimum standard in three or more fitness areas (Eastin, 2003).

Other research focusing on the brain and body connections include statements such as, exercise reduces stress by lowering cortisol levels that kill brain cells (Colcombe, Erikson, Raz, Webb, Cohen, McAuley, Kramer, 2003; Ratey, 1999). Exercise has the same effect and benefit as anti-depressant medication (Blaydes-Madigan, 2003; 1999). Lifetime physical activity grows new brain cells (Gage, 1999). When comparing 6-12 year old children who received physical education five hours per week to those who received 40 minutes per week found those students with more activity showed a significant difference (increase) in performance (Shepard, 1997; Sherpa & Lavelle, 1994; Vail, 2006). Children engaged in developmentally appropriate daily physical education show not only superior motor fitness, but academic performance as well (Colcombe et al., 2003; Dwyer, Sallis, Blizzard, Lazarus & Dean, 2001; Pollatschek, 2003; Sallis, McKenzie, Kolody, Lewis & Rosengard, 1999).

A study conducted by the California State Department of Education provides compelling evidence that the physical well-being of students has a direct impact on their ability to achieve academically (Eastin, 2003; 2006). The findings of this study show higher achievement was associated with higher levels of fitness at each of the three grade levels that were measured (2003). The relationship between achievement and fitness was greater in math than in reading. Students meeting minimum fitness levels in three or more fitness areas showed the greatest gains (2003).

Once again, this brings us back to the physical being melded with the whole child; they cannot be taken separately, each impacts the other. Various studies indicate physical
activity is beneficial not only for the heart, but also for the brain, feeding it glucose and oxygen, and increasing nerve connections, all of which make it easier for children to learn (Ratey, 1999). Other studies suggest movement facilitates cognition (Sylwester, 1995). Movement is a predominant mission or drive mechanism of the brain (1995). Moreover, it has been found that most school age students Kindergarten through grade 12 (85%) are natural kinesthetic learners (Payne, 1997). Repetitive gross motor movements balance brain chemicals that calm behavior, elevate self-esteem and self-worth and accommodate ADD/ADHD (Jensen, 1998). Improved balance as a result of increased physical activity improves spatial skills needed to read letters left to right on a page (Hannaford, 1995). Beat awareness and competency enhances internal dialogue for better silent reading (Weikart, Campbell, & Brewer, 2000). The physical part of the child not only impacts the mental part of the child, the physical enhances the mental as well.

Furthermore, in other studies, there is clear indication that cross lateralization activities, such as racquet sports, show increased bihemispheric lateralization (1998). This results in improved reading mechanics and symbolic recognition for decoding language. Cross lateralization activities also develop increased nerve connections and develop vestibular motion and peripheral vision which assist in improving math skills (1998; Pert, 1997). Many studies indicate that learning happens throughout the body and memory is retrieved better when learned through movement (Blaydes-Madigan, 2003). Again, developmentally appropriate physical education can address these needs.

An additional significant concern in the United States impacted through physical education and the aspect of the whole child is the academic achievement gap (Burton & VanHeest, 2007). The achievement gap is a persistent difference in academic
performance among different groups of students, specifically minority students (2007).

Investigation into this issue suggests minority students are not meeting the same academic standards as their white peers. Additionally, there are also a disproportionate number of overweight children in the minority population (2007). As physical activity has been proven to be significant in the reduction of overweight and obesity, there is also evidence of the significance of physical activity to cognitive performance (Ratey, 1999). Burton and VanHeest’s research explores the notion of links between overweight children, and the importance of physical activity in tempering this problem. This has been noted to be particularly relevant for children in elementary and middle school (2007).

Although increasing the physical activity level of children will not solve all of the societal issues related to health, wellness, and learning problems, infusion of carefully crafted developmentally appropriate physical education is a significant step toward lessening the achievement gap. It can also be a significant step toward the building of greater overall health and wellness of children.

Beyond the goal of increased student performance in physical and mental areas of a child, another goal of physical activity and physical education is to reduce the functional limitations and disability (Stewart, 2003). Stewart’s research focuses on epidemiologic pathways by which disease, injury, etc. lead to disability, and emphasizes physical activity both as a primary and secondary prevention (2003). Physiology, aging and decline go hand in hand. However, disuse leads to further impairments, chronic disease and premature aging. Physical and mental symptoms are determining factors of limitations and disability (2003). With this in mind, it is important to look at the extent to
which physical activity interventions improve one’s functioning. Although certainly young students are not interested in the prevention of disease and aging, the appropriate time to instill lifelong patterns of physical activity is in childhood (Dishman, Motl, Sallis, et al., 2005).

**D.3. The social – emotional impact of physical education on the child**

Another aspect of the child that cannot be neglected is the social-emotional status of the child. Womack and Womack (1982) suggest that to best serve a child, one has to begin at the child’s functional level. Children are typically in motion; so, educate them in motion. The author goes on to suggest some appropriate and inappropriate models for teaching the emotionally needy child. They also emphatically indicate that earlier is better in assisting the child. Waiting until high school is too late as many of the problems may have compounded themselves (1982).

Other studies have looked at competence and motivation and how it correlates with the self-worth and anxiety of children with and without disabilities. Skinner and Piek (2001) specifically measured perceived competence, perceived social support, self-worth and anxiety. It was found that those with developmental disabilities perceived themselves as less competent in several domains and had less social support and control (2001). Overall it was found they had lower self worth and increased anxiety levels. Adolescents were more affected by this than were younger children. The feelings of worthlessness and anxiety become more pervasive as the child matures (2001). It has been found that acceptance from others is an important factor in determining a child’s self worth (Harter, 1987). In that the feeling of worthlessness can be pervasive and tends to grow over time, there needs to be close attention to development of appropriate
movement skills beginning in the early childhood years (2001). Poor motor skills have negative effects on a multitude of areas in childrens’ lives. There have been found to be adverse social, emotional and scholastic effects on children (2001). Adverse effects permeating all academic subject areas seems to further justify the importance of carefully and relentlessly attending to the psychomotor development and the quality of physical education programs.

Harter (1987) found a high correlation between physical competence and social competence. As these feelings grow throughout adolescence, children with poor motor coordination have more difficulty in their high school years. Lack of physical competence leading to lack of social competence was found to be an extremely large contributor to children’s self worth (1987). Cratty (1970) concurs and emphasizes that appropriate motor behavior development in the educational process can be critical in the development of not only self-esteem, but cognition as well.

The focus on self-efficacy theory in the study by Dishman, Motl, Sallis and colleagues (2005), in relation to girls who have confidence in their capability to be physically active is of particular importance. Girls with confidence in physical activity perceive fewer barriers, are less influenced by the barriers and are more likely to pursue being physically active. They also enjoy physical activity more (2005). With this self-efficacy theory in mind, the results of the study rang true. Self-efficacy had direct effects on social cognitive variables. Self management strategies mediated the association of self-efficacy with physical activity (2005).

In addition, social-cognitive variables are critical influences on self initiated change in health behavior (Bauman, Sallis, & Dzewaltoski, 2002; Dishman, Motl, Sallis,
et al., 2005; Dishman, Motl, Saunders, et al., 2005). This is particularly true in early adolescence. There are a large number of social-cognitive correlates to physical activity among adolescents. Self-efficacy theory says that confidence in personal ability to carry out a behavior influences direction, intensity and persistence of behavior (Dishman, Motl, Sallis, et al., 2005; Dishman, Motl, Saunders, et al., 2005). It is suggested that there may be mediating strategies for self efficacy that influence physical activity (Bandura, 1986; Bandura 1997).

When focusing on the social emotional part of the child, Dishman, Motl, Sallis and colleagues (2005), report on a school based intervention that increased physical activity in adolescent girls which, in turn, increased self-efficacy. This intervention resulted in a similar pattern of behavior as shown in the study on psychosocial behavior by Skinner and Piek (2001). As this study focuses on self-efficacy for overcoming barriers to physical activity, Bandura (1997) proposes that efficacy beliefs about overcoming barriers should predict exercise adoption; efficacy beliefs regarding self regulation should predict long term exercise adherence. Therefore, self-efficacy regarding overcoming barriers may represent an initial target for physical activity intervention (Dishman, Motl, Sallis, et al., 2005). The social-emotional part of the child, as well as the physical and mental is important to address as a whole for increasing individual health and wellness. In addition to their physical well-being, developmentally appropriate physical education is critical to a child’s social-emotional development.

**D.4. Additional support for developmentally appropriate physical education**

Dr. Ratey, a clinical professor of psychiatry at Harvard Medical School states that “exercise itself doesn’t make you smarter, but it puts the brain of the learners in optimal
position for them to learn” (Viadero, 2008, p.14). Reid, in his article, “Future directions of inquiry in adapted physical activity,” suggests that there is a definite link between physical activity and life threatening physical conditions (Reid, 2000). Based on current research, it seems that the ultimate target outcomes of both physical education and adapted physical education should be the individuals’ voluntary participation in physical activity with the cognitive knowledge base to maintain optimal health and wellness. Possibly the importance needs to be placed on developmentally appropriate physical activity rather than strictly a physical fitness focus (2000).

More and more information and data is consistently appearing in research journals that emphasizes the importance of physical activity for everyone. Physical education is particularly important for children. As physical activity increases, the general health and well-being improves. The social-emotional state improves. Kids learn by doing; eighty-five percent are kinesthetic learners (Blaydes-Madigan, 2003). The evidence is compelling that children need to be engaged in daily rigorous physical activity (Bailey, 2000). Using current research as the measuring tool, together with student input, this study has focused on determining whether a district is providing physical education in the most appropriate and effective manner to best meet the needs of students.

2.2. Section E. Physical education implications for middle school students

Adolescence is a time of incredible physical and developmental changes (Carnegie Council on Adolescent Development [CCAD], 1995). Throughout adolescence physical activity tends to wane (United States Department of Health and Human Services, 2008). Overweight adolescents have become a major US public health problem (Gordon-Larsen, McMurray & Popkin, 2000). Inactivity in adolescence has
been cited as being associated with the obesity epidemic (2000). According to the National Center for Chronic Disease Prevention and Health Promotion (1997), adolescence is an important time to instill skills, knowledge and habits regarding maintaining a healthy lifestyle. This includes enjoyable participation, knowledge, attitudes, motor, behavioral skills, and confidence to adopt regular participation in physical activity – for a lifetime (Dishman, Motl, Saunders, Felton, Ward, Dianne, Dowda & Pate, 2005). Kuh & Cooper (1992), found that students who are active in adolescence are more likely to be active as adults. Gordon-Larsen and colleagues (2000) cite the importance of physical education classes in increasing physical activity.

2.3. Theoretical frameworks informing the study

Understanding and grounding the ontological and epistemological stance of this study from the interpretivist side of the spectrum suggests there is an innate desire to learn and develop mentally, physically, and socially-emotionally in humans. Each individual constructs their knowledge through a variety of modalities; these include, but are not necessarily limited to activities, interactions, experience, culture and background. When one loses that desire to learn, everything cognitively, physically, and emotionally begins to atrophy. Therefore, when attempting to comprehend the nature of individuals’ particular existence, it is important to capture such variables as the particular time, culture and place in which the individual is situated to elicit an understanding of individual actions and reactions (Lin, 1998). As a result of my ontological and epistemological stance, this study furtherunderscores that children, with and without special needs, have that innate desire to learn and grow, thereby constructing their own world with similar sociological-cultural-historical criteria as the rest of humanity. It may,
however, be in a form that requires the researcher, teacher, administrator, family member or friend to attend to different modes of learning acquisition than those he or she is commonly familiar. In our current system of educating students, particularly in physical education, are we structuring the systems to meet our (adult) needs or the child’s?

The literature review for this study contends that the prevailing attitude in schools towards physical education is largely “out of sight out of mind” despite various reforms purported to minimize or extinguish the marginalization of physical education and provide a developmentally appropriate physical education program for all students (Kamla, 2007; Keyes-Kun, 2004). The marginalization of physical education and particularly the marginalization of students with special needs in physical education is the antithesis of the beliefs behind the lenses through which recursively focus this project. Although all theories informing this project fall under the social constructive umbrella, there are many perspectives that have been blended to research and understand the physical education issues.

In order to support the theoretical framework, the literature offers several connections to assist in understanding developmentally appropriate physical education as it should or could be in a school district. A primarily social constructivist view of education underscores that there is more to the education process than simply the cognitive aspects; the whole child must be considered. This consideration must involve all three learning domains (cognitive, physical, and social-emotional) to correctly understand an educational issue in order to apply it in an individually developmentally appropriate manner. A singular theory cannot meet that criterion.
2.3. Section A: Thorndike, Dewey and Piaget

The theories of Thorndike, Dewey and Piaget provide a strong base for the theoretical positioning of this study. In some cases they seemed to hold oppositional ideologies, yet when examined closely they have interesting commonalities. They both conceptualized that habits are an integral phenomenon in the learning of individuals (Koschmann, 2000). Thorndike argued that stimulus and response are inseparably tied together and as the individual learns and develops, the integrity of this bond develops in strength as well as depth (2000). He understood response to stimulus as innate. He believed they were instinctual and acquired as the individual developed. He proposed a definite biological basis that developed as situations arose and there was success in the situation (2000). In contrast, Dewey (1974) determined activities are controlled by impulse and intelligence (2000). Again, a biological basis, however, he determined it was something that already existed and needed tapping into like the turning on of a faucet. There is essentially truth in both theoretical dichotomies. Although there is an element of innate capacity, that cannot be the sole defining force. Similarly, impulse and intelligence should be considered as a mediator and developer of some of the innate capacities rather than the defining force.

In order to complete the theoretical foundation, Piaget must be considered. His thoughts regarding accommodation, assimilation and adaptation can readily make sense in observable applications as children develop and learn new skills and insights (Lee, 2000). The role of culture and or environment is paramount in this theory. In a simpler sense, as a child learns, he or she enters into a situation and compares the present with what is known (Piaget, 1923). An interpretation must then take place to understand the
new situation. Finally, adjustments are made and new learning is formulated, otherwise known as accommodation. The individual then develops an understanding of the different behaviors appropriate to each situation. He accommodates, assimilates and adapts (1923). That whole premise or process can be applied to any learning situation. This application is valid not only for children, but adults as well. Additionally, with these thoughts in mind, Piaget’s theories, although generalizable across the lifespan, seem to be most highly applicable to the learning processes of children. Piaget’s theories are a great tool for understanding the learning process of young children and the development of physical, cognitive and social skills. All of these skills begin formation in childhood and therefore, need to be addressed, taught, and applied in childhood. Although Dewey, Thorndike and Piaget provide a credible basis for understanding learning, there are deeper complexities of learning and development that must also be considered.

2.3. Section B: Socioconstructivist umbrella

The socio-constructivist umbrella provides further insight into the significance of developmentally appropriate physical education. As students are engaged with various experiences, one approach to teaching and learning cannot be replicated identically for all students. Rather, the educational experience must be tailored to fit each and every individual uniquely (Vygotsky, 1987; Wertsch, 1991). Again, this is a hallmark of developmentally appropriate physical education.

Vygotsky (1987) writing about thought and word adds an interesting dynamic to the learning process. It appears that it [thought and word] is internalized and developed based on external factors. The egocentric speech that Piaget suggests atrophies, according to Vygotsky, (1987) actually blossoms based on one’s interaction in the world
Seemingly, in as much as this may be an asset to educators in addressing the needs of students, it could also be a dilemma as there so many unique idiosyncrasies about each individual; it would take a lifetime to understand and interpret all of them fully. Further, some of our interpretations of students’ abilities or disabilities in certain areas can be skewed by our own thought and word (Vygotsky, 1987). The creation of a developmentally appropriate physical education program from a socio-constructivist perspective is not a simple task. However, the potential positive results are worth the effort.

2.3. Section C: Cognitive sociological (psychological) theories

First of all, within the socio-constructivist framework, the social cognitive perspective needs consideration. Students do not learn and are not educated in isolation. The idea of self and self-regulation within the larger learning environment has a powerful influence on learning (Zimmerman, 1989). In other words, social settings have a powerful influence on behavior, attitudes, and beliefs about ones’ self in the world. Their development takes shape from social cues and experiences (positive and negative) or lack thereof. The primary point is to learn from observing the behavior of others and understand the social context of that situation. Much can be learned by observing individuals. This learning and understanding of a child needs to occur prior to correctly implementing and effectively providing a developmentally appropriate learning environment for the child.

Additionally, assisting in the focus and understanding of this study are the frameworks which come from the cognitive psychological thinkers that focus on prior knowledge with individual thought and self-awareness or self-acceptance processes
(Pintrich, Marx & Boyle, 1994). The particular piece of self and motivation to learn is crucial to the learning process. Some students may be uninterested, unmotivated and possibly need to be coerced into learning. A question might be: is that lack of motivation internal or created by external forces impinging on students’ time, thoughts and understandings? Certainly, this cognitive psychological piece is an important step in the learning process as children need to understand themselves as a valuable entity within the learning process. How students feel about themselves in the learning process or environment is critical to consider (1994). The self has become a pivotal component in the effectiveness or lack thereof in learning processes when infusing a developmentally appropriate approach. The socio-cognitive-psychological pieces are important added dimensions (Martin, 2004). This is particularly true for the middle level learner at the onset of puberty. The hormonal changes at this time can reprogram a student’s thinking as he or she is shifting motivational arenas from parental influences to a greater reliance on peer acceptance (Sigelman & Shaffer, 1995). Socio-cognitive-psychological variables are critical influencers of self initiated change in behavior. Again, this is particularly true in adolescence. Research has shown a large number of social cognitive correlates in relation to physical activity in adolescence (Martin, 2004). These two theories (social cognitive and social psychological) provide the opportunity to optimize learning and make it much more personal and effective.

2.3. Section D: Sociocultural theories

Development and learning must include some emphasis on the teacher and their approach to education and how the student feels he or she fits into the larger educational experience. Once again, the idea of self and self-regulation within the larger learning
environment has a powerful influence on learning (Zimmerman, 1989). Social settings have a powerful influence on behavior, attitudes and beliefs about one’s self in the world. The primary point is to learn from observing the behavior of others and the social context of a particular situation (1989). This line of thinking places an additional mantle on my (our) behavior, as an educator(s), to create the learning environment that sets up situations to engage students in a non-threatening way, checking for active engagement and understanding along the way. This is simply good teaching. Yet, many educators faced with time constraints, assessments and other obstacles within the current educational system; may neglect to attend to the details of the child’s social cultural perspective as it relates to learning. A developmentally appropriate learning experience cannot be provided without attending to the social cultural paradigms. The sociocultural dimension allows for the understanding of learning to be massaged in such a way that those innate understandings are mediated by one’s relationships in a social world (Panofsky, John-Steiner & Blackwell, 1990). Under the umbrella of sociocultural thinking, this could be considered an important step forward in understanding learning as it allows for more individuality.

2.3. Section E: Social-cultural historical theories

There is another unit of analysis that impacts individualized learning; that of one’s history. It would be difficult to take a look at the notion of “sociocultural” within an individual without looking into the “sociohistorical.” Individuals are highly influenced by the history of their culture. John-Steiner and Mahn (1996) allude to this as they quote Bakhurst, (1995) “the nature of an individual’s mental life cannot be understood independently of the culture of which that individual is a part” (p. 159). Within this
socio-cultural-historical framework, beyond the mental and physical aspects, one must additionally carefully consider the affective part of the individual. The affective part of individual instruction must be linked to the students lives (Gonzales & Moll, 2002). As teachers, without consideration of the whole child, we have few tools with which to motivate and enhance learning. This notion is particularly true for the physical education teacher; an understanding of the child’s interests and background is significant. Vygotsky (1987) suggests that learning blossoms when we attend to the socio-cultural-historical nature of the child.

Although each of the foregoing theories have a valuable, observable, basis for understanding learning, I continue to support my premise that each of the initial theories standing alone, is lacking in the ability to identify and define some aspects of or critical components of areas that impact the developmental process. However, when intertwined the theories begin to draw a clearer picture of individual needs and development of children in their unique learning processes.

2.3. Section F: Situated learning theory

An additional important concept to keep in mind when observing learning processes, is that “learning is situated in but not limited to social interaction” (John-Steiner and Mahn, 1996, p. 192). Whatever state or community of learners we find ourselves within shapes the learning that occurs. That learning is mediated, reorganized and understood in a unique manner within each individual.

Situated learning is an important consideration as we all are products of our environment and experience. That which is taking place around the student is critical
(Gee, 1999; Lave & Wenger, 1991). The impact of situated learning can be felt moment to moment and day to day in the classroom.

Gratefully, I find that Gonzales and Moll (2002) support the philosophy that instruction must be linked to student’s lives, history and community. This indicates a wholistic approach. When a teacher or other individual can dig beyond the façade of the learner, he or she can more efficiently affect learning within the individual. They can provide links and mediating tools that either make sense to the individual or motivate them to the next level of understanding. Situated learning aligns closely with the socio-cultural-historical theories upon which this study is built.

2.3. Section G. Self-efficacy theory

Last, Bandura’s self-efficacy theory must also be applied to this study. This theory suggests that an individual’s self-efficacy has a strong relationship to a child’s ability to succeed in many situations, including school (Dishman, Motl, Sallis, et al., 2005; LaGreca & Stone, 1990). Self-efficacy is particularly important in the area of physical and movement competence (2005; Skinner and Piek, 2001). As this piece of the theoretical framework focuses on self-efficacy, Bandura (1997) proposes that efficacy beliefs predict long term exercise adherence. Self-efficacy regarding overcoming barriers clearly represents a target for interventions for increased physical activity (2005).

Self-efficacy theory says that confidence in personal ability to carry out a behavior influences direction, intensity and persistence of behavior. It is reported that there are mediating strategies that influence physical activity and self-efficacy (Bandura, 1997; Bandura, 1989). This is particularly important for the child to be able to make healthy choices.
The focus on self-efficacy theory in the study by Dishman, Motl, Saunders, et al., (2005), reports there is a significant relationship between children, and particularly girls, confidence in their capability and physical activity. They perceive fewer barriers and are less influenced by them resulting in a greater likelihood of pursuing physical activity. With the foregoing in mind, self-efficacy, social-cognitive variables and motivation are significant factors in the overall health and well-being of students. This further solidifies the need for developmentally appropriate physical education.

Self-efficacy and motivation must be thought of as working in tandem. “Motivation is a critical piece of the learning cycle” (Vygotsky, 1987, p. 257). Vygotsky further talks about motivation and speech. The motivational factors are again somewhat innate and yet still formed by perceptions of the external world. The affect or the motivation is a critical pivotal point in the individuals’ learning progression. Cratty (1970) concurs and emphasizes that motor behavior in the educational process can be critical in the development of not only self-esteem, but cognition as well. Ultimately, this affects healthy choices and behavior. This needs to be instilled early, in childhood, as that is a particularly important time when habits are being formed and as children begin to make their own lifestyle choices.

2.4. Concluding thoughts and rationale

Based on the literature review, there seems to be a significant gap between what is revealed in the literature regarding developmentally appropriate physical education and physical education practices in many schools. Despite the laws, regulations, history and knowledge about the advantages of a developmentally appropriate physical education program for students and the advantages of a physically active lifestyle, this is not often
revealed in practice (Graham, 2008; Keyes-Kun, 2004; NASPE, 2004; Seidentop, 1991). Most children with or without special needs are now placed in a regular school physical education setting (Reid, 2000). Inclusion has become the norm in schools. However, possibly the definition of inclusion has been misunderstood as children are often dumped into the regular class setting under the guise of inclusion without the supports that will make them successful as LRE mandates (DePauw, 1986; Rich, 1981; Winnick, 2005). There may be some children for whom it would be more advantageous not to “include” in the regular physical education classroom. In the current physical education settings, some children in an inclusive setting would not only survive, but excel in an alternate environment.

As demonstrated in the literature review reported in the second chapter of this proposal, the body of evidence supports not only the need for and value of quality developmentally appropriate physical education and adapted physical education programs but demands it as well. The research uncovered indicates a need to further investigate and understand the issues in the physical education programming in schools.

Looking at the whole picture of children, their development, and the physical education experience, Armour and Yelling, (2004) who take a very social constructivist approach, is of assistance. Their theoretical base was grounded in the work of Vygotsky, as well as, Wenger’s communities of practice (1998). Additionally, they also cite the work of Lave and Wenger (1991) and the concept of situated learning. Educators need to educate children from the child’s perspective and abilities, not the abilities and perspectives of the norm or the adult. Physical education is no different in that respect from any other academic subject. Considering the child and his or her unique needs in
developing quality developmentally appropriate physical education programming is imperative (Armour & Yelling, 2004). This study was designed to probe the perspectives of students in order to identify their perceived needs.

Life is not stagnant; development is a lifelong process. Additionally, childhood and adolescence are “critical times for the acquisition and development of one’s necessary life skills and abilities” (Schahie & Willis, 1978, p. 121). Each child must be educated from his current ability forward. One must also consider social and generational changes that impact development and learning (1978). In fact, these authors go so far as to indicate there is a “necessity to screen for sensory deficits prior to evaluating for intellectual competence of the child” (1978, p.148).

The gaps in understanding regarding physical education, its significance and student perspectives and the resultant impact on children need to be addressed. An appropriate physical education experience has been shown to enhance children’s learning (Bull, Jamrozik & Blaksley, 1999; Burton & VanHeest, 2007; Reid, 2000). Therefore, physical education experiences need to be created which enhance a child’s physical, mental and social-emotional well-being (Armour & Yelling, 2004; Bailey, 2000; Dishman, Motl, Saunders, et al., 2005; Epstein, 1988).

Many current physical education programs may not be addressing the needs of all students. The data from this study as viewed through a socio-constructivist, individual centered lens, provides an opportunity for districts and physical education staff to understand student perceptions of their physical education experience. With this data stakeholders can come together to collectively understand and articulate the physical education needs and changes that may benefit students. In the words of one author,
“change is necessary…push forward with what we believe to be critical in the physical, social and emotional development of children…with or without special needs” (Price, 2007, p. 5). If we look at districts in general and ask, “what are districts doing for children as they control the educational experiences for children? Many children have to sit longer to prepare for high stakes testing. Based on current research, this scenario may not be in the best interest or welfare of children.
Chapter 3: Methodology

3.1. Introduction and overview

Throughout the literature review and from professional experience, major concerns have surfaced regarding the understanding and application of developmentally appropriate physical education programming in schools. There is a growing national concern over obesity and the level of student activity (American Heart Association (AHA), 1992; American Medical Association (AMA), 2008; American Obesity Association (AOA), 2008). Based on national concerns over obesity and activity levels, student perceptions of their physical education experience should be of concern as well. In fact, consideration of student choice has been found to be an important factor in determining exercise adherence (Condon & Collier, 2002).

Unfortunately, in many school districts, limiting physical education programs or giving little attention to program improvement has become the norm (Bailey 2000, Reid, 2000; Womack & Womack, 1982). Most attention is allotted to the core academic subjects which may result in students not receiving quality, developmentally appropriate physical education designed to meet the needs of all students, as well as, meeting state and federal laws, standards and regulations (Graham, 2008; Keyes-Kun, 2004). It has been shown that most school districts in New York State may not be meeting mandates for physical education (DiNapoli, 2008). Grounded in current literature and research on best practice in physical education, this study has focused on understanding middle school student perceptions and needs in physical education. The goal of this study was to gather student data to uncover student perceived issues in a physical education program. This chapter describes the design of this study.
The remaining sections of this chapter are dedicated to explaining the research process. Specifically discussed are methodology, rationale, contextual information, recruitment of participants, research questions, interventions, data collection, and data analysis. Finally, the chapter will conclude with some reflective thoughts about the particular study.

3.2. Methodology

This section describes the critical incident technique which was used in the design of the survey for gathering student data for the study. Collected student data was then viewed through the lens of a socio-constructivist paradigm and best practice research in teaching physical education to discover if program adjustments could be suggested to enhance the students’ physical education experience in an effort to increase satisfaction and activity level.

3.2.1. Critical incident technique

The critical incident technique is the theory behind the particular survey design chosen for this study. The critical incident technique is a set of procedures for collecting direct observations of human behavior in such a way that assists the researcher by enhancing the potential usefulness of the data in solving practical problems (Flanagan, 1954). The critical incident technique at its foundation, locates and questions the individuals most involved in that which is being investigated (1954). In this case, the middle school students are the focus as they are the participants in the program that is being studied. The individuals (students) were invited to describe an event or events that they experienced in their middle school physical education experience in reference to the phenomenon under investigation (perceptions regarding a physical education program).
This methodology of gathering student perceptions through the critical incident technique follows closely the social constructivist theory models upon which this study is framed. This main focus of this study was to understand middle school student perceptions of and needs in physical education. Therefore, the first step in this study was to provide a critical incident form to all students in grades six to eight and invite them to describe all incidents that have caused satisfaction and dissatisfaction in their personal physical education experience. These recorded incidents were then coded, categorized and reflected upon via a qualitative analysis, to reach a set of conclusions and recommendations to potentially be used as a tool to invoke change.

3.2.2. Middle School Physical Education Critical Incident Survey

A Middle School Physical Education Critical Incident Survey [MSPECIS] was developed and introduced by Krouscas (1999). The MSPECIS is adapted from the instrument earlier designed by Luke and Sinclair (1991) in their study of high school students’ attitudes toward physical education.

The MSPECIS contains two parts. Part one gathers general demographic data (e.g., grade, gender, and self-perception data). Part one also requests students to respond to the following question, if physical education was optional next year, would you choose to take it?

The part two of the MSPECIS contains the critical incident report form. In this section students record an event or events they experienced during their middle school physical education classes that caused them to like or dislike physical education. A final additional question was added by this researcher. The final question asked students to describe their perfect physical education class.
An initial pilot study using the MSPECIS was completed by Krouscas (1999) to determine (1) if issues existed with the wording of the preliminary survey instructions, (2) if problems existed within the wording of the MSPECIS, (3) the time needed to complete the survey, and (4) if the survey was indeed capturing the information needed to successfully answer the research question. Based on the initial pilot the instructions to the participants were modified because the responses to the MSPECIS were more comprehensive when subjects were reminded of the aspects of physical education (i.e. curriculum content, teacher behavior, peer interaction) during the preliminary instructions. The average completion time was 25 minutes and two of the 76 students requested clarification regarding a question on the MSPECIS. It was, therefore, concluded that the survey was clear and understandable for the majority of the middle school students in the pilot study (Krouscas, 1999).

The final goal of Krouscas’ pilot study was to determine if the MSPECIS uncovered responses that could potentially answer the research questions. The data was coded and analyzed according to gender, grade, and student choice to enroll or not to enroll in physical education. Results indicated that the collected data provided the necessary information required to answer the research questions. Based on this pilot, the procedures for the actual study were finalized (Krouscas, 1999). The present study closely follows the procedures of Krouscas. The only difference for the present study was the addition by this researcher of a final question as described above.

At the time of the initial writing of the proposal, the researcher was unsure whether the district was going to have the survey completed in the traditional classroom or in the students’ physical education class. Therefore, in order to verify the Krouscas
pilot and be sure there would be consistent results, the researcher had the survey piloted in three classes in various settings, a math class, a health class and a physical education class. Regardless of the setting, the survey data was consistent in terms of the length of response, number of responses and types of events shared by the students. The MSPECIS can be found in Appendix B.2.

3.3. Rationale

The following sections contain the various rationales fueling this study, intervention, methodology, and participant choice.

3.3.1. Intervention rationale

There were a number of concerns and gaps regarding understanding the importance and application of physical education that prompted this study. First, there is a strong connection beyond that which typically exists between physical activity and health and wellness. Research studies report there is a strong correlation between physical activity and learning, as well as, academic performance (Blaydes-Madigan, 2003; Dwyer, Sallis, Blizzard, Lazarus & Dean, 2001; Eastin, 2003; Hannaford, 1994; Government Innovators Network, 2008; Novello, DeGraw & Kleinman, 1992; Ratey, 1999; Sallis, McKenzie, Kolody, Lewis & Rosengard, 1999; Shepard, 1997; Sylwester, 1995; Vail, 2006; Viadero, 2008; Wolfe, 2000).

Second, there is an unprecedented national concern over obesity, particularly in children (American Alliance for Health Physical Education Recreation and Dance [AAHPERD], 2007; American Medical Association [AMA], 2008; American Obesity Association [AOA], 2008; National Association for Sport and Physical Education
Third, physical activity begins to wane in adolescence (Dishman, Motl, Sallis, et al., 2005). Individuals who choose to be active during adolescence are more likely to continue to be active as adults (Dishman, 1988; Kuh & Cooper, 1992).

Finally, there often seems to be little organization of the physical education curriculum across K-12 districts. In many districts, although recommended by the state, there is no screening process in place to determine appropriate placement in physical education classes (Mills, 1991). There are generally several students in districts with disabilities that vary from significant to mild. Some students may not have a “labeled” disability and still be totally unsuccessful in physical education for a variety of reasons. One of the researcher’s major roles in this study is to seek answers from students as to their perceived issues in physical education that may prevent them from being successful or engaging in regular physical activity.

With the data from the students’ surveys and literature review this study has not only been able to answer the question regarding student satisfaction, it also provided the data to suggest potential programmatic adjustments to meet the students’ perceived needs in the best manner and provide greater opportunities to encourage enhanced activity levels. It is irrelevant whether those needs are physical, mental or social-emotional, the goal is the same. The goal is to provide the most optimal educational experience possible in physical education that will assist students in reaching their potential across all domains as they are all interrelated. Based on the findings from literature and data collected from the study there are some recommendations made to address the concern of
students. With the foregoing research questions in mind, the rationale is clear; it is important to understand the students’ perception of physical education in the district and determine steps to improve the physical education program. With this data and the opportunity for continued program development, the district may be able to improve the students’ physical education experience, as well as, the students’ health and wellness through increased activity engagement.

3.3.2. Methodology rationale

The rationale for pursuing this study and using a qualitative research approach as the methodology is that qualitative research is used as problem-solving to effect change and is more effective than outside initiatives (Lieberman & Miller, 1984). District reform can ultimately occur from the inside rather than the outside, thus, this was intended as the initial step in potential program reform. With the data from this study, the potential exists for the district to promote continued stakeholder interventions and research which will be critical to gain further perspectives and make appropriate adjustments to meet the district’s ongoing physical education needs. This survey data, along with current research, serves to under gird suggestions for potential program reform, as well as, provide a model for future stakeholder groups in making recommendations.

3.3.3. Participant choice rationale

The rationale for pursuing this study in middle school physical education, further reinforcing the necessity of providing developmentally appropriate physical education, is that current research states that there is an obesity epidemic in the United States. There are several diseases being found in young children that were previously only found in
adults (as a result of obesity and inactivity) (American Heart Association, 1992; American Medical Association, 2008; American Obesity Association, 2008). Developmentally appropriate physical education can play an important role in reversing the trend of obesity and inactivity (American Obesity Association, 2008).

Current research also suggests middle school is a critical developmental time; this is particularly true when developing lifelong habits and goals (Hammond & Cheatum, 2000). Physical education research data used as a lens through which to view student perspective data has been used to define what may be needed to better meet the needs of all students to further enhance their potential as an individual and as a learner. Therefore, middle school students (grades six to eight) in a district were surveyed regarding their perceptions of their physical education experiences.

3.4. Contextual information

The information contained in this section describes pertinent contextual information to provide a clear understanding of and focus for the study including demographics and researcher positionality.

3.4.1. Demographics

This study took place in a rural school district in western New York. For the purpose of this study, this district was called St. Samuel Central School District (SSCSD). The district serves students with and without special needs in grades Pre-K through 12. There are approximately 2,000 students in the district. The school is comprised of two elementary buildings in two separate locations around the township. The district has a middle school building, housing grades 6-8, and a junior-senior high school building for grades 9-12 which are on a central campus.
St. Samuel educates children from many ethnic backgrounds. The current student and staff population is predominately White. Demographically, 86% of the students are White, 9% are Black, 4% are Hispanic and 1% are Asian. The students in the district are 55% male. Staff members are 73% female. The teaching and administrative staff is 83% white and 17% black. The median household income for this community is $41,375.

3.4.2. Researcher positionality

Throughout the last 15 years I have been employed in a nearby district as a physical education teacher, health teacher and adapted physical education teacher. From January to June of 2008 I served in the capacity of interim assistant principal. In September I returned to my teaching position. As a teacher or administrator, my overall focus for this research project has not changed: improving not only the educational experience of students, but their general health and well-being as well.

As a physical education teacher I have had many experiences from which to develop my thoughts on what I understand through literature, education and experience to be a developmentally appropriate physical education program that meets the unique needs of all students. Although our (physical education teachers’) understandings and desires are highly considered in program development, the opposite is true of students’ needs and desires from their (not our) point of view (Hill & Cleven, 2005). The main focus of this study was to understand student perceptions and needs in physical education. Data gathered through this study and applied through a lens of best practice was used to develop conclusions and recommendations that may be used to enhance physical education in the district to more adequately engage students with the goal of increasing satisfaction and activity levels for the long-term.
Current research, reinforces my point of view based on my educational and professional experience, which indicates there may be significant elements lacking in many current physical education programs that would serve to enhance student’s overall potential in several developmental domains, in addition to meeting state and federal requirements and best practice (Blaydes-Madigan, 2003; DiNapoli, 2008; Eastin, 2003; Kamla, 2007; Keyes-Kun, 2004). The goal of the study was that data from the students’ critical incident survey, when analyzed qualitatively, would provide student generated information that may be useful to begin the process of closing the gaps in the overall understanding of students’ physical education needs. It was hoped that this would be the first step in deconstructing current programming to determine if there are practical adjustments that may be made to better meet the physical education needs of all students in the district and move towards increased activity levels, satisfaction and overall general health and well-being.

Finally, my role of practitioner and researcher has been important to inform my thinking as I attempt to understand and negotiate individuals and systems throughout the research process (Ravitch & Wirth, 2007). This negotiation has been an ongoing process of interacting with individuals with varying roles. This required maintaining and adapting to various sensitivities and needs of all interest groups within the district. The main district contacts for setting up this project were the superintendent, middle school principal, middle school physical education teachers, middle school parents and middle school students.

Through the venue of this research project, understanding my role as researcher together with the input of student perspective data, this project has assisted in
(a) Providing a clearer understanding of the middle school physical education program as it exists in the district from students’ perspective

(b) Bringing to light issues and challenges in physical education, (positive and negative) from students’ perspectives

With the understanding from the literature review, the research data and recommendations, the district will have the tools to begin

(a) Defining potential steps for the future of the program

(b) Developing incremental steps to continue to enhance developmentally appropriate physical education experiences to meet the needs of all students and assist them in reaching their potential across all domains, increase satisfaction and activity levels, as well as, improve their general health and wellness.

3.5. Participant recruitment and selection

All participants for this study were middle school students in the district. Participation was voluntary and took place during one of the students’ physical education classes. Students and parents were alerted to the opportunity for students to participate in the survey via information letters generated by the researcher. The information letters were sent home by the district to parents via the students one week prior to the survey taking place. The sample parent information letter can be found in Appendix A.1. Any parents who did not wish their student participate in the survey were able to let the district know through several channels. They could have contacted the principal, the physical education teacher or sign and return the information letter to school indicating they did not wish their student to participate in the survey. The researcher received two documents indicating that two students were not to participate. One student was sent to
the library. The other student that was not to participate was not in attendance on the day of the survey. Additionally, in preparation for the survey, a verbal script was read to the students by their physical education teacher in their physical education classes one week prior to the survey date. The sample student information letter/script can be found in Appendix A.2. This provided an opportunity for the students to ask questions regarding the survey and its purpose. Even when a parent agreed that their student may participate in this study, the student personally had the option to not participate in the survey. The students were directed to alert their physical education teacher expressing their desire not to participate. Any students not wishing to participate were excused to the library for an alternate activity. No students chose not to participate.

3.6. Research questions

There were a number of research questions of interest. The overarching question was, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the activity level and satisfaction of middle school students?

Prior to answering the overarching question, it was imperative to gain an understanding of question one below; this information is contained in chapter two literature review and is used to frame the study. The study and survey are not designed to answer question one below. With that understanding, in order to answer the overarching question, I believe it is imperative to address the following research questions:

1. How have social discourses and ideologies impacted physical education?
2. What is the significance of physical education for these middle school students?
3. How do these middle school students perceive their physical selves?
4. How do these middle school students perceive their physical education experience?

Within the framework of answering the above questions, suggestions from students, and qualitative research methodology, this project provided rich data to draw some conclusions to be able to make recommendations for the district. These recommendations were aimed toward increasing student satisfaction and engagement in physical education while adhering to best practice research.

3.7. Intervention

The intervention consisted of using approximately one half hour of one class period during the students’ physical education class for the completion of a survey, the Middle School Physical Education Critical Incident Survey (MSPECIS). This occurred in June, 2009. Again, the intention was that this initial intervention process would result in positive future directions for the district physical education program and the students in the district if stakeholders collectively embark on assessing their program and determining steps toward potential reform.

3.8. Data collection

Data was collected from 333 middle school students in the St. Samuel School District, grades six to eight. This included male and female students with and without disabilities. There were approximately 400 potential students for this survey. The survey data was collected through the use of a critical incident survey citing students’ positive and negative experiences in physical education, as well as suggestions for improvement. The research data was used as a tool and a reference to guide recommendations to stakeholders, as well as, a tool for stakeholders within the district to use if they seek to
continue to improve the physical education program in the future. The specifics of the data collection process are as follows:

- Information letters were sent to parents one week prior to administration of the survey. Information letters were provided by the researcher.

- The information letter was read to students during their physical education classes one week prior to the administration of the survey. Again, this letter was provided by the researcher.

- The researcher provided the directions for the administration of the surveys as well as a copy of the survey to the superintendent, principal and physical education teachers.

- The surveys were divided, color coded, and placed in appropriately labeled folders to enhance the ease of administration, collection and analysis as follows:
  - Pink paper surveys sixth grade girls
  - Blue paper surveys sixth grade boys
  - Yellow paper surveys seventh grade girls
  - Green paper surveys seventh grade boys
  - Purple paper surveys eighth grade girls
  - Orange paper surveys eighth grade boys

- The researcher personally delivered the surveys to the physical education classes the day of the survey. All surveys were in clearly marked folders indicating the color of the grade and gender to which the surveys were going to be administered.
The physical education teachers provided time at the beginning of their physical education classes to have the students complete the surveys.

Pencils to complete the survey were provided to the students by the researcher. A piece of chocolate was also provided by the researcher and given to students when they completed their surveys.

The researcher administered the surveys to the students, as well as, provided additional explanation and opportunity for questions to be answered. The surveys were completed over a two day period as students attend physical education every other day.

Arrangements had been made for students who did not wish to be part of the survey or were not allowed to be part of the survey to go to the library. There was only one student present who was not to participate in the survey.

When the students completed the surveys they were returned by the students to the researcher and placed immediately in the appropriately labeled folder.

The folders were maintained with the researcher throughout the school day.

Physical education teachers and principal did not have access to the completed surveys.

3.9. Data analysis

In order to answer the research questions proposed within this study, data and information was available from the literature review as well as the student survey data. All student surveys were open coded to distill data in order to assist in creating a picture
of the current state of physical education and the desired state from students’ perspectives. The following table illustrates the research questions and how the data and information was analyzed. As previously stated, I purposefully did not conduct a statistical analysis of differences among gender and grade, the quantitative data presented is for information purposes only.

The overarching question for this project was, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the satisfaction and activity level of middle school students? In order to answer the overarching question the first task was to understand how social discourses and ideologies have impacted physical education. Question one is solely used for framing the study; the data derived from the study is not intended to address question one. Additional research questions to be answered in order to more clearly address the overarching question are contained in the following table which illustrates how they have been answered.
Table 3.1

Research Questions and Analysis Broken Down by Research Question

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How have social discourses and ideologies impacted physical education?</td>
<td>Literature Review</td>
</tr>
<tr>
<td>2. What is the significance of physical education for these middle school students?</td>
<td>Literature review, Critical Incident Survey – would student choose to take PE if it were optional</td>
</tr>
<tr>
<td>3. How do these middle school students perceive their physical selves?</td>
<td>Critical Incident Survey Codes: student self-perception in physical education; male and female perceptions; grade level differences; body build; physical condition; sport ability</td>
</tr>
<tr>
<td>4. How do these middle school students perceive their physical education experience?</td>
<td>Critical Incident Survey Codes: student issues; student likes in physical education; student frustrations in physical education; coed v. single sex class; student goals; perceived teacher behavior, desired activity choices; frequency of class; competition factor</td>
</tr>
</tbody>
</table>

Information from current research literature in physical education has provided the measure against which recommendations from the project have been made based on data from the student critical incident survey. In addition, the combined data provides useful information with which to suggest potential steps to bridge any gap found in the physical education program at St. Samuel in order to best meet the needs of students while attempting to increase satisfaction and activity levels of students.

3.10. Potential study benefits

Data collected has been used to assess student perceptions of physical education in a district. With that data and a qualitative approach the study has been designed to
investigate what modifications could be made in a physical education program thereby providing a more meaningful experience leading to increased satisfaction and activity levels for middle school students. Based on the results of this study, viewed through the lens of best practice in teaching physical education, conclusions and recommendations have been generated for the district. An executive summary will be shared with the district (See Appendix D.5). Stakeholders will have current data with which to begin collegial conversations regarding program reform, collectively increase their content knowledge, have opportunity and focus for collaboration, be able to share practical approaches in physical education and enhance practice and to further enhance student activity and satisfaction. In addition, the collective, reflective efforts of the staff, as described above, are integral components of professional performance reviews for teachers as prescribed by New York State (New York State United Teachers, 2003).

As a result of the student survey data, stakeholders may continue efforts towards reform of the current physical education program. Based on current research regarding physical education, with appropriate improvements in physical education students may further be able to improve their performance physically, emotionally and academically (Blaydes-Madigan, 2003; Burton & Van Heest, 2007; Eastin, 2003; Gage, 1999; Government Innovators Network, 2008; Novello, DeGraw & Kleinman, 1992; Vail, 2006; Trost, 2007). Students may have increased opportunity to be taught critical knowledge they personally require to increase their health, fitness and overall wellness, increase their self-esteem, and improve physical skills (Dishman, Motl, Saunders, et. al., 2005). There may also be the opportunity to promote and provide multidisciplinary enhancement to the students’ educational experience through physical education. With
the potential for improved skills and health and wellness, students may be able to increase their involvement and success in outside school activities. Increased responsible behaviors and decreased absenteeism may be positively affected (Virgilio, 1997).

Finally, using the data from this study, the district, over time, may have the potential to increase the quality of life and life span of students through their developmentally appropriate physical education program (Gallahue & Cleland, 2005)).

If, indeed, program enhancement in physical education becomes a focused priority in the district, based on the student survey data, with the appropriate program modifications, the school community may be enhanced with increased achievement scores, increased attendance levels, decrease in disciplinary issues and increased success and participation in interscholastic teams (athletic and academic) (Ratey, 1999; Shepard, 1997). Additionally, this study may be able to provide a model for investigating other subject areas for potential reform.

Globally, this study adds to the professional knowledge base and provides a model for other districts seeking program improvement from a student perspective, particularly in the area of physical education at the middle school level. This study provides opportunities for greater professional involvement and collaboration, thus more individuals are seeking knowledge to further enhance knowledge base. Finally, the study also informs us of some of the significant immediate and lifelong impacts of developmentally appropriate physical education on children with and without special needs in physical education (Blaydes-Madigan, 2003; Government Innovators Network, 2008; Hammond & Cheatum, 2000; Novello, DeGraw & Kleinman, 1992; Trost, 2007).
3.11. Conclusion

As was previously mentioned in chapter two, there are many global concerns regarding the health and wellness of students and their general lack of physical activity (American Association for Health Physical Education Recreation and Dance, 2007; American Medical Association, 2008; American Obesity Association, 2008). This project was designed to look at student perceptions of their physical education experience and compare their perceptions against current research in physical education. The overall goal was to determine if there is a way to enhance physical education to not only meet the perceived needs of students, but to address global health related issues that impact students. Based on current research, if this could be accomplished, several positives would result for the student physically, mentally, socially and academically (Bailey, 2000; Blaydes-Madigan, 2003; Burton & VanHeest, 2007; Eastin, 2003; Graham, 2008; Harter, 1987; Pollatscheck, 2003; United States Department of Health and Human Services Center for Disease Control and Prevention, 2008).

Additionally, this study attempted to look at student perceptions of physical education and what the literature says about the best practices in teaching research in physical education. These distinct areas of data and current research have been melded and provide the basis and rationale to recommended and ultimately be the catalyst for potential reform of physical education.

As documented in chapters one and two, there exists a significant amount of data which indicates that a developmentally appropriate physical education program can enhance student learning, as well as, health and general overall well-being (Blaydes-Madigan, 2003; Eastin, 2003; Graham, 2008; Gallahue and Cleland, 2003; Government
Innovators Network, 2008; Novello, DeGraw & Kleinmam, 1992; Trost, 2007). Additional literature would also suggest there is some disconnect between knowledge and understanding that school personnel have regarding the actual impact of physical activity on the whole child (e.g., physically, mentally and socially) when provided in a developmentally appropriate physical education program (Blaydes-Madigan, 2003; Eastin, 2003; Burton & VanHeest, 2007). Further, there is much agreement within the literature that a developmentally appropriate physical education program can significantly benefit not only a student’s overall learning, but their physical status and social-emotional well-being (American Medical Association, 2008; American Obesity Association, 2008; Stork & Sanders, 2005; Winnick, 2005).
Chapter 4: Results

4.1. Introduction and overview

This chapter begins with a brief review of the survey collection process conducted at St. Samuel Middle School. The chapter continues with a comprehensive review of the findings resulting from the survey. The chapter concludes with some brief reflective thoughts regarding the results.

As presented in chapter one, the purpose of this study was to examine middle school students’ attitudes toward a physical education program and some factors which contributed to those attitudes. The overarching question is, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the satisfaction and activity level of middle school students. Prior to answering the overarching question it was imperative to understand the social discourses and ideologies that have impacted physical education. In order to frame the study the first course of action was to answer question one below, which is contained solely in the literature review. The study itself is not designed to answer question one. Additional research questions are (1) how have social discourses and ideologies impacted physical education? (2) what is the significance of physical education for these middle school students? (3) how do these middle school students perceive their physical selves? and (4) how do these middle school students perceive their physical education experience?

Prior to conducting the survey, the researcher provided the school district with copies of the survey and human subjects’ approval documentation including parent permission forms. The forms were sent to parents and guardians of all sixth, seventh and
eighth grade students via the students. Parents were offered the opportunity to call, write, e-mail, or return the form to school if they did not wish to participate in the study. The researcher received two documents indicating that two parents requested their student not participate in the study. When the study was conducted, one of the two students was sent to the library. The other student that could not participate was on a class field trip.

The surveys were provided to all middle school students that wished to participate over the course of two days. On the days of the survey, the researcher arrived prior to classes and arranged the color coded surveys, pencils and chocolate on a table at one end of the gym. At the beginning of each class students were provided information regarding the purpose of the survey and the researcher’s role. Students were given another opportunity to opt out of the survey. No students chose to opt out. Pencils were handed to each student by the physical education teachers. Appropriate color-coded surveys were handed to the students by the researcher.

The researcher read the directions and allowed the students to complete part one. Part one contained demographic and multiple choice self-rating questions. When the students completed part one, the researcher read the directions to part two. On part two, the researcher answered questions and provided examples when requested by the students. Questions one and two of part two asked about experiences. Students were told that could mean something they did or something that happened. Questions one and two also asked for an event or events they experienced. Students were told this could include activities, what was or was not taught, what teachers did or said, what students did or said, facilities, equipment, class, level of competitiveness, how they felt about being part of the class, general makeup of class, size of class or anything that they wished to share.
When the third question, regarding creating their perfect physical education class was read, students were provided some additional prompts, for example, what do you believe could be done to make physical education better; even if you like physical education, what else would you like to see or experience; if you don’t like physical education, what are some specific ways we could begin to improve?

When the students finished the survey they returned the survey to the researcher in a folder labeled with the time of the class, grade, and gender. The students chose a small piece of chocolate and returned to the physical education activity for the day. Confidentiality was maintained throughout. Students were instructed to not put their name on the surveys. The only identifiers on the surveys were gender and grade. At no time did the physical education teachers have access to the completed surveys. Some student quotes were identified during the data analysis that adds depth of understanding to the study. These student quotes were identified by the researcher with a class time and number for referencing the quote.

Data was collected over the course of two days during the students’ physical education classes. Students meet for physical education alternate days. Therefore, all students had the opportunity to complete the survey over the two day period. There were fewer surveys completed by the eighth grade class as some of the students were on a class field trip on the dates of the survey.

Participant surveys were the primary data for analysis. The data was coded and categorized to uncover patterns and themes significant to answering the research questions set forth in this study.
4.2. Part one survey results overview

The following is part one data from the survey. The information in the following tables indicate the number of students participating and their answers to the part one questions (1) what is your gender? (male or female); (2) what is your grade? (6, 7, or 8); (3) if physical education were optional next year, would you choose to take it? (yes or no); (4) how would you feel most comfortable in your physical education class? (male or female, coed, choice or don’t care); (5) How would you rate your body build? (over, average or under); (6) how would you rate your level of fitness? (top, good, fair or poor) and (7) how would you rate your ability in sports? (excellent, good, average, fair or poor).

Question one and two required the students to identify their gender and grade respectively. The surveys were color coded to prevent students from providing incorrect data. Students completing the survey are illustrated in the following table.

Table 4.1

<table>
<thead>
<tr>
<th>Grade</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>70</td>
<td>54</td>
<td>124</td>
</tr>
<tr>
<td>7</td>
<td>73</td>
<td>64</td>
<td>137</td>
</tr>
<tr>
<td>8</td>
<td>37</td>
<td>35</td>
<td>72</td>
</tr>
<tr>
<td>Totals</td>
<td>180</td>
<td>153</td>
<td>333</td>
</tr>
</tbody>
</table>
4.2.1. Part one data sixth grade

Table 4.2 presents a report of question three of the part one sixth grade student responses by count and percentage, broken down by question and gender. Questions one and two referred to gender and grade and are reported in Table 4.1, therefore the tables begin with question three.

Table 4.2
Sixth Grade Question Three Student’s Indication of Interest in Continuing Physical Education by Gender, Number, and Percentage

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Yes</th>
<th>No</th>
<th>Percent Yes</th>
<th>Percent No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>70</td>
<td>67</td>
<td>3</td>
<td>96</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
<td>42</td>
<td>12</td>
<td>78</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>109</td>
<td>15</td>
<td>87</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Responses to the question: If physical education were optional next year, would you choose to take it?

In this study, most male and female sixth grade students would choose to take physical education if it were optional. Although the percentages are somewhat higher in this study than the Krouscas (1999) study, the data regarding student choice to take physical education are consistent with the findings of that study. The Krouscas (1999) data showed 80% of the sixth grade students would choose to take physical education (87% for males and 72% for females).

Table 4.3 presents a report of the part one the sixth grade student responses for question four by gender, count and percentage, broken down by choice.
Table 4.3

*Sixth Grade Question Four Student’s Indication of Demographic Preference for Their Physical Education Class by Gender, Choice, Number, and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Male or Female</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Coed</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Choice</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Don’t Care</td>
<td>39</td>
<td>56</td>
</tr>
</tbody>
</table>

Note: Responses to the question: How would you feel most comfortable in your physical education class?

In this study, when students were asked what demographic make-up they would prefer for their physical education classes most students did not have a preference.

Table 4.4 presents a report of the sixth grade student responses to question five by gender, count and percentage, broken down by choice.
Table 4.4

*Sixth Grade Question Five Student’s Indication of Personal Perception of Their Body*

*Build by Choice, Number and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Over Size</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Average</td>
<td>61</td>
<td>87</td>
</tr>
<tr>
<td>Under Size</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your body build?

In this study the majority of sixth grade students, both male and female, consider themselves to have an average body build compared to their classmates.

Table 4.5 presents a report of the sixth grade responses to question six by gender, count, and percentage, broken down by choice.
Table 4.5

*Sixth Grade Question Six Student’s Indication of Personal Perception of Their Level of Fitness by Choice, Number and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>In top condition</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>In good condition</td>
<td>41</td>
<td>59</td>
</tr>
<tr>
<td>In fair condition</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>In poor condition</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your level of fitness?

In this study most male and female sixth grade students rated themselves in good physical condition. The majority of students, 86% for boys and 71% for girls, rank themselves in either the good or top condition category. Although the males had 1% in the poor category, overall, males ranked themselves higher than the females.

Table 4.6 presents a report of the sixth grade responses to question seven by gender, count, and percentage, broken down by choice.
Table 4.6

*Sixth Grade Question Seven Student’s Indication of Personal Perception of Their Sports Ability by Level, Number, and Percentage*

<table>
<thead>
<tr>
<th>Level</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Excellent at sports</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>Good at sports</td>
<td>36</td>
<td>51</td>
</tr>
<tr>
<td>Average at sports</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Fair at sports</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Poor at sports</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your ability in sports?

In this study, most male and female sixth grade students ranked themselves in the good at sports category (51% of males and 43% of females). It is further noted that 94% percent of the males and 80% of the females ranked themselves average or above. Although the majority of the students ranked themselves average or better, the males consistently ranked themselves higher than the females.

4.2.2. Part one seventh grade data

Table 4.7 presents a report of question three of the part one seventh grade student responses by count and percentage broken down by question and gender. Questions one and two referred to gender and grade and are reported in Table 4.1 above, therefore the tables begin with question three.
Table 4.7

_Seventh Grade Question Three Student’s Indication of Interest in Continuing Physical Education by Gender, Number, and Percentage_

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Yes</th>
<th>No</th>
<th>Percent Yes</th>
<th>Percent No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>73</td>
<td>71</td>
<td>2</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>55</td>
<td>9</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>126</td>
<td>11</td>
<td>94</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Responses to the question: If physical education were optional next year, would you choose to take it?

In this study, most male and female seventh grade students would choose to take physical education if it were optional. The data within this study shows the percentage of students that would choose to take physical education higher than that of Krouscas (1999). His data showed only 78% of students in grade seven would elect to take physical education if it were optional (males, 90% and the females, 66%).

Table 4.8 presents a report of the part one the seventh grade student responses to question four by gender, count and percentage, broken down by choice.
Table 4.8

Seventh Grade Question Four Students Indication of Demographic Preference for their Physical Education Class by Gender, Choice, Number, and Percentage

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Male or Female</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Coed</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Choice</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>Don’t Care</td>
<td>32</td>
<td>43</td>
</tr>
</tbody>
</table>

Note: Responses to the question: How would you feel most comfortable in your physical education class?

In this study, when students were asked what demographic make-up they would prefer for their physical education classes most students did not have a preference.

Table 4.9 presents a report of part one sixth grade student responses to question five by gender, count and percentage, broken down by choice.
Table 4.9

**Seventh Grade Question Five Student’s Indication of Personal Perception of Their Body Build by Choice, Number and Percentage**

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th></th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>Over Size</td>
<td>8</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Average</td>
<td>62</td>
<td>85</td>
<td>54</td>
</tr>
<tr>
<td>Under Size</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your body build?

In this study the majority of seventh grade students, both male and female, consider themselves to have an average body build compared to their classmates. The females assess themselves in the body build category almost identical to the males.

Table 4.10 presents a report of the seventh grade responses to question six by gender, count, and percentage, broken down by choice.
Table 4.10

*Seventh Grade Question Six Student’s Indication of Personal Perception of Their Level of Fitness by Choice, Number and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th></th>
<th>Female Responses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>In top condition</td>
<td>18</td>
<td>25</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>In good condition</td>
<td>40</td>
<td>55</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>In fair condition</td>
<td>13</td>
<td>18</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>In poor condition</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your level of fitness?

In this study most male and female seventh grade students rated themselves in good physical condition. Further, the majority of students, 80% for males and 71% for females, rank themselves in either the good or top condition category.

Table 4.11 presents a report of the sixth grade responses to question seven by gender, count, and percentage, broken down by choice.
Table 4.11

*Seventh Grade Question Seven Student’s Indication of Personal Perception of Their Sports Ability by Level, Number, and Percentage*

<table>
<thead>
<tr>
<th>Level</th>
<th>Male Responses</th>
<th></th>
<th>Female Responses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Excellent at sports</td>
<td>30</td>
<td>41</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>Good at sports</td>
<td>28</td>
<td>38</td>
<td>23</td>
<td>36</td>
</tr>
<tr>
<td>Average at sports</td>
<td>9</td>
<td>12</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>Fair at sports</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Poor at sports</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note: Responses to the question: For your age group, how would you rate your ability in sports?*

In this study most male and female seventh grade students ranked themselves average or above. Therefore, 89% of the males and 91% of the females consider themselves to be average or better. Although the majority of the students ranked themselves average or better, the males consistently ranked themselves higher than the females in terms of sports ability.

**4.2.3. Part one eighth grade data**

Table 4.12 presents a report question three of the part one eighth grade student responses, by count and percentage, broken down by question and gender. Questions one and two referred to gender and grade and are reported in Table 4.1, therefore the tables begin with question three.
Table 4.12

_Eighth Grade Question Three Student’s Indication of Interest in Continuing Physical Education by Gender, Number, and Percentage_

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Yes</th>
<th>No</th>
<th>Percent Yes</th>
<th>Percent No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>37</td>
<td>35</td>
<td>2</td>
<td>95</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>27</td>
<td>8</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>Totals</td>
<td>72</td>
<td>62</td>
<td>10</td>
<td>86</td>
<td>14</td>
</tr>
</tbody>
</table>

Note: Responses to the question: If physical education were optional next year, would you choose to take it?

In this study, most male and female eighth grade students would choose to take physical education if it were optional. Once again, the students in this study surpassed the Krouscas (1999) study in terms of the number of students that would choose to take physical education. Only 59% of the eighth grade students in Krouscas (1999) would choose to take physical education if it were optional (71.7% of males and 47.0% of females).

Table 4.13 presents a report of the part one the eighth grade student responses for question four by gender, count and percentage, broken down by choice.
# Eighth Grade Question Four Student’s Indication of Demographic Preference for their Physical Education Class by Gender, Choice, Number, and Percentage

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Male or Female</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Coed</td>
<td>17</td>
<td>46</td>
</tr>
<tr>
<td>Choice</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Don’t Care</td>
<td>17</td>
<td>46</td>
</tr>
</tbody>
</table>

Note: Responses to the question: How would you feel most comfortable in your physical education class?

In this study, when students were asked what demographic make-up they would prefer for their physical education classes most students did not have a preference. However, the males preferences were equally divided between don’t care and coed categories.

Table 4.14 presents a report of part one seventh grade student responses to question five by gender, count and percentage, broken down by choice.
Table 4.14

*Eighth Grade Question Five Student’s Indication of Personal Perception of Their Body*

*Build by Choice, Number and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Over Size</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Average</td>
<td>26</td>
<td>70</td>
</tr>
<tr>
<td>Under Size</td>
<td>6</td>
<td>16</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your body build?

In this study the majority of eighth grade students, both male and female, consider themselves to have an average body build compared to their classmates.

Table 4.15 presents a report of the seventh grade responses to question six by gender, count, and percentage, broken down by choice.
Table 4.15

*Eighth Grade Question Six Student’s Indication of Personal Perception of Their Level of Fitness by Choice, Number and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>In top condition</td>
<td>16</td>
<td>43</td>
</tr>
<tr>
<td>In good condition</td>
<td>18</td>
<td>49</td>
</tr>
<tr>
<td>In fair condition</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>In poor condition</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your level of fitness?

In this study most male and female eighth grade students rated themselves in good physical condition. Eighty percent of all students rated themselves in good or top condition. Eighth grade males ranked themselves higher overall than their male counterparts at sixth and seventh grade. It is also noted that the number of females rating themselves in good condition increased each year. In addition, there are a higher percentage of females that rate themselves in the “poor” category than at any other grade level. Across grade levels, eighth grade females have the largest percentage of students rating themselves in the poor fitness category.

Table 4.16 presents a report of the sixth grade responses for question seven by gender, count, and percentage, broken down by level.
Table 4.16

*Eighth Grade Question Seven Student’s Indication of Personal Perception of Their Sports Ability by Level, Number, and Percentage*

<table>
<thead>
<tr>
<th>Level</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Excellent at sports</td>
<td>17</td>
<td>46</td>
</tr>
<tr>
<td>Good at sports</td>
<td>16</td>
<td>43</td>
</tr>
<tr>
<td>Average at sports</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Fair at sports</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poor at sports</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your ability in sports?

In this study most male and female eighth grade students rated themselves average or above. As shown in the table, 100% of the males and 86% of the females consider themselves to be average or better. Across grade levels, males and females have consistently rated themselves higher each year in the area of sports ability since the sixth grade.

4.3. *Part one data from students who would not choose to participate in physical education if given a choice*

In this study, there were seven, or 4%, of the males indicating they would not wish to take physical education if it were optional; there were 34, or 18%, of the females that would choose not to take physical education if it were optional. Overall, only 11% of sixth, seventh and eighth graders would opt out of physical education if given a choice.
Krouscas (1999) reported higher percentages of students that would opt out of physical education than did this study. The Krouscas (1999) study reported 17% of males and 38% of females would opt out of physical education. Overall, he reported 28% of students would opt out of physical education if given a choice.

Table 4.17 presents a report of the part one data of all the students that would opt out of physical education if they were given a choice. The tables begin with question four.

Table 4.17

*Question Four Students Choosing to Opt Out of Physical Education If Given a Choice*

*Indication of Demographic Preference for their Physical Education Class by Gender, Choice, Number, and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male or Female</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Coed</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Choice</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Don’t Care</td>
<td>6</td>
<td>15</td>
</tr>
</tbody>
</table>

Note: Responses to the question: How would you feel most comfortable in your physical education class?

In this study, student responses indicating demographic make-up preferences show they did not have a preference. A demographic preference comparison within this study between students that would take physical education and students that would choose to opt out of physical education showed a similar pattern in that most students did not have a preference regarding class make-up.
Table 4.18 presents a report of the student responses to question five by gender, count and percentage, broken down by choice.

Table 4.18

**Question Five Student’s Choosing to Opt Out of Physical Education if Given a Choice**

**Indication of Personal Perception of Their Body Build by Choice, Number and Percentage**

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Over Size</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Average</td>
<td>6</td>
<td>86</td>
</tr>
<tr>
<td>Under Size</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your body build?

In this study, considering middle school students who would opt out of physical education and their rating of their own body build, the majority of these students, both male and female consider average body build compared to their classmates. Within this study, a comparison between students that would opt out and students that would not showed that the percentage of students rating themselves in each of the categories remained consistent.

Table 4.19 presents a report of the to question six by gender, count, and percentage, broken down by choice.
Table 4.19

*Question Six Student’s Choosing to Opt Out of Physical Education Indication of Personal Perception of Their Level of Fitness by Choice, Number and Percentage*

<table>
<thead>
<tr>
<th>Choices</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>In top condition</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>In good condition</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>In fair condition</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>In poor condition</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your level of fitness?

In this study most male and female students that would choose to opt out of physical education rated themselves in good physical condition. The overall pattern continues that the majority of students, 85% for males and 71% for females, rank themselves in either the good or top condition category. It is interesting to note that within this study, a comparison of data in the category of personal fitness level showed that among the students that would opt out of physical education and students that would take physical education, there were higher percentages, both males and females, which considered themselves in top physical condition. Additionally, there were a lesser percentage of females rating themselves in the poor category than those students that would take physical education.

Table 4.20 presents a report of the responses to question seven by gender, count, and percentage, broken down by choice.
Table 4.20

Question Seven Students Choosing to Opt Out of Physical Education Indication of Personal Perception of Their Sports Ability by Level, Number, and Percentage

<table>
<thead>
<tr>
<th>Level</th>
<th>Male Responses</th>
<th>Female Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Excellent at sports</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Good at sports</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Average at sports</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>Fair at sports</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Poor at sports</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Responses to the question: For your age group, how would you rate your ability in sports?

In this study most male and female students ranked themselves average or above. Eighty-five percent of the males and 89% of the females consider themselves to be average or better. The students choosing to opt out of physical education when reporting sports ability provide the first instance where females have rated themselves higher than the males.

4.4. Summary of part one data by question, grade level and gender

The following data summaries represent a comparison across grade level by question. Gender (question one) and grade level (question two) are omitted from this section as they are previously reported in Table 4.1. Therefore, the summaries will begin with question three. A comprehensive summary table reported by number and percentage is in appendix D.1 and D.2 respectively.
4.4.1. Summary question 3

Question three asked the students to indicate their preference for taking physical education if they were given an option next year. Males chose to take physical education at the rate of 96%. Females chose to take physical education at the rate of 81%. Therefore, 89% of students at this middle school would choose to take physical education if given a choice. In Krouscas (1999), only 71% of students indicated that they would choose to take physical education if they were given a choice.

4.4.2. Summary question 4

Question four showed very little overall variation across gender in the percentages of students choosing a particular category. Data also showed consistency in preference across choices regardless of grade level. As indicated by the data, most students, regarding the demographic make-up of their physical education class, don’t care (46% indicated don’t care choice). Twenty-three percent would prefer a choice dependent upon activity. Twenty-four percent would prefer a coed class. Only 14% would prefer a strictly male or female class.

4.4.3. Summary question 5

Question five asked the students to indicate their body builds. Most, or 80%, rate themselves average. There is no deviation between the percentages of male and female selection of this category (males 80.6% and females 79.6%) across grade levels. In the over category, the percentages are similar in male and female ratings; 11% percent of males and 13% of females rate themselves oversize. Is it noted that there were higher percentages of males at eighth grade (16%) and females at sixth grade (15%) that considered themselves undersize than at other grade levels.
4.4.4. Summary question 6

Question six referred to fitness. The data showed some different trends than the prior questions. For the males, there was a gradual increase across grade levels for the number of students selecting the top fitness category; whereas, the females showed a decline in selecting the top fitness category. The good category illustrated the opposite trend. The numbers of males were gradually decreasing in selecting this choice; whereas females’ numbers increased in selecting this choice. The fair category for males fluctuated across grade levels. However, the females choosing this category showed a gradual decline. Separating out the top and good choices, males rated themselves 10% higher than the females (43% for males and 33% for females). In the categories showing the lowest rating in fitness level; only 1% of males chose this category, whereas 6% of females chose this category.

4.4.5. Summary question 7

Question seven referred to the student’s sport ability and asked them to rate their ability in sports. The data for personal sport ability showed males selecting higher ratings in relation to their sport ability than their female counterparts. Males choose the excellent progressively more frequently from sixth to eighth grade. Females showed a spike in the seventh grade; by the eighth grade they returned to an equal rating as they did at the sixth grade. Males rated themselves excellent in sport ability 20% more often than females. Only 17% of the males rated themselves average or below. Females, however, rated themselves average or below at the rate of 39%.

Across grade levels, with the exception of the male excellent category, there was little fluctuation. However, it should be noted that by the eighth grade no male students
rated themselves fair or poor in relation to their sport ability. Across grade levels female numbers remained consistent in the fair and poor categories; the data showed 8% of the females in sixth through eighth grade consider themselves “fair” or “poor”.

4.5. Part two data

In part two of the survey the students were asked three open-ended questions to which they were to provide written responses regarding their likes, dislikes and desires in physical education. The qualitative data provided by this part of the survey has been distilled to six major coding categories: atmosphere, dressing, self-perception, curriculum or activity choices, teacher behavior, and other. In order for a response to be shown in this chart it had to be mentioned by more than two of students’ surveyed at each grade and gender. Starred categories were found in at least 10% of the completed surveys. In addition it should also be noted that starred categories were discovered on completed surveys of both genders and at all grade levels.

Data reported in the following tables was coded into the six coding categories as listed above. Each coding category is a column heading. When there were no responses for a particular category, the column in the table was eliminated. The items listed in each column were the most frequent responses written on the completed student surveys at each grade level.

4.5.1. Part two open coding results sixth grade

Table 4.21 presents sixth grade male responses regarding an event or events causing them to like physical education. The table is broken down by coding category which lists the respective responses. The category of dressing was eliminated from this table as there were no responses.
Table 4.21

*Sixth Grade Male Responses to Event(s) that Caused Them to Like Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Fun</em></td>
<td>Beating all my times</td>
<td>Games</td>
<td>Nice teachers Help us out when we need it</td>
<td>Friends I have made playing dodgeball Love being able to be active</td>
</tr>
<tr>
<td><em>Competition</em></td>
<td><em>Football –</em></td>
<td><em>Matball</em> Liked teachers</td>
<td><em>More competitive</em></td>
<td></td>
</tr>
<tr>
<td>Coed</td>
<td><em>Softball</em></td>
<td>Exercise</td>
<td><em>Basketball</em></td>
<td>Challenge</td>
</tr>
<tr>
<td><em>Friends</em></td>
<td><em>Basketball</em></td>
<td></td>
<td>Swimming</td>
<td>Variety</td>
</tr>
<tr>
<td></td>
<td>Swimming</td>
<td></td>
<td>Hockey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lacrosse</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * signifies that at least 10% of the students responding to the surveys mentioned the item.

As is shown by Table 4.21, sixth grade males like team sports, fun, competition and friends as part of their physical education experience.

Table 4.22 presents the sixth grade male responses for an event or events causing them to dislike physical education. The table is broken down by coding category which lists the respective responses. The categories of dressing and teacher behavior were eliminated from this table as there were no responses.
Table 4.22

*Sixth Grade Male Responses to Event(s) that Caused Them to Dislike Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kids not paying attention</td>
<td>Being laughed at</td>
<td><em>Dancing</em></td>
<td>Paired with kids who don’t care</td>
</tr>
<tr>
<td>Ball hogs</td>
<td>Forced to do activities I’m not good at</td>
<td><em>Track</em></td>
<td>Poor equipment</td>
</tr>
<tr>
<td>People that think they are better than others</td>
<td>Fitness test cause I’m not good at it</td>
<td>Swimming</td>
<td>People that don’t care</td>
</tr>
</tbody>
</table>

Males had few comments listed under this section. The data that is evident in this section is that dance and track are the least liked activities.

Table 4.23 presents sixth grade male suggestions for creating their perfect physical education class. The table is broken down by coding category which lists the most frequent responses in each category. The categories of dressing, self-perception, and teacher behavior were eliminated as there were no comments for these categories.
### Sixth Grade Male Responses to Creating Their Perfect Physical Education Class

**by Category**

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Lots of competitiveness</em></td>
<td>Fitness</td>
<td><em>Daily</em></td>
</tr>
<tr>
<td><em>Very competitive</em></td>
<td><em>Basketball</em></td>
<td>Afternoon</td>
</tr>
<tr>
<td><em>Sport oriented</em></td>
<td><em>Softball/baseball</em></td>
<td>Outside as much as possible</td>
</tr>
<tr>
<td>Separate by ability</td>
<td><em>Matball</em></td>
<td><em>Longer classes</em></td>
</tr>
<tr>
<td>Just boys</td>
<td><em>Survey students to see what they like</em></td>
<td>Lots of equipment</td>
</tr>
<tr>
<td><em>Team sports</em></td>
<td>Football</td>
<td>Options for overweight</td>
</tr>
<tr>
<td><em>Friends</em></td>
<td>Lacrosse</td>
<td></td>
</tr>
<tr>
<td>Sporty people</td>
<td><em>Student decisions on activities</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>No dancing</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fitness equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Dodgeball</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separate swimming</td>
<td></td>
</tr>
</tbody>
</table>

The responses from the sixth grade males in when describing their perfect physical education class would state:

- They would like team sports and competitive activities
- They would like more and longer physical education classes
- They would like a voice in choosing the activities

Table 4.24 presents sixth grade female responses regarding an event or events that caused them to like physical education. The table is broken down by coding category which lists the respective responses. The categories of dressing and self-perception were removed from the following table as there were no comments from the sixth grade girls relative to those categories.

Table 4.24

* Sixth Grade Female Responses to Event(s) that Caused Them to Like Physical Education by Category *

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Friends</em></td>
<td><em>Variety of sports</em></td>
<td>Encouraging</td>
<td>Exercise</td>
</tr>
<tr>
<td><em>Fun</em></td>
<td><em>Team Sports</em></td>
<td>Love my PE teacher</td>
<td>Fitness</td>
</tr>
<tr>
<td><em>Competitiveness</em></td>
<td><em>Matball</em></td>
<td></td>
<td>Get along with others</td>
</tr>
<tr>
<td><em>Student choice</em></td>
<td>Dodgeball</td>
<td></td>
<td>Teamwork</td>
</tr>
<tr>
<td>Sports with friends</td>
<td><em>Basketball</em></td>
<td></td>
<td>Learning rules</td>
</tr>
<tr>
<td>Excitement / playing</td>
<td>Kickball</td>
<td></td>
<td>For your health</td>
</tr>
<tr>
<td>Playing and talking with friends</td>
<td>Fitness</td>
<td></td>
<td>Staying in shape</td>
</tr>
<tr>
<td></td>
<td><em>Swimming</em></td>
<td></td>
<td>Being active</td>
</tr>
<tr>
<td></td>
<td><em>Softball</em></td>
<td></td>
<td>Socialization</td>
</tr>
<tr>
<td></td>
<td>Lacrosse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As is shown by Table 4.24, friends, fun, competitiveness, and choice are significant factors in liking physical education for the sixth grade female students in this study.

The following table illustrates the results of the sixth grade females’ responses for an event or events causing them to dislike physical education. The table is broken down by coding category which lists the respective responses.

Table 4.25

_Sixth Grade Female Responses to Event(s) that Caused Them to Dislike Physical Education by Category_

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Dressing</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Kids who don’t try</td>
<td>Changing in front of others</td>
<td>Being made fun of</td>
<td>*Running Track</td>
<td>Teacher favorites</td>
<td>Poor equipment</td>
</tr>
<tr>
<td>Boys ballhogs</td>
<td></td>
<td>Boys putting girls in an “unimportant position”</td>
<td>*Square dancing</td>
<td>Teacher pushing too hard</td>
<td>Bad/damaged equipment</td>
</tr>
<tr>
<td>Girls attitudes</td>
<td></td>
<td>Boys calling girls names</td>
<td>Lack of student choice</td>
<td>Teacher yells/screams</td>
<td>Boys</td>
</tr>
<tr>
<td>Stuck up and snobby</td>
<td></td>
<td>Boys calling girls names</td>
<td>Lack of student choice</td>
<td>Teacher yells/screams</td>
<td>Boys</td>
</tr>
<tr>
<td>*Rude students</td>
<td></td>
<td>Bullies are stronger than me</td>
<td>Square dancing with boys</td>
<td>Teacher on cell phone</td>
<td>Cheaters</td>
</tr>
<tr>
<td>Bullies</td>
<td></td>
<td>Being picked on</td>
<td>Teacher texting</td>
<td>Forced to do activities you don’t like/are not good at</td>
<td></td>
</tr>
<tr>
<td>Mean people</td>
<td></td>
<td>Being made fun of</td>
<td>How teacher acted toward us</td>
<td>Teacher chews gum and we can’t</td>
<td></td>
</tr>
<tr>
<td>Bad language</td>
<td></td>
<td>I am too short</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As is shown by Table 4.25, the students in this study citing negative incidents focused on kids that did not try or were rude. Self-perception was mentioned in terms of male treatment toward females and bullies. Track and square dancing are perceived as negative. When they focused on teacher behavior their negative incidents identified teacher attention being elsewhere or their perceived treatment by a teacher.

Kroucas (1999) showed most negative incidents were in the categories of curriculum (warm-up, mile run and team sports); dressing (changing time and changing in general); and teacher behavior (evaluation and style).

Table 4.26 presents sixth grade female student suggestions for creating their perfect physical education class. Based on student responses, the categories of self-perception and teacher behavior were eliminated from this table.
Table 4.26

*Sixth Grade Female Responses to Creating Their Perfect Physical Education Class*

*by Category*

<table>
<thead>
<tr>
<th>Category</th>
<th>Atmosphere</th>
<th>Dressing</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Increase competitiveness</em></td>
<td>Not changing with others</td>
<td><em>Variety of sports</em></td>
<td><em>Daily physical education</em></td>
<td></td>
</tr>
<tr>
<td><em>Fun</em></td>
<td></td>
<td><em>Student choices</em></td>
<td><em>More time in physical education</em></td>
<td></td>
</tr>
<tr>
<td><em>Friends</em></td>
<td></td>
<td><em>Dodgeball</em></td>
<td>More equipment</td>
<td></td>
</tr>
<tr>
<td><em>Good sportsmanship</em></td>
<td><em>Matball</em></td>
<td><em>Basketball</em></td>
<td>Outside more</td>
<td></td>
</tr>
<tr>
<td><em>Smaller classes</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No rudeness</td>
<td>Lacrosse</td>
<td></td>
<td>Not after lunch</td>
<td></td>
</tr>
<tr>
<td>Free time</td>
<td>Swimming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Softball</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The student data for the “perfect” physical education class primarily focused on social and interpersonal issues. What students play seems to be less critical to them than some of the other actions that are taking place in class. Sixth grade girls want a competitive environment, with friends and would like the opportunity to have some choice in the activity chosen.

*4.5.2. Part two open coding results seventh grade*

Table 4.27 presents seventh grade male responses regarding an event or events that caused them to like physical education. The table is broken down by coding
category which lists the respective responses. The category of “dressing” was eliminated from this table as there were no responses in that category.

Table 4.27

*Seventh Grade Male Responses to Event(s) that Caused Them to Like Physical Education*

*by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Fun</em></td>
<td>I got better at sports</td>
<td><em>Matball</em> Choices on what to do</td>
<td>Separated into fair teams</td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>Got better at many things</td>
<td><em>Basketball</em></td>
<td>PE gives me more chances to play</td>
<td></td>
</tr>
<tr>
<td><em>Variety of Sports</em></td>
<td><em>Soccer</em> Volleyball <em>Softball</em> <em>Dodgeball</em> <em>Football</em> <em>Hockey</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The responses from seventh grade males suggest that team and competitive sports are significant in liking physical education. It is also clear that having a choice in activity is significant.

Table 4.28 presents seventh grade male responses regarding an event or events that caused them to dislike physical education. The table is broken down by coding category which lists the respective responses. The category of dressing was eliminated as
there was only one response that could be placed in that category. However, the way the response was written it seemed more appropriate to place it in the self-perception category.

Table 4.28

*Seventh Grade Male Responses to Event(s) that Caused Them to Dislike Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some classmates</td>
<td>Kids got picked on</td>
<td>Running</td>
<td>Not having choices</td>
<td>Limiting play time</td>
</tr>
<tr>
<td>People that don’t try</td>
<td>People saying you suck</td>
<td>Soccer</td>
<td>Taking too long to discuss things</td>
<td>Not enough time to play</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Getting yelled at</td>
<td><em>Track</em></td>
<td></td>
<td>Not enough outside</td>
</tr>
<tr>
<td>Poor sportsmanship</td>
<td>Called fat</td>
<td>Fitness</td>
<td></td>
<td>Not enough matball</td>
</tr>
<tr>
<td>Wasting time</td>
<td>Changing in front of others</td>
<td>Lacrosse</td>
<td></td>
<td>Gym detention</td>
</tr>
<tr>
<td>Makeup of class</td>
<td>Square Dancing</td>
<td></td>
<td></td>
<td>Not enough time</td>
</tr>
<tr>
<td>Bad language</td>
<td>Wrestling</td>
<td></td>
<td></td>
<td>Poor equipment</td>
</tr>
<tr>
<td>Too many people</td>
<td><em>Swimming</em></td>
<td></td>
<td></td>
<td>Made to do activities I don’t like</td>
</tr>
<tr>
<td>Some people cause problems</td>
<td>Dance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Responses from the male students regarding negative events revealed that students did not wish to tolerate students that were exhibiting negative and or insulting behaviors or did not try or care. Much of the data in the negative incidences question, although in various categories above, refer to personal or interpersonal incidences that they considered negative. With the exception of soccer, the physical activities mentioned that the students found negative were individual physical activities.

Table 4.29 presents seventh grade male suggestions for creating their perfect physical education class. Based on student responses, the categories of dressing and teacher behavior were eliminated from this table.
Table 4.29

*Seventh Grade Male Responses to Creating Their Perfect Physical Education Class*

*by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free time</td>
<td>People would be nice to each other</td>
<td><em>Baseball</em></td>
<td>Keep everything the same and let it work itself out</td>
</tr>
<tr>
<td><em>Friends</em></td>
<td><em>Dodgeball</em></td>
<td></td>
<td><em>Daily</em></td>
</tr>
<tr>
<td><em>Variety of sports</em></td>
<td>Swimming</td>
<td></td>
<td>Choices daily</td>
</tr>
<tr>
<td>Play</td>
<td>Archery</td>
<td></td>
<td>Weight room</td>
</tr>
<tr>
<td><em>Really competitive, Very competitive</em></td>
<td><em>Matball</em></td>
<td><em>At least an hour</em></td>
<td>Longer time</td>
</tr>
<tr>
<td><em>Very sport oriented</em></td>
<td><em>Lacrosse</em></td>
<td></td>
<td>More contact sports</td>
</tr>
<tr>
<td><em>Fun</em></td>
<td><em>Soccer</em></td>
<td></td>
<td>All specials would be just like gym</td>
</tr>
<tr>
<td>More mats on the wall</td>
<td><em>Basketball</em></td>
<td></td>
<td>New equipment</td>
</tr>
<tr>
<td></td>
<td>Softball</td>
<td></td>
<td>Bigger gym</td>
</tr>
<tr>
<td></td>
<td><em>Do stuff people like</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A description of the perfect physical education class according to the above data suggests seventh grade males prefer team sports and competition. Fun and friends are also significant components.
Table 4.30 presents seventh grade female responses regarding an event or events that caused them to like physical education. The table is broken down by coding category which lists the respective responses. The categories of dressing and teacher behavior were eliminated as there were no responses in those categories.

Table 4.30

*Seventh Grade Female Responses to Event(s) that Caused Them to Like Physical Education*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Competitiveness</em></td>
<td><em>Dodgeball</em></td>
<td>Nice teachers</td>
<td><em>When we get a choice</em></td>
</tr>
<tr>
<td><em>Fun</em></td>
<td><em>Swimming</em></td>
<td>Encouraging words</td>
<td>Running, laughing and having fun with friends</td>
</tr>
<tr>
<td>Determination of classmates</td>
<td>Capture Flag</td>
<td></td>
<td>Anything as long as I get to stay in the game – active</td>
</tr>
<tr>
<td>Free time</td>
<td><em>Variety</em></td>
<td></td>
<td>Getting the adrenaline rush</td>
</tr>
<tr>
<td>Everyone got along</td>
<td><em>Matball</em></td>
<td></td>
<td>Being able to move around</td>
</tr>
<tr>
<td></td>
<td><em>Basketball</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Swimming</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lacrosse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Running/track</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is shown by Table 4.30, fun, competitiveness and choice are significant factors for liking physical education. In terms of activities, matball, dodgeball, basketball and
swimming are all important in liking physical education. Finally, student choice continues to be a significant item repeatedly mentioned in the surveys.

Table 4.31 presents seventh grade female responses to an event or events that have caused them to dislike physical education.

Table 4.31

*Seventh Grade Female Responses to Event(s) that Caused Them to Dislike Physical Education by Category*

<table>
<thead>
<tr>
<th>Category</th>
<th>Atmosphere</th>
<th>Dressing</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of participation</td>
<td><em>Not enough time</em></td>
<td>People yelling at me because I am not as good</td>
<td><em>Track</em></td>
<td>Teacher always has their phone out</td>
<td><em>Don’t like PE when forced to play what don’t like</em></td>
<td></td>
</tr>
<tr>
<td>Bad language by losers</td>
<td></td>
<td>Putting me down ’cause I’m not good</td>
<td>Swimming</td>
<td>Teacher plays favorites</td>
<td></td>
<td>Not enough space</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td>Made fun of me</td>
<td>Square Dancing</td>
<td>Gym teacher texting</td>
<td></td>
<td>Need equal opportunity M/F</td>
</tr>
<tr>
<td>Lack of competition</td>
<td></td>
<td>Teasing me</td>
<td></td>
<td>Mean</td>
<td></td>
<td>Not enough time to play</td>
</tr>
<tr>
<td>Boys don’t let us play</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys ball hogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some kids attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As is shown in Table 4.31 positive interpersonal relationships are important to seventh grade females as a factor for liking physical education. A major factor in changing was that there was not enough time allotted. However, congruent with other students and grade levels one of the most significant factors in students liking or disliking physical education is student choice. Track is the least favorite activity.

Table 4.32 presents suggestions from seventh grade females for creating their perfect physical education class.
Table 4.32

*Seventh Grade Female Responses to Creating Their Perfect Physical Education Class by Category*

<table>
<thead>
<tr>
<th>Category</th>
<th>Atmosphere</th>
<th>Dressing</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excited students</td>
<td><em>Fun</em></td>
<td><em>Matball</em></td>
<td><em>Every day</em></td>
<td><em>More Competitive</em></td>
<td><em>Soccer</em></td>
<td>More active</td>
</tr>
<tr>
<td></td>
<td><em>Outside more</em></td>
<td><em>Dodgeball</em></td>
<td><em>Kids pick level of competitiveness</em></td>
<td><em>Variety</em></td>
<td>Soccer</td>
<td>Create own PE class</td>
</tr>
<tr>
<td></td>
<td><em>All girls</em></td>
<td>Softball</td>
<td>Vote on activities</td>
<td><em>Not competitive</em></td>
<td><em>Student choices</em></td>
<td>Just the way it is except without some people</td>
</tr>
<tr>
<td></td>
<td><em>Friends</em></td>
<td>Basketball, softball, swimming</td>
<td>Neater locker room and smell good</td>
<td><em>More sport oriented</em></td>
<td>Lots of options</td>
<td>Top equipment</td>
</tr>
<tr>
<td></td>
<td>Girls only</td>
<td></td>
<td></td>
<td>Playing sports/fun games</td>
<td></td>
<td>Less warm-ups</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wear flip flops and not be responsible if students get hurt</td>
</tr>
</tbody>
</table>
As presented in Table 4.32 in order to construct a perfect physical education program for these seventh grade females it would need to offer choices, competition, friends and fun.

4.5.3. *Part two open coding results eighth grade*

Table 4.33 presents the eighth grade male responses regarding an event or events that have caused them to like physical education. The table is broken down by category which lists the respective responses. The categories of dressing and teacher behavior were removed as there were no comments for these categories.

Table 4.33

*Eighth Grade Male Responses to Event(s) that Caused them to Like Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Fun</em></td>
<td>When people say good job</td>
<td><em>Matball</em></td>
<td>Gives me a chance to have fun during the school day</td>
</tr>
<tr>
<td><em>Playing sports</em></td>
<td>Not yelled at</td>
<td><em>Basketball</em></td>
<td>Outside</td>
</tr>
<tr>
<td>Try new sports</td>
<td>Don’t focus on physical shape</td>
<td><em>Football</em></td>
<td></td>
</tr>
<tr>
<td>Getting along with others</td>
<td></td>
<td><em>Dodgeball</em></td>
<td></td>
</tr>
<tr>
<td>New friends</td>
<td></td>
<td><em>Swimming</em></td>
<td></td>
</tr>
<tr>
<td>Variety of sports</td>
<td></td>
<td><em>Soccer</em></td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the above data that fun and sports are critical elements in physical education for eighth grade males in this district. Team sports were frequently mentioned as being significant.
Table 4.34 presents the eighth grade male responses regarding an event or events that caused them to dislike physical education. The table is broken down by category which lists the respective responses. The category of “dressing” was eliminated as there were no responses for that category.

Table 4.34

*Eighth Grade Male Responses to Event(s) that Caused Them to Dislike Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some kids don’t let other kids play</td>
<td>People say I can’t play</td>
<td>Mile</td>
<td>Teachers</td>
<td>Standing around and waiting</td>
</tr>
<tr>
<td>People that don’t try</td>
<td>Name calling</td>
<td><em>Square dancing</em></td>
<td>Long explanations</td>
<td>Put people that don’t like PE in another class</td>
</tr>
<tr>
<td>Low competitiveness</td>
<td>Softball</td>
<td>Not giving choices</td>
<td>Waiting for people to dress</td>
<td></td>
</tr>
<tr>
<td>Bad teams</td>
<td><em>Swimming</em></td>
<td>Teachers mostly</td>
<td>Don’t play tennis or pickle ball</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Track</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hockey</td>
<td></td>
<td>Lack of decent equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not enough dodgeball</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The responses from the eighth grade males suggest that lack of competition and loosing play time were issues for these students. It is also noted that there were a number
of responses that suggest students are negatively impacted by others that do not wish or choose to participate appropriately.

Table 4.35 reports the eighth grade male students’ suggestions for creating their perfect physical education class. The table is broken down by category which lists the respective responses. The categories of “dressing”, “self-perception” and “teacher behavior” were once again eliminated for lack of responses.

Table 4.35

_Eighth Grade Male Responses for Creating Their Perfect Physical Education Class by Category_

<table>
<thead>
<tr>
<th>Category</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal athletic ability</td>
<td>*Matball</td>
<td>Don’t care as long as fun</td>
</tr>
<tr>
<td>*Competitiveness</td>
<td>*Choice / voting</td>
<td>*Daily</td>
</tr>
<tr>
<td>*Fun</td>
<td>*Dodgeball</td>
<td>Fewer people</td>
</tr>
<tr>
<td>*Variety of sports</td>
<td>*Basketball</td>
<td>Longer</td>
</tr>
<tr>
<td>Everyone wants to play</td>
<td>*Hockey</td>
<td>No lectures</td>
</tr>
<tr>
<td>The active kids in class</td>
<td>Football</td>
<td></td>
</tr>
<tr>
<td>Very competitive</td>
<td>Swimming</td>
<td>Survey kids</td>
</tr>
</tbody>
</table>

The responses continue a theme that has been shown across grade levels; competitiveness, team sports, fun and student choices are important to these students. In addition, having physical education more often is significant for these students.
Table 4.36 presents eighth grade females’ responses regarding an event or events that caused them to like physical education. The table is broken down by coding category which lists the respective responses. The categories of dressing and teacher behavior were eliminated for a lack of responses.

Table 4.36

*Eighth Grade Female Responses to Event(s) that Caused Them to Like Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Friends</em></td>
<td>Get better at activity</td>
<td><em>Softball</em></td>
<td>I like all activities, I am usually too active for the other classes</td>
</tr>
<tr>
<td><em>Fun</em></td>
<td>Don’t have to be extremely great to play</td>
<td><em>Variety</em></td>
<td>I have learned that winning and losing is not the most important thing, but how you play the game</td>
</tr>
<tr>
<td>New friends</td>
<td>Can express myself</td>
<td></td>
<td><em>Volleyball</em></td>
</tr>
<tr>
<td><em>Competition</em></td>
<td>Get anger and aggression out</td>
<td><em>Soccer</em></td>
<td></td>
</tr>
<tr>
<td>Fun to be active</td>
<td>Keep in shape</td>
<td></td>
<td><em>Dodgeball</em></td>
</tr>
<tr>
<td>Very very competitive</td>
<td>Improve myself</td>
<td></td>
<td><em>Basketball</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Matball</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ping-pong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Choices of activities</em></td>
</tr>
</tbody>
</table>

Fun, competition, friends, and choices of activity have generated the most responses from the eighth grade females as being events that have caused them to like

physical education. Team sports continue to be mentioned more frequently than the individual activities.

Table 4.37 presents eighth grade female responses regarding an event or events that caused them to dislike physical education. The table is broken down by coding category which lists the respective responses.
Table 4.37

*Eighth Grade Female Responses to Event(s) that Caused them to Dislike Physical Education by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Dressing</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Teacher Behavior</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in the class</td>
<td>Changing with others</td>
<td>Running or swimming with others</td>
<td>Softball</td>
<td>Teachers pick favorites</td>
<td>Poor equipment</td>
</tr>
<tr>
<td>People take it too seriously</td>
<td>Need separate places to change</td>
<td>Competitive when everyone isn’t so great</td>
<td><em>Lack of choice</em></td>
<td>Write paragraphs because I forgot my sneakers</td>
<td>How much girls don’t get along with others</td>
</tr>
<tr>
<td><em>Inappropriate behaviors by some students</em></td>
<td>Seeing people naked is so gross</td>
<td>Changing</td>
<td>Mile</td>
<td>Annoying</td>
<td></td>
</tr>
<tr>
<td><em>Lack of competitiveness</em></td>
<td>Being made fun of</td>
<td>Play activities not familiar with</td>
<td>Track</td>
<td>Teacher called some people the N word</td>
<td></td>
</tr>
<tr>
<td>Boys are ballhogs</td>
<td>Name calling</td>
<td>Basketball</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take down the competitiveness a bit</td>
<td></td>
<td></td>
<td>Square dancing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some people need to use deodorant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some people too snobby</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Once again many of the responses contained in this chart refer to self-perception and or personal or interpersonal relationships. It seems clear that competition, friends and fun are critical. Eighth grade females provided more responses referring to changing than have been mentioned at any other grade level or gender.

Table 4.38 presents suggestions for creating their perfect physical education class. Dressing and teacher behavior were removed as there were no responses for those categories.
Table 4.38

*Eighth Grade Female Responses for Creating Their Perfect Physical Education Class by Category*

<table>
<thead>
<tr>
<th>Atmosphere</th>
<th>Self Perception</th>
<th>Curriculum or Activity Choices</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Competitive</em></td>
<td>Work on metabolism</td>
<td><em>Softball</em></td>
<td><em>Longer time to play</em></td>
</tr>
<tr>
<td>Non competitive</td>
<td>Kids wouldn’t pick on each other</td>
<td><em>Choices</em></td>
<td><em>Daily</em></td>
</tr>
<tr>
<td>Just girls</td>
<td><em>Planned by students</em></td>
<td>More athletic people in class</td>
<td></td>
</tr>
<tr>
<td>Sort by competitiveness</td>
<td><em>Variety</em></td>
<td>Less people</td>
<td></td>
</tr>
<tr>
<td>Coed</td>
<td><em>Volleyball</em></td>
<td>In the afternoon</td>
<td></td>
</tr>
<tr>
<td>Choices</td>
<td><em>Soccer</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No snobs</td>
<td><em>Dodgeball</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No one mean</td>
<td><em>Swimming</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Friends</em></td>
<td><em>Activities students agreed upon</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Variety of sports</em></td>
<td><em>Basketball</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Competition is important</em></td>
<td><em>Student choices</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For fun only</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


According to Table 4.38, the necessary components for the perfect physical education class for eighth grade females in this district would require competitiveness, fun, friends and choices and variety of activities.

4.6. Summary part two most frequently mentioned incidence categories causing students to like or dislike physical education

Tables 4.39 and 4.40 present the most frequently mentioned events which have caused these students to like physical education. Specific sports are reported in a separate table. Tables 4.39 and 4.40 include events mentioned from grades 6, 7 and 8. Tables are listed by gender and are broken down by count and event.

Table 4.39

Number of events mentioned by males reported by students as reasons to like physical education

<table>
<thead>
<tr>
<th>Event</th>
<th>Male Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fun</td>
<td>55</td>
</tr>
<tr>
<td>Competition</td>
<td>54</td>
</tr>
<tr>
<td>Variety</td>
<td>50</td>
</tr>
<tr>
<td>Team Sports</td>
<td>48</td>
</tr>
<tr>
<td>Daily</td>
<td>43</td>
</tr>
<tr>
<td>More Time</td>
<td>30</td>
</tr>
<tr>
<td>Choice</td>
<td>23</td>
</tr>
<tr>
<td>Friends</td>
<td>20</td>
</tr>
</tbody>
</table>
Table 4.40

*Number of events mentioned by females reported by students as reasons to like physical education*

<table>
<thead>
<tr>
<th>Event</th>
<th>Female Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fun</td>
<td>52</td>
</tr>
<tr>
<td>Competition</td>
<td>41</td>
</tr>
<tr>
<td>Variety</td>
<td>37</td>
</tr>
<tr>
<td>Choice</td>
<td>35</td>
</tr>
<tr>
<td>Friends</td>
<td>34</td>
</tr>
<tr>
<td>Daily</td>
<td>30</td>
</tr>
<tr>
<td>Team Sports</td>
<td>27</td>
</tr>
<tr>
<td>More Time</td>
<td>21</td>
</tr>
</tbody>
</table>

It is interesting to note that for both males and females, the events causing students to like physical education are identical. In addition, the top three ranking events for both males and females are identical.

Tables 4.41 and 4.42 present the most frequently mentioned sports which cause these students to like physical education.
Table 4.41

*Sports mentioned by males*

<table>
<thead>
<tr>
<th>Sport</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matball</td>
<td>74</td>
</tr>
<tr>
<td>Softball/Baseball</td>
<td>67</td>
</tr>
<tr>
<td>Basketball</td>
<td>48</td>
</tr>
<tr>
<td>Football</td>
<td>48</td>
</tr>
<tr>
<td>Dodgeball</td>
<td>39</td>
</tr>
<tr>
<td>Kickball</td>
<td>38</td>
</tr>
<tr>
<td>Lacrosse</td>
<td>36</td>
</tr>
<tr>
<td>Soccer</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 4.42

*Sports Mentioned by Females*

<table>
<thead>
<tr>
<th>Sport</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softball/Baseball</td>
<td>62</td>
</tr>
<tr>
<td>Matball</td>
<td>60</td>
</tr>
<tr>
<td>Swimming</td>
<td>34</td>
</tr>
<tr>
<td>Soccer</td>
<td>33</td>
</tr>
<tr>
<td>Basketball</td>
<td>31</td>
</tr>
<tr>
<td>Dodgeball</td>
<td>26</td>
</tr>
<tr>
<td>Kickball</td>
<td>15</td>
</tr>
<tr>
<td>Lacrosse</td>
<td>15</td>
</tr>
</tbody>
</table>
Once again, it is noteworthy that all sports for both males and females that cause these students to like physical education are team, competitive sports (with the possible exception of swimming). Further, both male and female sport listings are identical except for the football for the males and the swimming for the females.

Tables 4.43 and 4.44 present the most frequently mentioned events that cause these students to dislike physical education.

Table 4.43

*Events Causing Male Students to Dislike Physical Education*

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track</td>
<td>35</td>
</tr>
<tr>
<td>Dance</td>
<td>31</td>
</tr>
<tr>
<td>Size of class</td>
<td>16</td>
</tr>
<tr>
<td>Poor sports / rude students</td>
<td>15</td>
</tr>
<tr>
<td>Equipment Condition</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4.44

*Events Causing Female Students to Dislike Physical Education*

<table>
<thead>
<tr>
<th>Event</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor sports / rude students</td>
<td>34</td>
</tr>
<tr>
<td>Teacher</td>
<td>29</td>
</tr>
<tr>
<td>Track</td>
<td>25</td>
</tr>
<tr>
<td>Changing (PE Clothes)</td>
<td>11</td>
</tr>
<tr>
<td>Dance</td>
<td>5</td>
</tr>
</tbody>
</table>
Incidents causing students to dislike physical education vary across gender. The three categories that are identical cross-gender are poor sports and/or rude students, dance and track. A summary table of a complete listing of positive and negative incidents recorded by gender and grade can be found in appendix D.3 and D.4 respectively.

4.7. Conclusion

Subjects for this study were asked to record demographic and self-perception data, as well as, events which caused them to like or dislike physical education. The preceding data suggests that most students would take physical education if they had an option. Most students are satisfied with their middle school physical education experience. It is also noted that the particular events reported that caused male and female students to like or dislike physical education in this study are similar. It is particularly noted that across grade levels and gender that competition, choice, fun, friends and more physical education are significant aspects that these students feel are important in their physical education experience. In the following chapter a discussion, implications, and suggestions for next steps are offered.
Chapter 5: Discussion

5.1. Introduction and overview

The purpose of this study was to examine students’ attitudes toward a middle school physical education program and identify factors that contribute to positive and negative attitudes towards physical education. Data was collected via a critical incident technique as presented in chapter four. This chapter provides a discussion of that data together with implications and recommendations surfacing as a result of this investigation. I will first discuss each of the research questions as they relate to the findings of this study. Next, I will review some key findings. I will then discuss limitations and suggestions for future research arising from this study. Finally, some conclusions are offered based on the findings of this study.

5.2. Review of research questions

The following sections contain the research questions related to this study that were addressed in order to effectively answer the overarching question of the study, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the satisfaction and activity level of middle school students?

5.2.1. How have social discourses and ideologies impacted physical education?

There are a variety of discourses and ideologies that have impacted physical education. Again, this question is meant to frame the study only. The survey data did not address this question. These ideologies have their roots in historical, political and educational arenas. In support of this notion, Fernandez-Balboa and Muros (2006) introduce the concept of “hegemonic triumvirate” (HT). They describe it as a “powerful
system of reality constructing resulting from interrelation of dominant ideologies, habitus and discourses” (p.197). They specifically analyzed the HT in relation to sports and physical education. As can be seen throughout the literature review and throughout history there have been a variety of dominant ideologies, habitus and discourses that have molded physical education and sport. Although the literature suggests that physical education should have a dominant role in education, this rarely occurs (Amrein & Berliner, 2002; Dwyer, Blizzard & Dean, 1996; Graham, 2004; Tracy, 2007; Keyes-Kun, 2004). Based on various discourses physical education has been relegated to a lesser role in education than other subject areas (Fernandez-Balboa & Muros, 2006).

Since ancient history, humankind has understood the impact of a physically active person. Throughout history the predominant ideology has been reactionary in nature. When a problem existed or a need incurred (war, building, remediating injury), physical activity was the mode to ameliorate the need. Although the importance of physical activity is recognized throughout history, it is repeatedly relegated to a deficit model approach when applying it to the educational experience of children.

Throughout recent history, the literature review shows multiple laws and regulations that have been enacted to increase the effectiveness of education and physical education. Unfortunately, we see that more often than not, the laws and regulations are not followed (Castelli & Rink, 2003; DiNapoli, 2008). In addition, in the case of NCLB, the reaction to meet the demands of this law seems to have had an opposite effect on physical education (Amrein & Berliner, 2002; Dwyer, Blizzard & Dean, 1996; Graham, 2008; Tracy, 2007; Keyes-Kun, 2004).
Two current discourses found in society and educational arenas center on test scores and the “epidemic” of childhood obesity resulting from the inactivity of our young people. Research tells us there is an unprecedented epidemic of childhood obesity in our nation (United States Department of Health and Human Services Centers for Disease Control and Prevention, 2008). In addition, cardiovascular diseases once found only in adults are now being found in children (Klish, 2009; Virgilio, 1997). Furthermore, physical well-being has a direct impact on academic achievement (Eastin, 2003; Sallis, McKenzie, Kolody, Lewis & Rosengard, 1999). Movement fosters brain development and physical activity prepares the brain to learn (WebMd Medical News, 2004).

However, it appears that instead of learning from the past, learning from current research, and refocusing attention on physical education and the overall health and well-being of students the opposite is occurring (DiNapoli, 2008; Graham, 2008; Keyes-Kun, 2004; NASPE, 2005).

5.2.2. What is the significance of physical education for middle school students?

It is necessary to view this question both from the perspective of the literature review and from the student data generated by this study. The literature review suggests several dynamics related the significance of physical education for the middle school student:

- They need to participate regularly in physical activity thereby providing opportunities for enjoyment, challenge, self-expression and social interaction (NASPE, 2004; Virgilio, 1997).

- The inactive, unfit and increasingly overweight status of today’s young people is a significant problem (American Medical Association, 2008; American Obesity
Association, 2008; United States Department of Health and Human Services, 2008).

- Developmentally appropriate physical education has the capacity to address the important health issues facing our nation’s children (Eastin, 2003; Gallahue & Cleland, 2004; Kamla, 2007).

- Individuals who choose to be active during adolescence are more likely to continue to be active as adults (Dishman & Dunn, 1988; Kuh & Cooper, 1992).

Following the theoretical premises undergirding this study we must look at the whole child. From the physical perspective we know the following:

- Physical activity tends to decrease in adolescence, particularly in girls (Dishman, Motl, Sallis, et al., 2005).

- Cardiovascular diseases formerly seen in adults are now being found in children (Virgilio, 1997).

- The skeletal structure is influenced by adaptive mechanisms and occurs more readily in adolescence (Bailey, 2000).

- Ninety percent of bone mass is achieved during adolescence (2000)

From the mental perspective we know the following:

- Movement prepares children to learn (WebMD Medical News, 2004).

- Physically active children fare better mentally than children that are not active (Web MD Medical News, 2004).

- There is a significant positive relationship between physical activity and cognitive functioning (Eastin, 2003; Jensen, 1998; Ratey, 1999; Shepard 1997).
• Physical activity decreases stress (Colcombe, 2003; Ratey, 1999).

• Physical activity provides the same effect as anti-depressant medications (Blaydes-Madigan, 2003; 1999).

• Children in a developmentally appropriate physical education program have increased fitness scores and increased academic scores (Eastin, 2003; Sallis, McKenzie, Kolody, Lewis & Rosengard, 1999; Shepard, 1997; Sherpa & Lavelle, 1994).

• Physical activity increases nerve connections making it easier to learn (Ratey, 1999).

• Most K-12 learners are kinesthetic learners (Payne, 1999).

From the social-emotional perspective we know:

• Poor motor skills have negative effects on children in social, emotional and scholastic areas (Skinner & Piek, 2001).

• Development of appropriate motor skills is significant in acceptance from others and is important in determining self worth (Harter, 1987).

• There is a high correlation between physical competence and social competence as well as cognition (Cratty, 1970; Harter, 1987).

• Females with confidence in physical abilities perceive fewer barriers and are more motivated (Dishman, Motl, Sallis, et al., 2005).

As previously stated, the literature suggests that the importance of physical education and physical activity in adolescents is significant. When looking at the student data from this study, it is also clear that physical education is important to middle school students. The comments listed below are not isolated comments. The statements are
examples of various student data that were themes throughout many of the surveys. In order to clarify, the middle school student data states the following:

- Eighty-nine percent of the students would choose to take physical education if it were optional.
- They love being able to be active (8F1.7).
- They want longer classes (6M4.15).
- They want physical education more often (6M3.7).
- They desire being able to move around; “allows me to get away from the non-physical boring classes” (7M1.1).
- They indicate playing and talking with friends is important; they don’t like physical education without friends; running, laughing, having fun with friends (6M3.3).
- They suggest excitement is important to them (6M3.7).
- They love to have fun (6F4.7).
- They need a break from work (7M1.1).
- They need some time to be free (7F3.9).
- They want to play more talk less (7M1.2).
- They state, “I am usually too active for other classes” (8F1.7).
- They wish all specials should be like physical education (7M6.14).

5.2.3. How do middle school students perceive their physical selves?

This question is solely grounded in student data derived from the surveys. Overall, students perceive themselves to be average. However, as students move from
sixth to eighth grade they become increasingly less satisfied with their physical selves. The trend, although more frequently cited for females, is to consider themselves oversize.

There were some references within the student data that pertain to this particular question. It was repeatedly mentioned in the student data that they wished they had more time or daily opportunities to be in physical education. It is also noted in some student surveys that they wanted a weight room that was open all day. In addition, there were several comments that indicated a particular need for some students in this area. Some students asked for a class that was geared toward students that were overweight. Other students asked for opportunities to “work on metabolism” (7F3.8).

5.2.4. How do middle school students perceive their physical education experience?

The data from this study provides us with a unique vantage point from which to understand the student perspective regarding physical education. Condon and Collier (2002), suggest that choice is believed to be significant for students to become and remain physically active. Choice encourages self management, prepares for self-directed activity and encourages exercise adherence (2002).

5.3. Key findings

There were many significant findings as a result of this study. Particularly noteworthy is that regardless of gender and grade there were some common themes that were predominant. Although the females were generally much more forthcoming with descriptive data, the data that was given followed similar patterns of likes and dislikes regarding physical education experiences.

The majority of students in this study are satisfied with their physical education experience. Most would continue to take physical education if given a choice. However,
in order to improve their physical education experience, both males and females desire competition, choice, more time, fun and friends to complete their perfect physical education experience.

I will address the top three items that were mentioned in the student surveys. I will follow up with two additional categories that may be significant.

**5.3.1. Competition**

Competition was the most frequently mentioned factor in liking or disliking physical education. During the administration of the surveys I did not define competitiveness for the students. I would consider competition as a challenge against another. In the student surveys, when competitiveness was mentioned; it was always paired with team sport activities. Either team sports or wanting competition was mentioned 170 times on the surveys. Of the students that mentioned “competitiveness”:

- 96% of all males surveyed prefer a competitive environment
- 88% of all females surveyed prefer a competitive environment

Although the competition factor is somewhat less significant for females, it is still a highly contributory factor in the satisfaction level of students in their physical education classes (Males = 102; Females = 68).

**5.3.2. Choice**

The second most frequently mentioned factor in liking or disliking physical education was that of choice or variety. This was mentioned 145 times on the surveys. Of the students that mentioned choice or variety:

- 100% of the males surveyed indicate that choice is important
- 100% of the females surveyed indicate that choice is important
There were equal numbers of males and females indicating that this was a significant part of their physical education experience (Males = 73; Females = 72).

### 5.3.3. More time

The third most frequently mentioned factor in liking or disliking physical education was that of having more time in physical education. This data set combined responses that suggested either “daily” or simply “more time” in physical education. Of the students that mentioned more time in physical education:

- 100% of the males want more time in physical education
- 95% of the females want more time in physical education

Although the more time was mentioned somewhat more often for the males than the females it remained as a highly contributory factor toward satisfaction in physical education (Males = 73; Females = 51).

### 5.3.4. Fun and friends

The final factors mentioned in the student surveys that are noteworthy are fun and or friends. The surveys mentioned fun and or friends a significant number of times. In some cases the two terms were used by the students simultaneously and in others they were not. If the two terms were to be considered separately, they would fall into line as the fourth and fifth most mentioned factors respectively. One hundred percent of the students that mentioned fun and or friends indicated that this was a positive factor in satisfaction of physical education. The results were as follows:

- males mentioned fun 55 times
- females mentioned fun 52 times
- males mentioned friends 20 times
females mentioned friends 34 times

As fun and friends were frequently mentioned in tandem, a case could be made that the students were often considering them together. Therefore, if they were to be taken simultaneously, which is the researcher’s suggestion based on the analysis of the surveys, this would realign the rankings to place fun and friends as the second most frequently mentioned factor relating to satisfaction in physical education (N = 161).

5.4. Limitations

The limitations of this study include unavoidable aspects which are inherent in the methodology itself. First of all, this particular study may not be generalizable to all school districts; although there are definite patterns that emerged which are significant and may prove beneficial as a beginning point for discussions of a curricular and or programmatic nature in other districts. There was a limited window of opportunity from which to gather data and, therefore, was not an opportunity for discussion with students regarding their individual experiences in physical education. It should also be noted that the intention of this study was not to indentify students with disabilities. Any discussion of students with disabilities is limited to the literature review in chapter two and is for background information only. Finally, the nature of this study was that it was a one time occurrence. Upon review of the data it would have been interesting and potentially informative to be able to follow up on some of the responses to gain a deeper understanding of some of the student comments. Opportunity for more complete follow-up would add greater meaning and then possibly greater insight into next steps for the physical education program.
5.5. Recommendations

There are a variety of suggestions that arise as a result of the review of the data from this study. It is imperative to note that the research repeatedly describes the critical nature of student voice (Carlson, 1995; Condon & Collier, 2002; Dishman & Dunn, 1988; Fox, 1991; Howard & Howard, 1997; Thompson & Wankel, 1980). It is hoped that the district will use the data contained within this study to begin some initial steps toward program reform. The following are some recommendations as next steps for stakeholders in the district:

- Review data with physical education staff, building and district administration responsible for curricular updates.
- Develop focus group(s) with students to assist in brainstorming sessions for program development.
- Do a follow-up survey and or interview with students to assist in constructing some background knowledge in order to enable a deeper understanding of student comments.
- Develop a plan to provide student input or choice into activities for physical education.
- Develop programmatic adjustments to provide opportunities for competitive environment.
- Provide alternatives for the students not desiring a competitive environment and or those who do not generally like physical education.
- Provide opportunities for both teacher and student reflection regarding the “fun” factor in physical education.
• Brainstorm options for providing more access to physical education.

5.6. Conclusion

This study has provided insight into the importance of a quality, developmentally appropriate physical education program from both a student perspective and a literature review. The study has identified numerous historical, social and political discourses having impact on physical education. In addition it has also described the high level of importance that student voice has on participation, adherence and enjoyment of physical education and physical activity (Carlson, 1995; Condon & Collier, 2002; Dishman & Dunn, 1988; Fox, 1991; Howard & Howard, 1997; Thompson & Wankel, 1980).

Specifically, the study explored the significance of physical education for middle school students. Upon examination of the literature and student perspectives, it was found that both arenas agree that physical education is significant. Adolescence is a highly critical time for providing appropriate physical education (Dishman, Kuh & Cooper, 1992). The students concurred as they would choose to take physical education at the rate of 89%.

Upon examination of student data, student self-perception data was first explored. In most cases (80%), students considered themselves average. However, it should be noted that males from grade six to grade eight showed a decline in satisfaction of their physical selves.

Personal fitness was explored. Overall most students considered themselves in good physical condition. However, it is noted that there was a gradual decline in satisfaction of personal fitness level of females. This is consistent with the literature that
reports that physical activity, particularly in females wanes during adolescence (Dishman, Motl, Sallis, et al., 2005).

Finally, personal sports ability was investigated. Males showed more confidence overall in their sports ability than females. Across grade levels, male confidence gradually increased. However, across grade levels, female confidence in sport ability decreased.

The preceding literature and data were explored in an effort to gain an understanding to more completely answer the overarching question, based on student perceptions of their physical education experience, what modifications may be made in a physical education program to potentially enhance the satisfaction and activity level of middle school students. The literature research and data is clear in stating that physical education is significant for middle school students.

Student critical incident data was explored to gain an understanding of student perspectives of their physical education experience. The data is clear that the overwhelming majority of the students are satisfied with their physical education experience and that physical education is a significant part of their lives and educational experience. However, they do offer some suggestions for program improvement. Therefore, based on student data, the literature review, and understanding of the theoretical framework for this study, potential modifications for this particular physical education program should include:

- Providing opportunity for appropriate competition
- Providing student choice in program / activity development
• Providing flexible scheduling opportunities for increasing physical education time

• Providing opportunities for positive social interactions

The data generated through this study was meant to be the first step in a potentially longer research effort continued by the district upon completion of this project. This research project provides information for the district to continue qualitative research under an action research model and which follows the plan-act-observe-reflect research spiral of action research as described by Kemmis & McTaggart (1987).

Like Charmaz (2006), I see this process as “unfolding temporal sequences that may have identifiable markers (p. 10). If the district chooses to pursue next steps beyond this study, the stakeholders in SSCSD may need to re-navigate the research process to continually deconstruct known information and data to discover ongoing potential solutions. These potential solutions will need to be collectively agreed upon in order to best meet the needs of the district and the children. In order to have lasting positive impact, it will be imperative that this initial research study be continued as an action research endeavor and be an ongoing process.

This study was intended to be a starting place for stakeholders to probe deeper into the current physical education program. With the student input data and data from the literature review, collegial conversations can begin to take place to uncover practical next steps in program development. With this collective knowledge and concerted effort toward reform, perhaps an even greater developmentally appropriate physical education program can be developed to further enhance the satisfaction and activity level of middle
school students. The potential also exists for increased health and wellness and increased academic achievement.

Based on the findings of this research, the researcher has to wonder what would happen if a district followed through on this research and focused on physical education programming as an avenue to enhance student achievement. Would we see improved satisfaction not only with physical education, but with school, self and others as well? What about test scores that all districts are focused on improving? Could all these areas be enhanced with a concerted effort towards designing and implementing a developmentally appropriate physical education program that seeks to enhance the students’ overall health and well-being?
References


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Wallhead, T. (2007). Teaching K-12 students to combat obesity: students must enjoy physical activity before they will use their motor skills outside class. *Journal of Physical Education Recreation and Dance*. October.


Appendix A

Human subjects documentation
A.1. Parent information letter

Study Title: Middle school student perceptions of physical education.

Principal Investigator: Karen Benedict

Introduction

This form describes a research study that is being conducted by Karen Benedict, Principal Investigator, of the University of Rochester’s Warner School Department of Teaching and Curriculum. Your child is being asked to participate in this study because he/she is a middle school student in the Medina Central School District.

The following information is what you may expect if you decide to let your child participate. You are encouraged to read this form carefully and contact the person at the bottom of the form if you have further questions before making your decision whether or not to allow your child to participate.

Purpose of Study

The purpose of the study is to understand middle school students’ perceptions of their physical education experience and how we can use that information together with current research in physical education for potential program reform.

Description of Study Procedures

We are asking your permission to allow your child to participate in this study. If you give us your permission, we will also ask your child if they agree to participate as well. If you and your child agree, your child will be asked to complete a survey next week during their regular physical education class. The questions will be regarding their experience and perception of their personal physical education experiences. We will not share their answers with you or their teacher. No names will be on the surveys; only grade and whether the student is a male or female will be asked.

If they are part of the study it will begin and end during one class period. It will take about ½ hour. There are no direct benefits for you or your child. This study is to see how physical education could be improved to better meet the needs of students while still adhering to current best practice research. You may choose not to have your child participate; that decision will in no way impact the student’s care, education, grades or relationships at school. The school district has given permission for this study to occur.

Number of Subjects

We expect to have 400 subjects in this study.
Confidentiality of records

While we make every effort to maintain confidentiality, it can not be absolutely guaranteed. All forms may be inspected by a regulatory agency and or the University of Rochester. The results of the research may be presented at meetings or in publications; no names will be a used at any time. All data will be kept in a locked cabinet in the Principal Investigators office. Electronic data will be stored on the Principal Investigators password protected computer. All data will be destroyed three years after the dissertation defense.

Benefits

There are no direct benefits to the participants other than the information being gathered may ultimately be used in physical education program reform in the Medina Central School District.

Contact Persons

For more information concerning this research or if you feel that your participation has resulted in any emotional or physical discomfort, please contact: Karen Benedict, Principal Investigator at (585)-943-7214.

If you have any questions about your rights as a research subject or any concerns or complaints, you may contact the Human Subjects Protection Specialist at the University of Rochester Research Subjects Review Board, Box 315, 601 Elmwood Avenue, Rochester, New York, 14642-8315, telephone (585) 276-0005 or for long distance you may call toll free, (877) 449-4441.

Voluntary Participation

Participation in this study is voluntary. Your child is free to not participate or to withdraw at any time during the survey, for whatever reason, without risking the loss of present or future care for your child would otherwise expect to receive. In the event that your child does withdraw from the study, the information they have already provided will be kept in a confidential manner.

Please sign and return this form to school ONLY if you DO NOT want your child to participate in the short survey.

Signature/Dates

I have read or have had read to me the contents of this form and have been encouraged to ask questions of the person doing the study. I have received answers to my questions. I understand the school has given permission for this study to occur.

________ I DO NOT WISH MY CHILD TO PARTICIPATE IN THE SURVEY
Parent/Guardian ________________________________

Print Name

________________________________

Signature

_________________________________

Child’s Name

_________________________________

Date

If you prefer, you may call your child’s physical education teacher or principal to let them know you do not wish your child to participate. (585) 798-2100.
A.2. Student information letter/script

(to be read to students one week prior to the survey)

Study Title: Student perceptions of physical education.

Principal Investigator: Karen Benedict

This form describes a research study that Karen Benedict, principal investigator from the University of Rochester, is conducting in order to understand student perceptions or feelings about physical education. This is like a big science project.

The study involves answering questions on a short survey as part of a research project. Information will be asked of you, the students regarding your perceptions or feelings about your physical education experiences. The surveys should be completed in their entirety. However, any question may be skipped that you, the participant, do not feel comfortable answering. All your responses will be kept confidential. Only the investigator, Karen Benedict, will have access to your individual responses. Your name will not be on the survey, only your grade and whether you are a male or female. Only summarized information will be presented in meetings or publications. Our hope is to use this information to make adjustments that may be needed the make our physical education best fit your needs.

I am hoping you will help me by doing this survey. However, your participation is completely voluntary. You are free to not participate or to withdraw at any time for whatever reason.

This study will take place in one week. If you do not wish to be a part of this study, please let your physical education teacher or principal know. You will not be penalized if you do not want to participate.

For more information about this research you may contact: Karen Benedict at 2 Country View Terrace, Brockport, New York, or 585-943-7214.

If you have any questions about your rights as a research subject or any concerns, you may contact the Human Subjects Protection Specialist at the University of Rochester Research Subjects Review Board, Box 315, 601 Elmwood Avenue, Rochester, NY 14642-8315, Telephone (585) 276-0005, for long-distance you may call toll-free, (877) 449-4441. You may also call this number if you cannot reach the research staff or wish to talk to someone else.
Appendix B

Collection document
PART I

DIRECTIONS: Please put a check besides the response that best describes you. If you have any questions please feel free to ask. Please do not answer any question you feel uncomfortable answering.

1. Sex: _____M _____F

2. Grade Level: _____6 _____7 _____8

3. If physical education was optional next year, would you choose to take it?
   _____Yes
   _____No

4. How would you feel most comfortable in your physical education class? If it were:
   Circle one.
   a. all same gender (either boys or girls)
   b. co-ed classes (boys and girls mixed)
   c. choice of co-ed or same gender depending on the activity
   d. doesn’t really matter to me

5. For your age group, how would you rate your body build?
   Check one.
   _____Over Size
   _____Average
   _____Under Size

6. For your age group, how would you rate your level of fitness?
   Check one.
   _____In top condition
   _____In good condition
   _____In fair condition
   _____In poor condition

7. For your age group, how would you rate your ability in sports?
   Check one.
   _____Excellent at sports
   _____Good at sports
   _____Average at sports
   _____Fair at sports
   _____Poor at Sports
PART II
DIRECTIONS: Below are two questions regarding your experience in middle school physical education. Please answer each question honestly and with as much detail as possible. Please note that your physical education teacher will not read your responses. If you have any questions please feel free to ask. You have as much time as you need to write. When you are done writing, please turn your survey over.

1. Please write the event or events that you have experienced during middle school physical education, that have caused you to like physical education.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Please write the event or events that you have experienced during middle school physical education, that have caused you to dislike physical education.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. If you could create your perfect physical education class, what would it look like? (think about: what types of activities, time in PE, how often in PE (daily, weekly, alternate days, etc.), competitiveness (or not), more sport oriented (or not), accountability, and any other factors you can think of that you would like to see as part of your physical education program).

________________________________________________________________________
Appendix C

Supporting documents
C.1. Physical Education Part 135 Regs

CHAPTER 11 REGULATIONS OF THE COMMISSIONER § 135.1

SUBCHAPTER G
Health and Physical Education

PART
135 Health, Physical Education and Recreation
136 Health Service
137 Educational Use of Hypodermic Syringes and Needles

PART 135
HEALTH, PHYSICAL EDUCATION AND RECREATION
(Statutory authority: Education Law, §§ 207, 305[1], [2], 803, 804-a, 91.1, 3001-b, 3204[3]; L. 1991, ch. 498)

Sec.
135.1 Definitions
135.2 General regulations
135.3 Health education
135.4 Physical education
135.5 First aid knowledge and skills requirements for coaches

§ 135.1 Definitions.
Definitions as used in this Part:
(a) Commissioner means the Commissioner of Education.
(b) Department means the Education Department of the State of New York.
(c) Satisfactory, appropriate, approved, acceptable, adequate, equivalent, essential, sufficient, suitable mean satisfactory, appropriate, approved, acceptable, adequate, equivalent, essential, sufficient, suitable, respectively, in the judgment of the commissioner.
(d) School personnel means persons employed by school authorities in conducting the schools.
(e) Adaptive physical education means a specially designed program of developmental activities, games, sports and rhythms suited to the interests, capacities and limitations of pupils with handicapping conditions who may not safely or successfully engage in unrestricted participation in the activities of the regular physical education program.
(f) Athletic association means an approved central organization of schools joined together on a large geographic area or statewide basis for the purpose of governing athletic programs for all its member schools.
(g) Bona fide student means a regularly enrolled student who is taking sufficient subjects to make an aggregate amount of three courses and who satisfies the physical education requirement.
(h) Extraclass periods in physical education mean those sessions organized for instruction and practice in skills, attitudes and knowledge through participation in individual, group and team activities organized on an intramural, extramural or interschool athletic basis to supplement regular physical education class instruction.
(i) Extramural activities mean those games or other events which involve the participation of pupils from two or more school districts and which are conducted as play-days or sports days at the end of the intramural season.
(j) Health education means instruction in understandings, attitudes and behavior in regard to the several dimensions of health. This instruction relates to alcohol, tobacco and other drugs, safety, mental health, nutrition,
dental health, sensory perception, disease prevention and control, environmental and public health, consumer health, first aid, and other health-related areas.

§ 135.1 TITLE 8 EDUCATION

(k) Instructional physical education means the required physical education program which has as its foundation planned sequential learning experiences for all students.

(1) Interschool activities mean those which provide competition between representatives of two or more schools and which offer enriched opportunities for the selected and more highly skilled individuals.

(m) Intramural activities mean those activities conducted within one school district involving only those pupils enrolled in such school district and which are organized to serve the entire enrollment.

(n) Invitation activities mean those games or other events dealing with one sport, arranged by invitation of one school to one or more other schools without leading to any formal schedule and championship.

(o) League means an organization of schools joined for the purpose of providing athletic competition among schools of comparable size, interests, and within reasonable distance of each other.

(p) Mixed competition means the combination of male and female pupils participating on the same interschool athletic teams.

(q) Organized practice means a session of an athletic squad or group organized for interschool athletics for the purpose of providing instruction and practice in physical conditioning activities, skills, team play and game strategy, under the supervision of a qualified school official.

(r) Physical fitness activities mean those physical activities which are designed to develop endurance, strength and agility and to fit the individual so that he can perform the task repeatedly without undue fatigue and with a reserve capacity to meet unexpected stresses and hazards.

(s) Physiological maturity means a stage of maturation identified by the school physician in determining an appropriate level of interschool athletic competition in accordance with standards established by the commissioner.

(t) Recreation means the program which is organized to include types of activities such as arts and crafts, athletics, dramatics, music, rhythms, sports, swimming and water safety provided at the discretion of school district authorities under the supervision of qualified personnel and designed to provide for the worthy use of leisure by individuals and groups.

(u) Sports day means a day when pupils from two or more schools meet and engage in a variety of competitive sports events.

(v) Section means an organization of schools within a specified geographic area which holds membership in an athletic association, and is established for the purpose of administering athletic programs for the member schools and leagues within such area.

Historical Note

§ 135.2 General regulations.
(a) All schools under the jurisdiction of the State Education Department shall provide a program of health, physical education and recreation in an environment conducive to healthful living. This program shall include:
(1) health and safety education;
(2) physical education, including athletics; and
(3) recreation.
(b) It shall be the duty of trustees and boards of education:
(1) to provide approved and adequate personnel and facilities;
(2) to maintain for each child cumulative records covering the essential features of the
health and physical education program and, when a pupil transfers to another school, to provide such
school with a certified transcript thereof;
(3) to make reports to the department on forms prescribed by the commissioner.

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CHAPTER 11 REGULATIONS OF THE COMMISSIONER § 135.3

§ 135.3 Health education.
(a) Provision for health education. It shall be the duty of the trustees and boards of education to provide a
satisfactory program in health education in accordance with the needs of pupils in all grades. This program
shall include, but shall not be limited to, instruction concerning the misuse of alcohol, tobacco and other drugs.
(b) Health education in the elementary schools. (1) The elementary school curriculum shall include a
sequential
health education program for all pupils, grades K-6. In the kindergarten and primary grades, the teacher
shall
provide for pupil participation in planned activities for developing attitudes, knowledge and behavior that
contribute to their own sense of self-worth, respect for their bodies and ability to make constructive
decisions
regarding their social and emotional, as well as physical, health. Personal health guidance shall also be
provided according to the individual needs of pupils. This guidance shall include the development of
specific
habits necessary to maintain good individual and community health. In addition to continued health
guidance,
provision shall be made in the school program of grades 4-6 for planned units of teaching which shall
include
health instruction through which pupils may become increasingly self-reliant in solving their own health
problems and those of the group. Health education in the elementary school grades shall be taught by the
regular classroom teachers.
(2) All elementary schools shall provide appropriate instruction concerning the acquired immune
deficiency
syndrome (AIDS) as part of the sequential health education program for all pupils, grades K-6. Such
instruction shall be designed to provide accurate information to pupils concerning the nature of the disease,
methods of transmission, and methods of prevention; shall stress abstinence as the most appropriate and
effective premarital protection against AIDS, and shall be age appropriate and consistent with community
values. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if the
parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a
written request that the pupil not participate in such instruction, with an assurance that the pupil will receive
such instruction at home. In public schools, such instruction shall be given during an existing class period
using existing instructional personnel, and the board of education or trustees shall provide appropriate
training
and curriculum materials for the instructional staff who provide such instruction and instructional materials
to the parents who request such materials. In public schools, the board of education or trustees shall establish an
advisory council which shall be responsible for making recommendations concerning the content,
implementation, and evaluation of an AIDS instruction program. The advisory council shall consist of parents,
school board members, appropriate school personnel, and community representatives, including
representatives from religious organizations. Each board of education or trustees shall determine the
content of
the curriculum and approve its implementation, and shall be responsible for the evaluation of the district's
AIDS instruction program.
(c) Health education in the secondary schools. (1) The secondary school curriculum shall include health
education as a constant for all pupils. In addition to continued health guidance in the junior high school
grades, provision shall also be made for a separate one-half year course. In addition to continued health
guidance in the senior high school, provision shall also be made for an approved one-half unit course.
Health
education shall be required for all pupils in the junior and senior high school grades and shall be taught by
teachers holding a certificate to teach health. A member of each faculty with approved preparation shall be
designated as health coordinator, in order that the entire faculty may cooperate in realizing the potential
health teaching values of the school programs. The health coordinator shall insure that related school
courses
are conducted in a manner supportive of health education, and provide for cooperation with community
agencies and use of community resources necessary for achieving a complete school -community health
education program.
(2) (i) All secondary schools shall provide appropriate instruction concerning the acquired immune
deficiency syndrome (AIDS) as part of required health education courses in grades 7-8 and in grades 9-12.
Such instruction shall be designed to provide accurate information to pupils concerning the nature of the
disease, methods of transmission, and methods of prevention; shall stress abstinence as the most
appropriate
and effective premarital protection against AIDS, and shall be age appropriate and consistent with
community
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§ 135.3 TITLE 8 EDUCATION
values. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if
the
parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a
written
request that the pupil not participate in such instruction, with an assurance that the pupil will receive such
instruction at home. In public schools, such instruction shall be given during an existing class period using
existing instructional personnel, and the board of education or trustees shall provide appropriate training
and
curriculum materials for the instructional staff who provide such instruction and instructional materials to
the
parents who request such materials. In public schools, the board of education or trustees shall establish an
advisory council which shall be responsible for making recommendations concerning the content,
implementation, and evaluation of an AIDS instruction program. The advisory council shall consist of
parents,
school board members, appropriate school personnel, and community representatives, including
representatives from religious organizations. Each board of education or trustees shall determine the
content of
the curriculum and approve its implementation and shall be responsible for the evaluation of the district's
AIDS
instruction program.
(ii) Boards of education or trustees that make condoms available to pupils as part of the district's AIDS
instruction program shall:
(a) submit a condom distribution policy to the advisory council for appropriate recommendations;
(b) make condoms available only to pupils who participate in an appropriate AIDS instruction program
as defined in this section;
(c) provide each pupil receiving condoms with accurate and complete personal health guidance as to
the risks of disease that may result from the pupil's use or misuse of such product, which appropriately
takes into account the child's age;
(d) assure that such personal health guidance is provided by health service personnel or school
personnel trained and supervised by competent health professionals or health educators; and
(e) submit for approval by the commissioner a plan for the training of health service personnel, as defined in section 136.1(c) of this Title, or school personnel who will provide such personal health guidance. Such plan shall be approved upon a finding of the commissioner that the training is adequate to prepare such personnel or school personnel to provide the required personal health guidance in an effective manner.

**Historical Note**

### § 135.4 Physical education.

(a) **School district plans.** It shall be the duty of trustees and boards of education to develop and implement school district plans to provide physical education experiences for all pupils as provided in this section. Such current plans shall be kept on file in the school district office and shall be filed with the Division of Physical Education, Fitness, Health, Nutrition and Safety Services. All school districts shall comply with the provisions of this section by August 1, 1982. However, the requirement for submission of a plan shall become effective by January 1, 1983. A school district may conduct an instructional physical education program which differs from, but is equivalent to, the required program of instruction set forth in paragraph (2) of subdivision (c) of this section, with the approval of the commissioner. An equivalent program may be implemented only after approval from the Division of Physical Education, Fitness, Health, Nutrition and Safety Services. A request for approval to conduct an equivalent instructional physical education program shall be filed with the Division of Physical Education, Fitness, Health, Nutrition and Safety Services, and shall include the:

1. program goals and objectives;

(b) **Nonpublic schools.** Similar courses of instruction shall be prescribed and maintained in private schools in the State, and all pupils in grades kindergarten through 12 shall attend such courses. If such courses are not established and maintained in any private school, instruction in such school shall not be deemed to be substantially equivalent to instruction given to children of like ages in the public school or schools of the city or district in which the child resides.

(c) **Program plans.** School district plans shall include the following:

1. Curriculum. (i) The curriculum shall be designed to:

   a. promote physical activity and the attainment of physical fitness, and a desire to maintain physical fitness throughout life;
   b. attain competency in the management of the body and useful physical skills;
   c. emphasize safety practices;
   d. motivate expression and communication;
   e. promote individual and group understanding;
   f. provide knowledge and appreciation of physical education activities;
(g) make each individual aware of the effect of physical activity upon the body;
(h) provide opportunities for the exercise of pupil initiative, leadership and responsibility;
and
(i) reinforce basic learnings of other areas of the total school curriculum.
(ii) There shall be experiences of sufficient variety in each of the following:
(a) basic and creative movement;
(b) rhythm and dance;
(c) games;
(d) perceptual -motor skills;
(e) individual and team sports;
(f) gymnastics;
(g) aquatics, where possible;
(h) lifetime sports activities;
(i) outdoor living skills; and
(j) other appropriate activities which promote the development of boys and girls.
(iii) There shall be opportunity provided for participation in appropriate extra-class activities.
(iv) There shall be activities adapted to meet the needs of pupils who are temporarily or permanently unable to participate in the regular program of physical education. Adaptive physical education programs shall be taught by a certified physical education teacher.
(v) There shall be continuous evaluation of the instructional program and assessment of individual pupil needs and progress. Appropriate cumulative records shall be maintained which cover the essential features of the physical education program for each pupil, and when a pupil transfers to another school, such records shall be transferred with the student's transcript.
(2) Required instruction. (i) Elementary instructional program-grades K through 6.
(a) all pupils in grades K-3 shall participate in the physical education program on a daily basis. All pupils in grades 4-6 shall participate in the physical education program not less than three times each week. The minimum time devoted to such programs shall be at least 120 minutes in each calendar week, exclusive of any time that may be required for dressing and showering; or
(b) as provided in an equivalent program approved by the Commissioner of Education.
(ii) Secondary instructional program-grades 7 through 12. All secondary pupils shall have the opportunity for regular physical education, but not less than three times per week in one semester and two times per week in the other semester, taught by a certified physical education teacher, and all such pupils shall participate in the physical education program either:
(a) a minimum of three periods per calendar week during one semester of each school year and two periods during the other semester; or
(b) a comparable time each semester if the school is organized in other patterns; or
(c) for pupils in grades 10 through 12 only, a comparable time each semester in extraclass programs for those pupils who have demonstrated acceptable levels of physical fitness, physical skills, and knowledge of physical education activities; or
(d) for pupils in grades 10 through 12 only, a comparable time each semester in outof-school activities approved by the physical education staff and the school administration; or
(e) as provided in an equivalent program approved by the Commissioner of Education.

(3) Attendance. (i) All pupils shall attend and participate in the physical education program as approved in the school plan for physical education and as indicated by physicians' examinations and other tests approved by the Commissioner of Education. Individual medical certificates of limitations must indicate the area of the program in which the pupil may participate.
(ii) School district plans shall indicate through the sequential curriculum the steps to be taken to insure that each pupil meets the requirement for participation in physical education program which complies with the provisions of this section. School districts may award local diploma credit for the required program, and may also submit plans for elective units in physical education for additional credit.

(4) Personnel. (i) Elementary classroom teachers may provide instruction under the direction and supervision of a certified physical education teacher.
(ii) When students participate in out-of-school activities as part of alternative programs, such activities may be taught by noncertified personnel, provided they have appropriate experience and are so approved by the board of education.
(iii) Each school district operating a high school shall employ a director of physical education who shall have certification in physical education and administrative and supervisory service. Such director shall provide leadership and supervision for the class instruction, intramural activities, and interschool athletic competition in the total physical education program. Where there are extenuating circumstances, a member of the physical education staff may be designated for such responsibilities, upon approval of the commissioner. School districts may share the services of a director of physical education.

(5) Facilities. Trustees and boards of education shall provide adequate indoor and outdoor facilities for the physical education program at all grade levels. Appropriate guidelines to schools with respect to facilities will be provided by the Division of Physical Education, Fitness, Health, Nutrition and Safety Services.

(6) Administrative procedures. (i) School district plans for the physical education program shall include information on the following administrative procedures:
(a) curriculum development in relation to grade levels, as referred to in paragraph (1) of this subdivision;
(b) appropriate examinations and tests to be employed by school authorities in determining pupil needs and progress in physical fitness, knowledge and skills;
(c) class size and grouping patterns which are compatible with the activities being taught;
(d) use of nonschool facilities;
(e) use of noncertified persons, such as student leaders, practice teachers, etc.;
(f) use of supplementary personnel which are described in section 80.33 of this Title;
(g) summer school physical education programs, if conducted; and
(h) policies and procedures for the conduct of extraclass programs.
(ii) Periodic reports regarding the status and progress of equivalent programs which have been approved by the commissioner shall be filed with the Division of Physical Education, Fitness, Health, Nutrition and Safety Services as requested.

(7) Basic code for extraclass athletic activities. Athletic participation in all schools shall be planned so as to conform to the following:
(i) General provisions. It shall be the duty of trustees and boards of education:
(a) to conduct school extraclass athletic activities in accordance with this Part and such additional rules consistent with this basic code as may be adopted by such boards relating to items not covered specifically in this code. A board may authorize appropriate staff members to consult with representatives of other
school systems and make recommendations to the board for the enactment of such rules;
(b) to make the extraclass athletic activities an integral part of the physical education program;
(c) to permit individuals to serve as coaches of interschool athletic teams, other than intramural teams or extramural teams, in accordance with the following:
(1) certified physical education teachers may coach any sport in any school;
(2) teachers with coaching qualifications and experience certified only in areas other than physical education may coach any sport in any school, provided they have completed:
(i) the first aid requirement set forth in section 135.5 of this Part; and
(ii) an approved pre-service or in-service education program for coaches or will complete such a program within three years of appointment. Such program shall include an approved course in philosophy, principles and organization of athletics which shall be completed within two years after initial appointment as a coach. Upon application to the Commissioner of Education, setting forth the reasons for which an extension is necessary, the period in which to complete such training may be extended to no more than five years after such appointment. Such approved programs for coaches will consist of one of the following (credits and hours vary depending upon the contact and endurance involved in the sport): a department-approved college program of from two to eight credits; or a department-approved in-service education program, conducted by schools, colleges, professional organizations or other recognized groups or agencies, from 30 to 120 clock hours; or an equivalent experience which is approved by the Commissioner of Education;
(3) notwithstanding the provisions of section 80.18 of this Title, other persons with coaching qualifications and experience satisfactory to the board of education may be employed as temporary coaches of interschool sport teams, when certified teachers with coaching qualifications and experience are not available, upon the issuance by the commissioner of a temporary coaching license. A temporary coaching license, valid for one year, will be issued under the following conditions:
(i) the superintendent of schools shall submit an application for a temporary coaching license, in which the inability of the district to obtain the services of a certified teacher with coaching qualifications and experience is demonstrated to the satisfaction of the commissioner;
(ii) candidates for initial temporary licensure shall have completed the first aid requirement set forth in section 135.5 of this Part prior to the first day of coaching;
(iii) candidates for the first renewal of a temporary license shall have completed or be enrolled in an approved course in philosophy, principles and organization of athletics; and
(iv) candidates for any subsequent renewal of a temporary license shall have completed or demonstrate evidence of satisfactory progress towards the completion of an approved pre-service or in-service education program for coaches which shall include an approved course in philosophy, principles and organization of athletics. Such approved programs for coaches shall consist of one of the following (credits and hours vary depending upon the contact and endurance involved in the sport): a department-approved college program of from two to eight credits; or a department-approved in-service education program, conducted by schools, colleges, professional organizations or other recognized groups or agencies, from 30 to 120 clock hours; or an equivalent experience which is approved by the Commissioner of Education;
(4) persons who were employed as coaches in New York State schools on or before September 1, 1974 and who do not meet the requirements set forth in subclause (1), (2) or (3) of this clause, may continue to coach any sport;
(d) to determine the need for an athletic trainer and to permit individuals to serve as athletic trainers for interschool athletic teams, intramural teams or physical education classes only in accordance with the following:
(1) Qualifications. Persons serving as an athletic trainer shall possess a valid certificate from the National Athletic Trainers Association or have completed a course of study comparable to that required for certification by the National Athletic Trainers Association.
(2) Scope of duties and responsibilities. The services provided by an athletic trainer shall include, but not be limited to, the following:
(i) provide first aid and sport injury emergency services for students;
(ii) provide school personnel and students with advice and services on physical conditioning programs, training methods, screening procedures, injury prevention and use of safety equipment for sports
(iii) supervise the training room, maintain and order first aid supplies, and maintain records on student
injuries and illnesses relative to sports participation in cooperation with the school health service office.
(e) to give primary consideration to the well-being of individual boys and girls in the conduct of games and
sports;
(f) to sacrifice no individual for the sake of winning events;
(g) to conduct all activities under adequate safety provisions;
(h) to equalize insofar, as possible the powers of opponents in individual and group athletic competition;
(i) to provide adequate health examination before participation in strenuous activity and periodically
throughout the season as necessary, and to permit no pupil to participate in such activity without the
approval of the school medical officer;
(j) to maintain an equitable division of facilities, budget and personnel between boys and girls;
(k) to permit no athletic team to represent a school except in conformance with this Part;
(l) to approve all traveling of individuals or teams under their jurisdiction;
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(m) to permit no post-season games or tournaments;
(n) to permit no post-schedule games or tournaments other than those conducted by school authorities in
accordance with approved standards;
(o) to permit any individual or team to represent a school only in games, meets or tournaments which are
conducted by secondary school authorities;
(p) to provide opportunity for instruction, practice and competition for pupils in grades four through six in
extraclass programs which shall be basically intramural activities;
(q) to provide opportunity for instruction and practice for pupils in grades 7 through 12 in extraclass
athletic activities which are intramural activities and approved interschool competition;
(r) to limit athletic activities conducted by the school to appropriate competition and practice between
pupils in grades 7 through 12, except that a post-graduate pupil may participate in intramural activities;
(s) to provide the same general degree of opportunity for participation in intramural and interscholastic
activities to both males and females.
(ii) Provisions for interschool athletic activities for pupils in grades 7 through 12. It shall be the duty of the
trustees and boards of education to conduct interschool athletic competition for grades 7 through 12 in
accordance
with the following:
(a) Interschool athletic competition for pupils in junior high school grades seven, eight and nine. Such
competition shall be conducted in accordance with the following: Seventh and eighth grade teams may
participate only with teams of like grade groups, with the following exceptions:
(1) In junior high school, competition may include grades seven through nine.
(2) In six-year high schools, competition may include grades seven through nine.
(3) In four-year high schools, ninth grade pupils may participate in junior high competition.
(4) A board of education may permit pupils in grades no lower than seventh to compete on any senior
high school team, or permit senior high school pupils to compete on any teams in grades no lower than
seventh, provided the pupils are placed at levels of competition appropriate to their physiological maturity,
physical fitness and skills in relationship to other pupils on those teams in accordance with standards
established by the commissioner.
(b) Interschool athletic competition for pupils in senior high school grades 9, 10, 11 and 12. Inter-high
school athletic competition shall be limited to competition between high school teams, composed of pupils
in grades 9 to 12 inclusive, except as otherwise provided in subclause (a)(4) of this subparagraph. Such
activities shall be conducted in accordance with the following:
(1) Duration of competition. A pupil shall be eligible for senior high school athletic competition in a
sport during each of four consecutive seasons of such sport commencing with the pupil's entry into the
ninth grade and prior to graduation, except as otherwise provided in this subclause. If a board of education
has adopted a policy, pursuant to subclause (a)(4) of this subparagraph, to permit pupils in the seventh and
eighth grades to compete in senior high school athletic competition, such pupils shall be eligible for
competition during five consecutive seasons of a sport commencing with the pupil's entry into the eighth
grade, or six consecutive seasons of a sport commencing with the pupil's entry into the seventh grade. A
pupil enters competition in a given year when the pupil is a member of the team in the sport involved, and
that team has completed at least one contest. A pupil shall be eligible for interschool competition in grades 9, 10, 11 and 12 until the last day of the school year in which he or she attains the age of 19, except as otherwise provided in subclause (a)(4) of this subparagraph or in § 135.4 TITLE 8 EDUCATION this subclause. The eligibility for competition of a pupil who has not attained the age of 19 years prior to July 1st may be extended under the following circumstances.
(i) If sufficient evidence is presented by the chief school officer to the section to show that the pupil's failure to enter competition during one or more seasons of a sport was caused by illness, accident, or similar circumstances beyond the control of the student, such pupil's eligibility shall be extended accordingly in that sport.
(ii) If the chief school officer demonstrates to the satisfaction of the section that the pupil's failure to enter competition during one or more seasons of a sport is caused by such pupil's enrollment in a national or international student exchange program or foreign study program, that as a result of such enrollment the pupil will be required to attend school for one or more additional semesters in order to graduate, and that the pupil did not enter competition in any sport while enrolled in such program, such pupil's eligibility shall be extended accordingly in such sport.
(2) Registration. A pupil shall be eligible for interschool competition in a sport during a semester, provided that he is a bona fide student, enrolled during the first 15 school days of such semester, is registered in the equivalent of three regular courses, is meeting the physical education requirement, and has been in regular attendance 80 percent of the school time, bona fide absence caused by personal illness excepted.
(3) Sports standards. Interschool athletic programs shall be planned so as to provide opportunities for pupils to participate in a sufficient variety of types of sports. Sports standards, such as number of contests, length of seasons, time between contests, required practice days, etc., for all interschool sports shall conform to guidelines established by the Commissioner of Education.
(c) Male and female pupils on interschool athletic teams.
(1) Equal opportunity to participate in interschool competition, either on separate teams or in mixed competition on the same team, shall be provided to make and female students, except as hereinafter provided. In schools that do not provide separate competition for male and female students in a specific sport, no student shall be excluded from such competition solely by reason of sex, except in accordance with the provisions of subclauses (2) and (4) of this clause. For the purposes of this clause, baseball and softball shall be considered to constitute a single sport.
(2) In the sports of baseball, basketball, boxing, field hockey, football, ice hockey, lacrosse, rugby, soccer, softball, speedball, team handball, power volleyball where the height of the net is set at less than eight feet, and wrestling, the fitness of a given student to participate in mixed competition shall be determined by a review panel consisting of the school physician, a physical education teacher designated by the principal of the school, and if requested by the parents of the pupil, a physician selected by such parents. Such panel shall make its determination by majority vote of the members, and in accordance with standards and criteria issued by the department.
(3) Where a school provides separate competition for male and female pupils in interschool athletic competition in a specific sport, the superintendent of schools, or in the case of a nonpublic school or school system which elects to be governed by this clause, the chief executive officer of the school or school system, may permit a female or females to participate on a team organized for males. However, where separate competition is provided, males may not participate on teams organized for females.
(4) Where a school does not provide separate competition for male and female pupils in interschool athletic competition in a specific sport, the superintendent of schools, or in the case of a nonpublic school or school system which elects to be governed by this clause, the chief executive officer of the school or school system, or the section may decline to permit a male or males to participate on a team organized for females upon a finding that such participation would have a significant adverse effect upon the opportunity of females to participate successfully in interschool competition in that sport.
Historical Note
§ 135.5 First aid knowledge and skills requirements for coaches.

(a) Coaches of extra class periods in physical education, as defined in section 135.1(h) of this Part, shall meet the requirements of this section.

(b) Except as provided in subdivision (c) of this section, all coaches must hold valid certification in first aid knowledge and skills, including instruction in the administration of adult cardiopulmonary resuscitation, as issued by the American National Red Cross, or meet equivalent requirements as set forth in this section.

(c) By January 15, 1993 all coaches employed on or after January 15, 1992 must hold valid certification in first aid knowledge and skills, including instruction in administration of adult cardiopulmonary resuscitation, as issued by the American National Red Cross, or meet equivalent requirements as set forth in this section.

(d) For the purpose of this section, the following shall be deemed as equivalent to certification in first aid knowledge and skills, including instruction in administration of adult cardiopulmonary resuscitation as issued by the American National Red Cross:

(1) completion of an approved course for coaches in first aid knowledge and skills, including instruction in administration of adult cardiopulmonary resuscitation;

(2) completion of an approved college or university first aid knowledge and skills course, including instruction in administration of adult cardiopulmonary resuscitation;

(3) completion of approved college or university courses in athletic training and sports medicine, which include first aid knowledge and skills, including instruction in administration of adult cardiopulmonary resuscitation; or

(4) equivalent experience which is approved by the Commissioner of Education.

(e) Except as provided in subdivision (c) of this section, prior to the start of each sports season, coaches must provide valid evidence to their chief school officer that their first aid and adult cardiopulmonary resuscitation knowledge and skills are current pursuant to the requirements established by the American National Red Cross or that they meet equivalent requirements as set forth in subdivision (d) of this section.

Historical Note

§ 135.6 Comprehensive school health education demonstration program.

(a) Definition. As used in this section, eligible local educational agency means a board of cooperative educational services or the trustees or board of education of a public school district, except that the board of education of a community school district within the City of New York shall not be an eligible local educational agency unless its participation in the demonstration program is authorized by the board of education of the city school district of the City of New York.

(b) Program components. The comprehensive school health education demonstration program established pursuant to section 804-a of the Education Law shall be limited to health education in grades K through 6 and shall consist of the following components:
§ 135.6 TITLE 8 EDUCATION

(1) Developer grants for comprehensive school health education programs.
   (i) Developer grants may be awarded to eligible local educational agencies for the development, implementation, and evaluation of a comprehensive health education program, including such activities as:
      (a) coordination of health instruction with other available programs in the school and community related to health education;
      (b) provision of in-service training and materials for elementary level school teachers in comprehensive health education;
      (c) development and implementation of evaluation procedures to measure students' knowledge, skills, behaviors and attitudes prior to and after program implementation; and
      (d) development and implementation of a mechanism for project maintenance and long-range programming.
   (ii) Subject to the availability of funds, recipients of developer grants who successfully complete the development, implementation and evaluation of a program in accordance with subparagraph (i) of this paragraph shall be required to assist other eligible local educational agencies with replication of such program.
(2) Health education regional training centers. Grants may be awarded to eligible local educational agencies for participation in the establishment of health education regional training centers for the purpose of developing materials and providing training programs to meet the needs of teachers in the implementation of comprehensive school health education programs at the elementary level.
(3) Statewide advocacy program. Grants may be awarded to eligible local educational agencies for participation in the development and implementation of a statewide advocacy program, to create an awareness on the part of school administrators of the need to develop strategies for implementing comprehensive school health education programs at the elementary level.
(4) Replication grants. Grants may be awarded to eligible local educational agencies for the replication of an elementary level health education program which has been validated by the National Diffusion Network, or which is consistent with the State syllabus in health education and has been approved by the commissioner for the purpose of this section.

(c) Grant applications. An eligible local educational agency desiring to participate in the program shall submit for approval a grant application in a form and by the date prescribed by the commissioner to implement one or more of the program components set forth in paragraphs (b , )((1)-(4) of this section. The grant application shall set forth so much of the following information with respect as is appropriate to the program components for which funding is requested:
   (1) the specific need for the program;
   (2) the specific goals and objectives to be achieved;
   (3) the schools and grades to be served within the public school district, board of cooperative educational services or community school district;
   (4) the specific services to be provided;
   (5) the number and types of participants to be served;
   (6) a description of the health curriculum and/or materials to be developed, implemented, evaluated and/or replicated and the manner in which this will be accomplished;
   (7) the type of in-service training or advocacy functions to be conducted;
   (8) a description of any proposed contractual/consultant arrangements;
(9) evaluation strategies to be undertaken;
(10) a description of how the program will be coordinated with existing resources and services in the school and community;
(11) a description of how long-range planning will be instituted for program continuance;
(12) a description of how the program will be replicated, if appropriate;
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CHAPTER 11 REGULATIONS OF THE COMMISSIONER § 135.6
(13) other information determined by the commissioner to be essential to the operation of the program; and
(14) a proposed first-year budget, including staffing needs.
(d) No grant to a local educational agency shall exceed $200,000 per school year.
(e) Allowable costs. Grant funds shall be used solely for allowable costs of the comprehensive school health education program. In no case shall the cost of services already required of, or currently provided by, the local educational agency as of the effective date of this section be considered allowable costs for the purposes of this section. Allowable costs may include:
(1) Salaries of certified teachers including health educators, elementary classroom teachers, and school nurse-teachers; administrators, including health coordinators; curriculum and training specialists; and non instructional support personnel;
(2) employee benefits;
(3) teacher in-service training costs, including stipends and substitute pay;
(4) contractual and consultant costs, including staff development, curriculum development, coordination activities, evaluation, travel expense, rental of space, and other services designed to achieve program goals and objectives;
(5) supplies and materials;
(6) instructional equipment;
(7) rental of other related equipment;
(8) library and computer professional and student resources and materials;
(9) reasonable costs of evaluation;
(10) curriculum development activities;
(11) replication;
(12) travel essential to program goals and objectives;
(13) a maximum five-percent overhead allowance;
(14) program costs related to printing, duplication and communication; and
(15) other costs determined to be essential to program goals and objectives, as approved by the commissioner.
(f) Termination of grant. The commissioner may terminate a grant at any time when in the judgment of the commissioner a program is not meeting the purposes of this section.
(g) Reports and records. (1) Each participating local educational agency shall:
(i) file an interim report with the commissioner on or before December 31st of the current year of funding and a final report on or before July 15th of the school year next following the current year, containing such information as the commissioner may require;
(ii) file an annual evaluation report by a date prescribed by the commissioner, which contains such information as the commissioner may require; and
(iii) notify the department of any change in professional staff, program design or ability to meet stated goals and objectives.
(2) Financial records shall be maintained.
(3) All programs shall be subject to the general supervision of the commissioner and the department who shall have the right to examine the facilities, operations and records relating to such program at any time.

Historical Note
Amended (d).
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C.2. New York State Physical Education Standards

**STANDARD 1**

**Personal Health and Fitness**

*Students will* have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.

**Key Idea:** *Students will:*

**Physical Education**

1a: perform basic motor and manipulative skills. They will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities.

1b: design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance, and body composition.

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<th>ELEMENTARY</th>
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<td>• participate in physical activities (games, sports, exercises) that provide conditioning for each fitness area</td>
<td>• demonstrate competency in a variety of physical activities (games, sports, exercises) that provide conditioning for each fitness area</td>
<td>• demonstrate proficiency in selected complex physical activities (games, sports, exercises) that provide conditioning for each fitness area</td>
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<td>• develop physical fitness skills through regular practice, effort, and perseverance</td>
<td>• know that motor skills progress in complexity and need to be used in the context of games and sports with additional environmental constraints</td>
<td>• establish and maintain a high level of skilled performance, demonstrate mastery of fundamental movement forms and skills that can contribute to daily living tasks, and analyze skill activities</td>
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<td>• demonstrate mastery of fundamental motor, non-locomotor, and manipulative skills, and understand fundamental principles of movement</td>
<td>• combine and integrate fundamental skills and adjust technique based on feedback, including self-assessment</td>
<td>• make physical activity an important part of their life and recognize such consequent benefits as self-renewal, greater productivity as a worker, more energy for family activities, and reduction in health care costs</td>
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<td>• understand the effects of activity on the body, the risks associated with inactivity, and the basic components of health-related fitness (cardiovascular, muscle strength, muscle endurance, flexibility, and</td>
<td>• understand the relationship between physical activity and the prevention of illness, disease, and premature death</td>
<td>• use the basic principles of skill analysis to improve previously acquired skills and to continue to learn new skills and activities</td>
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<td>Body Composition</td>
<td>Develop and Implement a Personal Fitness Plan Based on Self-Assessment and Goal Setting, Understand Physiological Changes That Result from Training, and Understand the Health Benefits of Regular Participation in Activity</td>
<td>Know the Components of Personal Wellness (Nutrition and Weight Control, Disease Prevention, Stress Management, Safety, and Physical Fitness), Establish a Personal Profile with Fitness/Wellness Goals, and Engage in Appropriate Activities to Improve or Sustain Their Fitness</td>
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<td>Understand the Relationship Between Physical Activity and Individual Well Being</td>
<td>Develop Leadership, Problem Solving, Cooperation, and Team Work by Participating in Group Activities</td>
<td>Follow a Program that Relates to Wellness, Including Weight Control and Stress Management</td>
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<td>Demonstrate Competence in Leading and Participating in Group Activities</td>
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**STANDARD 2**

**A Safe and Healthy Environment**

*Students will* acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.

**Key Idea:** *Students will:*

**Physical Education**

2a: demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, and communication.

2b: be able to identify safety hazards and react effectively to ensure a safe and positive experience for all participants.

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<td>• contribute to a safe and healthy environment by observing safe conditions for games, recreation, and outdoor activities</td>
<td>• understand the risks of injury if physical activity is performed incorrectly or performed in extreme environmental conditions, and recognize the importance of safe physical conditions (equipment, facilities) as well as the emotional conditions essential for safety</td>
<td>• know the potential safety hazards associated with a wide variety of games and activities and are able to prevent and respond to accidents</td>
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<td>• come to know and practice appropriate participant and spectator behaviors to produce a safe and positive environment</td>
<td>• develop skills of cooperation and collaboration, as well as fairness, sportsmanship, and respect for others</td>
<td>• demonstrate responsible personal and social behavior while engaged in physical activities</td>
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<td>• work constructively with others to accomplish a variety of goals and tasks</td>
<td>• work constructively with others to accomplish a goal in a group activity, demonstrating consideration for others involved</td>
<td>• accept physical activity as an important part of life. Self-renewal, productivity as a worker, energy for family activities, fitness, weight control, stress management, and reduction in health-care costs are understood as benefits of physical activity</td>
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<td>• know how injuries from physical activity can be prevented or treated</td>
<td>• understand the physical and environmental dangers associated with particular activities and demonstrate proper procedures for safe participation in games, sports, and recreational pursuits</td>
<td>• create a positive climate for group activities by assuming a variety of roles</td>
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• demonstrate care, consideration, and respect of self and others during physical activity

• understand the role of physical activity, sport, and games as a balance between cooperative and competitive behaviors and as a possible arena in which to develop and sharpen leadership and problem solving skills, and understand the physical, emotional, and social benefits of participation in physical activities

• understand the physical, social, and emotional benefits of physical activity and can demonstrate leadership and problem solving through participation in organized games or activities
**STANDARD** 3  

**Resource Management**  

**Students will** understand and be able to manage their personal and community resources.  

**Key Idea:** **Students will:**  

**Physical Education**  

3a: will be aware of and able to access opportunities available to them within their community to engage in physical activity.  

3b: be informed consumers and be able to evaluate facilities and programs.  

3c: be aware of some career options in the field of physical fitness and sports.

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<td>• know that resources available at home and in the community offer opportunities to participate in and enjoy a variety of physical activities in their leisure time</td>
<td>• should be informed consumers, aware of the alternatives available to them within their communities for physical activity and should be able to evaluate facilities and programs available</td>
<td>• recognize their role as concerned and discriminating consumers of physical activities programs and understand the importance of physical activity as a resource for everyone regardless of age or ability</td>
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<td>• become discriminating consumers of fitness information, health-related fitness activities in their communities, and fitness and sports equipment</td>
<td>• demonstrate the ability to locate physical activity information, products, and services</td>
<td>• recognize the benefits of engaging in appropriate physical activities with others, including both older and younger members of the community</td>
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<td>• demonstrate the ability to apply the decision making process to physical activity</td>
<td>• know some career options in the field of physical fitness and sports</td>
<td>• identify a variety of career opportunities associated with sports and fitness and understand the qualifications, educational requirements, and job responsibilities of those careers</td>
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C.3. National Physical Education Standards

Moving into the Future: National Standards for Physical Education,

2nd Edition National Standards for Physical Education

Physical activity is critical to the development and maintenance of good health. The goal of physical education is to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity.

A physically educated person:

**Standard 1:** Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.

**Standard 2:** Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.

**Standard 3:** Participates regularly in physical activity.

**Standard 4:** Achieves and maintains a health-enhancing level of physical fitness.

**Standard 5:** Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

**Standard 6:** Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

Purpose of the National Standards Document

Standards Provide the Framework for a Quality Physical Education Program

What is worth teaching and learning in physical education? The national content standards define what a student should know and be able to do as result of a quality physical education program. They provide a framework for developing realistic and achievable expectations for student performance at every grade level. These expectations are the first step in designing an instructionally aligned program.

National Standards Provide Guidance for Developing State and Local Standards
States and local school districts across the country have used the national standards to develop standards, frameworks, and curricula. Others have revised their existing standards and curricula to align with the national standards.

**Standards Increase the Professional Stature of Physical Education**

The national standards demonstrate that physical education has academic standing equal to other subject areas. They describe achievement, show that knowledge and skills matter, and confirm that mere willing participation is not the same as education. In short, national physical education standards bring accountability and rigor to the profession.
Appendix D

Summary data
## D.1. Summary of part one survey data by question

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D.5. Executive Summary

Executive Summary

Middle School Student Perceptions of a Physical Education Program

Prepared for

Samuel St. Bernard School District

By

Karen Benedict, Ed.D.
April, 2010
Middle School Student Perceptions of a Physical Education Program

A quality physical education program should be a significant part of students’ educational experience. A developmentally appropriate physical education program provides positive influences on a child’s physical, mental and social-emotional well-being. (Dishman, Kuh & Cooper, 1992; Eastin, 2003; Klish, 2009; Sallis, McKenzie, Kolody, Lewis & Rosengard, 1999; United States Department of Health and Human Services Centers for Disease Control and Prevention, 2008; Virgilio, 1997; WebMd Medical News, 2004). A quality developmentally appropriate physical education program is even more significant for the middle school child (American Medical Association, 2008; American Obesity Association, 2008; Dishman, 1988; Gallahue & Cleland, 2004; Kamla, 2007; Kuh & Cooper, 1992; NASPE, 2004; United States Department of Health and Human Services, 2008; Virgilio, 1997).

In addition to the above, the research also suggests that providing student voice in the selection of activities is significant (Congdon & Collier, 2002). Therefore, with the background knowledge regarding the holistic importance of physical education for students, and particularly the middle school student, as well as, an understanding of the laws and standards that impact physical education, this summary provides an overview of the survey data collected from the students at Samuel St. Bernard, as well as some suggestions for potential next steps. There were 333 sixth, seventh and eighth grade students completing the survey.

The data suggests the following:

- Physical education is significant for them. Most students are satisfied with the overall middle school physical education experience. Eighty-nine
percent of the students would choose to take physical education if it were optional.

- Most students rate themselves to have an average body build. However, as students move from sixth to eighth grade they rate themselves less often in the average category; more students begin to rate themselves as overweight.

- Personal fitness was explored. Overall most students considered themselves to be in good physical condition. However, it is noted that there was a gradual decline in satisfaction of personal fitness level of fitness for females.

- Personal sports ability was investigated. Males rated themselves higher in their sports ability than females. Across grade levels, male ratings gradually increased. However, across grade levels, female ratings in sport ability decreased.

- In order to improve their physical education experience, both males and females state competition, choice, more time, fun and friends are significant factors in liking physical education.

In order to address some of the student data derived from the survey, the following recommendations are made as suggestions for potential starting points for curricular review.

- Review data with physical education staff, building and district administration responsible for curricular updates.
• Develop focus group(s) with students to assist in brainstorming sessions for program development.

• Conduct a follow-up survey and or interview with students to assist in constructing some background knowledge regarding responses in order to develop a deeper understanding of student comments.

• Develop a plan to provide student input or choice into activities for physical education.

• Provide alternatives for the students not desiring a competitive environment and or those who do not generally like physical education.

• Brainstorm options for providing more access to physical education.

This study was intended to be a starting place for stakeholders to probe deeper into the current physical education program. With the student input data and data from the literature review, collegial conversations can begin to take place to uncover practical next steps in program development. With this collective knowledge and concerted effort toward reform, perhaps an even greater developmentally appropriate physical education program can be developed to further enhance the satisfaction and activity level of these middle school students as well as their increased health, wellness and academic achievement.