Title
Elementary physical education programs: in what ways might leaders best facilitate positive change?

Permalink
https://escholarship.org/uc/item/54b1t7nj

Author
Rhine, Christa D.

Publication Date
2011

Peer reviewed|Thesis/dissertation
Elementary Physical Education Programs: In What Ways Might Leaders Best Facilitate Positive Change?

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Education in Educational Leadership by Christa D. Rhine

Committee in charge:

California State University of California, San Marcos
Professor Jennifer Jeffries, Chair
Professor Lorri Santamaria

University of California, San Diego
Professor Amanda Datnow

2011
The dissertation of Christa D. Rhine is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

Chair

University of California, San Diego
California State University, San Marcos
2011
Dedication

This dissertation is dedicated to my parents, Tom and Cathy, who have always supported me in my academic endeavors. I couldn’t ask for two more positive role models who fill me with unlimited love and encouragement. I would not be where I am today without them.

To my siblings, Holly, Kevin, and Aaron, who have set such a wonderful example for me through the hard work and dedication as seen in their own professional lives.

To my grandma, Shirley, who has inspired me to keep writing and has offered a helping hand in not only writing this dissertation, but throughout all of my schooling.

To my grandma, Tody, who has supported me and helped make my higher education goals a reality.

To my beautiful nieces, Ava and Harper, who have reminded me of the importance of incorporating laughter and fun into every day.

To Andrew, who has been unbelievably patient and supportive as I spent hours upon hours writing and researching.

To the memory of my grandpa, Bert, for having the dream of all his grandchildren getting a higher education and passing that dream along to me.

To the memory of my grandpa, Walt, who supported me throughout this dissertation process until almost the very end. I did it gramps!

I thank and love you all!
Table of Contents

Dedication ........................................................................................................................................ iv

Table of Contents ................................................................................................................................ v

List of Figures ....................................................................................................................................... viii

List of Tables ........................................................................................................................................ ix

Acknowledgements ............................................................................................................................. x

Curriculum Vitae ................................................................................................................................ xi

Abstract of the Dissertation .................................................................................................................. xii

Chapter 1 ............................................................................................................................................. 1

Introduction .......................................................................................................................................... 1

Childhood Obesity ............................................................................................................................... 2

The Need for Physical Education ......................................................................................................... 4

Factors Impacting the Quality of Physical Education ......................................................................... 5

Purpose of the Study and Research Questions ..................................................................................... 7

Overview of the Methods ....................................................................................................................... 8

Theoretical Framework ......................................................................................................................... 8

Significance of Study ............................................................................................................................. 9

Definition of Terms ............................................................................................................................... 10

Organization of the Study ..................................................................................................................... 12

Chapter 2 ............................................................................................................................................. 14

Review of the Literature ....................................................................................................................... 14
Summary of Findings .................................................................................................................. 91
Interpretation of Findings ......................................................................................................... 93
Placing the Findings in Context ............................................................................................... 97
Using Distributed Leadership to Improve Physical Education Programs: Recommendations for Elementary Districts and Site Administrators and Teachers ................................................. 100
Additional Leadership Implications ......................................................................................... 106
Limitations ................................................................................................................................. 108
Comments on Future Direction ............................................................................................... 108
Conclusion ................................................................................................................................ 109
Appendix A ................................................................................................................................. 110
Appendix B ................................................................................................................................. 115
Appendix C ................................................................................................................................. 120
Appendix D ................................................................................................................................. 126
Appendix E ................................................................................................................................ 128
Appendix F ................................................................................................................................ 130
References ................................................................................................................................ 132
List of Figures

Figure 2.1. Obesity levels amongst children aged 2-19 throughout the past 30 years.... 16
List of Tables

Table 2.1. California Physical Education Content Standards. .................................................. 26

Table 2.2. Fifth grade physical fitness test results for the state of California from the 2008-2009 school year. ......................................................................................................................... 29

Table 2.3. Fifth grade physical fitness test results for the county of San Diego from the 2008-2009 school year. ......................................................................................................................... 30

Table 2.4. Teaching credential requirements in the area of physical education .................. 35

Table 3.1. Research questions and corresponding survey questions ................................. 47

Table 3.2. Research questions and corresponding interview questions ............................. 48

Table 4.1. Summary of districts participating in survey research ...................................... 53

Table 4.2. Survey statements in which principals were in agreement .............................. 55

Table 4.3. Survey statements in which principals were in disagreement ....................... 55

Table 4.4. Survey statements in which teachers were in agreement .............................. 56

Table 4.5. Survey statements in which teachers were in disagreement ....................... 57

Table 4.6. Participant Data ........................................................................................................ 63

Table 4.7. Themes and Frequencies .................................................................................... 65

Table 4.8. Themes and Dialogue Examples .......................................................................... 66
Acknowledgements

I would like to thank my dissertation committee, Dr. Jennifer Jeffries, Dr. Lorri Santamaria, and Dr. Amanda Datnow, for their valuable support throughout this process. I have learned so much from these three remarkable women and am proud of what they have helped me accomplish. Dr. Jeffries, my chair, always had a way to put me at ease when I had trouble putting my thoughts down on paper. I feel I am now prepared for more educational research and writing because of her.

I would also like to thank the participants who were willing to take time out of their busy schedules in order to provide me with the rich data used in this study. I could not have done this without them.

Thank you to Kevin Rhine, Jihan Yacoub, and Shirley Hoehn for the editing and formatting assistance. Your sharp eyes and computer expertise helped ensure this document was prepared by all of my deadlines.

Lastly, I would like to thank the rest of the students in Cohort 4 for being such a strong support group throughout this process. To Christine Jensen, in particular, for helping me stay on target and for the countless walks and meals to help me recharge!
Curriculum Vitae

Academic Background

Ed.D., Educational Leadership, University of California, San Diego & California State University, San Marcos (2011)
M.Ed., Teaching, Learning, & Leadership, California State University, San Marcos (2005)
B.A., Liberal Studies, Concordia University, Irvine (2002)

Additional Education and Training

“On My Honor” Civics Institute & Training (2009-2010)
AVID Training (2007)
McRel Administration Training (2007)
CPR & First Aid Training (2006)

Committees

Site Leadership Committee (2009-Present)
Site Grade Level Chairperson (2007-2010)
Writing Assessment District Committee Member (2009-2010)
Textbook Adoption Committee (2007-2008)
English Learner Liasion District Committee Member (2005-2008)

Professional Certificates

Certificate of Eligibility for the Administrative Services Credential
Clear Multiple Subjects Teaching Credential

Professional Experience

Teacher, 5th Grade, La Paloma School (2008-Present)
Instructor, College for Kids Institution, Mira Costa College (Summer 2009 & 2010)
Teacher, 6th Grade, La Paloma School (2004-2008)
Teacher, 7th & 8th Grade English, Potter Junior High School (2003-2004)
Abstract of the Dissertation

Elementary Physical Education Programs: In What Ways Might Leaders Best Facilitate Positive Change?

by

Christa D. Rhine

Doctor of Education in Educational Leadership

University of California, San Diego, 2011
California State University, San Marcos, 2011

Professor Jennifer Jeffries, Chair

The overwhelming evidence that supports coupling a healthy diet with proper exercise suggests that schools can help target the growing epidemic of childhood obesity through physical education instruction. However, because of pressure to perform well on standardized testing, a lack of funding, and limited time in the school day, physical education often does not get the attention it needs. This mixed-methods study explored the perceptions of superintendents, principals, and teachers in the area of physical education instruction. Data collected offered insight into current program quality at the time of the study, as well as ideas as to what might make physical education stronger.
The results suggested that superintendents felt time, budget constraints, a lack of desired personnel, and accountability pressures in the core academic areas affected their abilities to sufficiently oversee physical education programs. Principals stated the lack of accountability by the state and district, funding, and the absence of professional development negatively affected physical education. Finally, teachers, despite having a personal connection to the subject and feeling confident they can deliver high quality instruction, stated a lack of equipment, standardized test pressure, limited time, and a lack of ongoing professional development stood in their way of providing high quality physical education instruction.
Chapter 1

Introduction

Students in our schools are declining in their level of physical fitness. Childhood obesity is on the rise, which results in researchers suggesting that our future holds a steadily increasing percentage of American adults suffering from heart disease, diabetes, and other health problems (Daniels, Jacobson, McCrindle, Eckel, & Sanner, 2009). This will have profound impacts on the cost of health care, which will hamper national and state governments in terms of resources available to meet the health care needs of the citizenry and reduce the length and quality of life for these children in their adult years.

The pressure placed on schools to perform academically has taken time and funding away from subjects other than those tested annually, and physical education is no exception (Beveridge, 2010; Cawelti, 2006; Jennings & Renter, 2006). The instruction of physical education in the elementary grades is the responsibility of general education teachers who have little to no training on how to instruct students successfully in physical education. Additionally, there is little research as to how well schools are following through with the adherence to the physical education standards. Granted, public schools in California are required to test students in physical areas in the fifth, seventh, and ninth grades, but the success level of students on this test does not indicate that students have an adequate level of physical fitness.

While educators cannot control many of the factors impacting student fitness levels such as nutrition, physical activities in the home, or hereditary factors, educators and school leaders can create a school culture that encourages good habits that impact levels of physical fitness and deliver a coherent physical education program that can have
positive effects. By understanding the factors that impede or promote physical education in the schools, educators and educational leaders can leverage those factors in building a school culture that includes the value and importance of physical education and its desired outcome – physically fit students and healthy future adults.

The current trend of increasing childhood obesity and the need for quality physical education instruction in schools to mitigate this trend demands a better understanding of how school leaders at all levels can positively impact the state of elementary physical education programs. This study is designed to illuminate that understanding.

In this section, childhood obesity, the need for physical education in response to childhood obesity, a theoretical framework upon which the study is based, the purpose of the study including research questions, and definitions of terms will be introduced.

**Childhood Obesity**

Recently the New York Times stated that “more than two-thirds of Americans are now overweight or obese, and the percentage is still rising” (New York Times, 2009). The prevalence of obesity in children has tripled in the last 30 years (Centers for Disease Control and Prevention, 2010). These statistics are alarming considering that being overweight or obese can lead to serious health risks such as Type II diabetes, heart disease, and certain types of cancer (Centers for Disease Control and Prevention, 2008; Finkelstein, Trogdon, Cohen, & Dietz, 2009). Additionally, $150 billion dollars is spent annually to treat conditions related to obesity, and experts do not expect that number to decrease in the near future (Let’s Move, 2010).
In response to childhood obesity, First Lady Michelle Obama openly stated her concern for her own children and their risk of childhood obesity (National Education Association, 2010). She claimed that the busy lifestyle of their family negatively influenced their eating and exercise programs. “Our pediatrician basically said you are going to want to make some changes”, Obama stated (Let’s Move, 2010). As a result of these concerns, she and her husband, President Barack Obama, announced the launch of a nationwide campaign, “Let’s Move”, to reduce childhood obesity throughout the country. It affirms the need to educate not just adults, but children, who will soon grow into adulthood, about the importance of health and fitness.

It makes sense to assume that a reasonable place to start educating youth about healthy lifestyles would be in schools. However, public schools are under pressure to perform at increasingly high levels in the core academic areas, specifically language arts and mathematics (Maeda & Murata, 2004). This provides less time and focus on areas such as the fine arts and physical education (Annesi, Westcott, Faigenbaum, & Unruh, 2005; Beveridge, 2010; Cawelti, 2006; Chomitz et al., 2009; Jennings & Renter, 2006). Though physical education is mandated in public schools, there is not as much pressure to perform at highly proficient levels because it is not a core subject focused on within the No Child Left Behind Act, nor is it a subject area that is factored into a school’s adequate yearly progress data (Cook, 2005). Additionally, while students are required to participate in standards based physical education, there is little research to show how accurately schools are adhering to the prescribed minutes and content of the standards.
The Need for Physical Education

In the age of No Child Left Behind, reading and mathematics are rightfully receiving added attention and schools are held to account if annual scores for all groups of students are not met. One of the unintended effects of focusing on core subjects is that the time and attention for physical education has been eroded. It is ironic since there is evidence suggesting a positive correlation between physically healthy individuals and academic achievement (Bailey et al., 2009; Chomitz et al., 2009; Cooper, Valentine, Nye, & Lindsay, 1999; Eveland-Sayers et al., 2009; Fejgin, 1994; Taras, 2005).

In California, students in the 5th, 7th, and 9th grades are required to take a physical fitness test in May of their school year. It is alarming that the percentage of students who are able to “pass” in all of the tested physical fitness areas is relatively small. In fact, in the spring of 2009, 29.2% of 5th graders, 34.2% of 7th graders, and 37.9% of 9th graders successfully passed each of the tested items (California Department of Education, 2009). Though these results have improved in the last several years, that improvement has been extremely slow. Even more alarming is the fact that the superintendent of California public schools, Jack O’Connell released a statement stating that the 1.4 to 5.5 percent increase across the board in physical fitness test scores from 2007 to 2008 was a “step in the right direction” (California Department of Education, 2009). In a time when a school is often pressured by the state to make as high as 10% annual growth in the core academic areas, it seems ironic that the combination of slow proficiency score growth and low proficiency in physical fitness is gaining praise from the top education officer in the state (California Department of Education, 2009).
Factors Impacting the Quality of Physical Education

As mentioned, in a time when most of the school focus is on core subjects, there has been a vast amount of research about the rising levels of childhood obesity in the United States (Klaczynski, Goold, & Mundry, 2004; Ogden, & Flegal, 2008). The lack of focus on physical education programs can create detrimental effects on children who are not being taught the skills necessary to live a physically healthy life. The failure of the physical fitness efforts in the schools is exacerbated by the fact that young people of all ages are spending time indoors on sedentary activities such as watching television or playing video games (Green & Reese, 2006; McKenzi & Kahan, 2008; Sherman, 2000). Additionally, research suggests children are eating more processed, unhealthy foods on a regular basis. These three factors – diminished physical education in the schools, poor nutrition, and an increasingly sedentary childhood – are a ticking time bomb on the health of children and their future well-being.

In addition to the physical consequences of obesity, students who are overweight or obese are much more likely to suffer from depression, poor self-esteem, or body dissatisfaction (Ata, Ludden, & Lally, 2007; Harter, 1999). These issues, combined with the anxiety often accompanied by the pressures of high stakes testing in school, can be extremely harmful to children and young adults. Research suggests that physical education programs, when taught correctly, can help to combat these issues in students by teaching them a healthy lifestyle that can carry over into adulthood (Kirk & McDonald, 1998).

There are two other factors that may contribute to the lack of physical fitness among school-aged children. The level of preparedness of teachers to deliver a high
quality physical fitness program to their students, and the district and school site level leadership in the area of physical education are both factors that may need exploration in terms of positively impacting the obesity level of the nation’s youth. From a historical perspective, things have changed in the delivery of physical education programs. In previous decades, teachers with specific physical education credentials were hired to instruct elementary physical education a defined subject area. Now, the general education teacher is left to instruct the students. Typical teacher education courses offer few to no courses on how to successfully implement physical education programs, and schools do not regularly offer trainings in this area either (Morgan & Hansen, 2007). Therefore, the quality and consistency of physical education are in the hands of underprepared classroom teachers.

Principals and district level administrators exert leadership in the delivery of curriculum and are essential to the process of allocation of resources, including instructional time, expertise and funding. To this degree, classroom teachers are underprepared to be excellent physical education teachers, and administrators are equally underprepared to exert leadership in the area as administrative preparation programs focus on the core academic disciplines in learning how to lead in the school setting.

In addition to the lack of administrative preparation in the area of physical fitness, time and attention are in short supply for district and school site administrators. Given the accountability demands in the areas of mathematics and reading, do administrators have the time, energy, and resources to be champions for physical fitness and programs that promote it?
The politics of accountability measures around attaining proficiency in the core subjects, such as the issuing of the API and AYP score for every public school, coupled with the finite number of minutes in the school day and the lack of teacher and administrator preparation in the area, have combined to reduce physical education to a minimal presence in the school day.

**Purpose of the Study and Research Questions**

The purpose of this study is to understand the factors that impede or promote quality physical education in California elementary schools. The role of leadership in the implementation and monitoring of physical education programs was studied in order to better understand the way physical education was viewed by superintendents and principals. Additionally, barriers and supports common to teachers in the instruction of physical education were examined. Each of these areas was investigated in hopes of providing information and suggestions for teachers and administrators in California to help strengthen physical education programs and to impact the school culture in which they exist, and by doing so, positively impact the degree of physical fitness among students. The research questions that will be addressed in this study are as follows:

1. How do superintendents exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?

2. How do elementary principals exert their leadership in the area of physical education programs in terms of:
a. Monitoring the quality and outcome of programs?

b. Professional development?

c. Resource allocation?

3. What do elementary teachers view as barriers and supports of a highly effective physical education program?

**Overview of the Methods**

This study utilized a mixed-methods research design. In order to better understand the current experiences of administrators and teachers in physical education instruction, participants in the San Diego region of California were first invited to complete a survey relating to factors that impede and support physical education instruction, teacher training and professional development, the accountability mandates schools are faced with, and issues regarding administrative leadership of the programs. Next, members from the three participant groups participated in interviews based on the above topics in order to provide more support for the research questions.

**Theoretical Framework**

Distributed leadership provided the framework for this study. Distributed leadership, as defined by Spillane (2006), takes the focus away from capitalizing on one sole leader and instead distributes leadership “through collective interactions among leaders, followers, and their situation” (p. 4). Spillane notes that when looking at distributed leadership as a framework in education, teaching and learning should be the foundation.

The study examined the viewpoints of administrators and teachers regarding the delivery and quality of physical education programs. The data collected during the study
revealed how principals, district level administrators, and teachers viewed their role in providing physical education programs to students. The study assumes a certain degree of distributed leadership among principals, district administrators, and teachers based on the distinct roles and areas of involvement in physical education among teachers and site and district administrators. The distributed leadership model supports the inquiry from a teaching and learning perspective, as suggested by Spillane (2006), in that the study identified impediments and supports to the delivery of quality physical education programs. In the analysis process, the distributed leadership framework assisted in developing actions for schools to strengthen the overall program to better benefit the students involved.

**Significance of Study**

The trends in fitness data indicate a significant percentage of students are not performing well on mandated state physical education tests taken in the fifth, seventh, and ninth grades. These trends indicate that student fitness levels will continue to decline. Student fitness directly impacts academic performance. Therefore, educators need to determine what can be done in schools to increase student fitness levels.

By understanding the current experiences and attitudes of teachers and administrators relative to physical education instruction, we can determine what adjustments may need to be made in order to strengthen physical fitness programs throughout the county and state.
Definition of Terms

For purposes of this study, terms used throughout the presentation of research need to be clearly defined. The following section will outline the major terms and concepts in order to create a common language.

**No Child Left Behind Act.** Signed into action by President George Bush in 2002, the No Child Left Behind Act was put into action by federal legislation. The act is aimed at improving student performance through creating a more accountable system and was “the culmination of 15 years of standards-based reform” (Jennings & Renter, 2006). The new accountability system was put into place using standards and testing in order to monitor school performance. The ultimate goal of the program is to have every student, regardless of socioeconomic status, disability, gender, or race, to be proficient in the tested areas by the year 2014 (United States Department of Education, 2010).

**Physical education.** Physical education refers to the embedded school fitness programs in public schools. The objective of these programs is to engage students in an active and healthy lifestyle, promoting a future with a physically active lifestyle. In California, each grade level has physical fitness standards that should be adhered to in order to meet the goals of the program. Additionally, students in elementary schools are required to have 200 minutes of instruction in the area for every 10 school days, whereas middle and high school students should get 400 minutes every 10 days (California Department of Education, 2010).

**Physical fitness testing.** Students in California schools are tested in physical education in grades five, seven, and nine. In these tests, students are asked to perform a variety of exercises, including endurance, strength, and flexibility. Scores on these tasks
are recorded by the classroom teacher and sent into the state department of education for the annual review. There are usually six subsets of tests, in which a child can pass or fail in. Ideally, a student should be able to pass each of these areas (California Department of Education, 2010).

**Physical activity.** Physical activity involves any type of activity that involves movement of the body. For purposes of this research, physical activity will represent activities that are identified as planned, healthy activities. Examples of these activities would include playing sports, other outdoor games, flexibility exercises aimed at improving health, and dance (Haug, Torsheim, Sallis, & Samdal, 2010).

**Healthy Fitness Zone (HFZ).** The Healthy Fitness Zone is defined in this study as when children are achieving the minimum passing requirements on individual sections of the state physical fitness test (California Department of Education, 2010). This “zone” is a target for an average number of repetitions in an exercise are done. Likewise, it can also be achieved when an exercise is completed in a certain amount of time. For example, a fifth grade boy is in the healthy fitness zone when he can complete a mile in under 12 minutes.

**Obesity.** Obesity is defined as and excessive accumulation of body fat. In girls, this would mean that body fat accounts for more than 32 percent of the body mass, and in boys, more than 25 percent (Lohman, 1987). Overweight on the other hand, refers to simply having a body weight that is too high for a person’s age and height. Both terms often go hand in hand, but for purposes of this research, the terms will be used separately.

**Core academic subjects.** The core academic subjects refer to those tested the most throughout the state of California. With the exception of science being tested on
three different occasions, the focus lies within language arts and mathematics. Therefore, for purposes of this research, the core academic subjects will refer to language arts and mathematics.

**Standardized tests.** Standardized testing will refer to the testing done in the spring of each year in the core subject areas. These tests produce results that are highly reflective on the school in which they were taken, and can provide easy insight into what schools may need to develop in order to have a higher level of success. In California elementary schools, the main standardized test is known as the California Standardized Test, or the CST (California Department of Education, 2010). Though there are other state and district tests that are mandatory for students to take, for purposes of this paper, standardized tests will refer to the major annual test given in language arts, mathematics. Though history and science are tested during particular years, because they are not factored into the AYP of a school, they will not be referred to in this paper.

**Organization of the Study**

In order to better understand the current needs of administration, teachers, and students involved in physical education programs in public schools, a review of the literature relevant to schools, students, and physical education will be presented in the following chapter. First, student health will be reviewed. Rising childhood obesity rates, as well as self-esteem, body image, depression, and anxiety will be closely examined. Next, the benefits of physical fitness will be observed in connection with the body, mind, and academic performance. Third, state physical fitness standards, testing, and results will be outlined, followed by common challenges that districts have in providing quality physical education programs to students. Instructional leadership implications in the area
of physical education will also be reviewed. Lastly, the distributed leadership framework will be examined.

In Chapter 3, the methodology of the study will be outlined. The purpose of the study and research questions will be revisited in order to provide a rationale for the general research design. Then, each component of the research design will be carefully described. These components will include the research participants, instrumentation, data collection, and data analysis. Finally, limitations of the study will be discussed.

In Chapter 4, survey and interview data will be presented, followed by an in depth analysis and interpretation of that data. The survey and interview data will be examined individually at first, and as a whole at the culmination of the chapter.

Finally, in Chapter 5, a summary of the findings will be reviewed, followed by an overall interpretation of the data within the three participant groups. Next, the findings will be placed in context and connected to previous research. Looking at how the data, coupled with Spillane’s (2006) distributed leadership framework, can provide implications for school leaders in the area of physical education will be next. Finally, limitations of the study and areas of future research will be reviewed.
Chapter 2
Review of the Literature

Americans are becoming less healthy every year and children are no exception to this trend. In particular, a large percentage of health care costs are being spent to combat diseases that accompany obesity, such as cardiovascular disease, Type II diabetes, and some types of cancer (Centers for Disease Control and Prevention, 2010; Finkelstein, Trogdon, Cohen, & Dietz, 2009). In a time of decreasing health, the success level of physical education in schools is bleak. Districts continue to focus on the core subjects as defined by No Child Left Behind despite evidence that physically healthy individuals perform better in academic and social situations (Chomitz et al., 2009; Taras, 2005). Additionally, research suggests that healthy habits in eating and exercise need to be taught at a young age in order to become a successful component of a person’s everyday life (Barrett, 2001). The scientific connection between the body and the mind is being ignored in the school setting.

In order to better understand the connections among the many factors impacting physical education in the schools, this review of literature addresses the current state student health, focusing mainly on childhood obesity, but also touching upon self-esteem, body image, depression and anxiety. Next, the many benefits of physical activity are reviewed in terms of its connection between physical, emotional, and academic relationships. Physical education requirements in California elementary schools are also reviewed and current test results are outlined. Challenges to physical education instruction will be defined next, including funding, and the impact of the No Child Left Behind Act. The areas of high stakes tests and class scheduling will be highlighted, as
they impact the school culture relative to physical education, as well as resource allocation. Finally, instructional implications for leadership in the area of physical education will be reviewed, followed by an in depth look at the theoretical framework in distributed leadership.

State of Physical Fitness among Children in the United States

In the following sections, issues surrounding the current health of children will be examined. First, physical health will be reviewed, specifically targeting the growing obesity rates among children. Next, the emotional issues often facing students will be presented. These include self-esteem problems, body dissatisfaction, depression, and anxiety.

Physical health. Physical health in this context is defined as overall bodily health, resulting from specific dietary measures and exercise habits. This section will review current literature on the physical health of children in schools today, focusing on the growing phenomenon of obesity.

Obesity. A significant area of concern for medical and school practitioners is the physical health of students in our schools today, with obesity being a large focus (Klaczyński, Goold, & Mundry, 2004). Obesity is defined as “having increased body weight caused by excessive accumulation of fat” (American Heritage Dictionary, 2008). Some research refers to this concern using the term “overweight” as opposed to “obesity”, but both terms generally reflect the idea of excess weight.

In the past 20 years, obesity rates among children and teens have more than doubled (Ogden, & Flegal, 2008). The most alarming thing about this statistic is that the numbers don’t seem to be improving. Rather, the trend toward greater numbers of
children being diagnosed as obese continues to rise. Figure 2.1 outlines the increase in obesity amongst children in the past 30 years as measured by body mass index, weight, and height (Centers for Disease Control & Prevention, 2008). The statistics were collected through the National Health and Nutrition Examination Survey (NHANES).

![Graph showing obesity levels amongst children aged 2-19 throughout the past 30 years.](image)

*Figure 2.1. Obesity levels amongst children aged 2-19 throughout the past 30 years.*

Research shows that in addition to poor eating habits, a major contribution to the obesity of children comes from the increase in sedentary activities such as watching television, time on computers, and playing video games (Green & Reese, 2006; McKenzie & Kahan, 2008). All of these sedentary activities take away time from which children could be participating in physical activities, keeping them physically fit.

Unfortunately, many negative side effects accompany obesity. Aside from having low energy and some physical movement limitations, obese children run the risk of having high blood pressure. Additionally, it can be linked to the emergence of Type 2 diabetes when combined with family history, race, or insulin resistance (Flegal, Tabak, & Ogden, 2006). The biggest concern regarding the obesity of young children is the
prevalence of carry over into adulthood. Obesity can contribute to cardiovascular risk in adults, and according to the Centers for Disease Control and Prevention (2008) it is the most common cause of death amongst adults, even exceeding deaths from cancer.

These facts caught the attention of Michelle Obama, First Lady of the United States, who recently spoke out about her concern for children in the United States, using her own children as an example. These concerns have resulted in her support of a national initiative fighting childhood obesity through education about healthy eating, physical fitness, and personal goal setting (National Education Association, 2010).

In addition to the physical side effects correlated with obesity, there are also many emotional side effects. Research consistently shows a link between obesity and being negatively stigmatized, meaning children and adults who are obese are seen in a poor fashion in society (Klaczynski, Goold, & Mudry, 2004). Other effects that obesity can have on a person that can be detrimental to children as they head into adolescence and adulthood include the development of a poor self-esteem, body dissatisfaction, depressive symptoms, or anxiety (Ata, Ludden, & Lally, 2007; Harter, 1999).

**Emotional health.** “Emotional health” is defined in this research as being the internal well-being of a person. In other words, it is the feelings that a person typically internalizes, or keeps inside. This section will review the definitions of common emotional issues facing children and teens, as well as the factors that influence the development of them. It will also review the many negative side effects that can accompany these issues. As previously mentioned, obesity can trigger any or all of these emotional issues. However, many growing children who are at perfectly healthy weights are also faced with some of these issues as they develop into young adulthood.
**Self-Esteem.** The self-esteem of a person is defined as the evaluation of his or her own worth (American Heritage Dictionary, 2008). In other words, self-esteem revolves around whether or not a person feels good about him or herself. As mentioned, obesity can lead to a sense of low self-esteem in a person, or vice versa (McCullough, Muldoon, & Dempster, 2009). However, even students who are at perfectly healthy weights often struggle with self-esteem problems. Unfortunately, there are many side effects that can accompany low levels of self-esteem. Some of these include the development of eating disorders, delinquency, drug and alcohol use, or poor body image (Ata, Ludden, & Lally, 2007; Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Frederick & Grow, 1996; Kumpulainen & Roine, 2002; Pipher, 1994; Trzesniewski et al., 2006). Even more alarming may be the fact that research has shown self-esteem and body image issues can affect children as young as five years old (Dohnt & Tiggemann, 2006). In this sense, it is important to immerse young children in programs or situations that can enhance self-esteem and create resiliency.

**Body image and dissatisfaction.** Body image is the image that a person has of his or her own external appearance and bodily composition. Body dissatisfaction occurs when one does not like the way that his or her body looks. Though no child is safe from having issues with body image, those who are overweight or obese suffer from the effects more frequently (Stockton, et al., 2009; Theodore, Bray, & Kehle, 2009).

The effect that poor body image or dissatisfaction can have on a child or adolescent is more alarming than the negative feelings itself. Some children may feel less confident about their abilities to be active or eat healthily (Stockton, et al., 2009). As with low self-esteem, children with body image issues may also be at risk of developing
eating disorders or depression (Choate, 2007). Kalodner and DeLucia-Waack (2003) found that body image dissatisfaction is the primary indicator of the development of disordered eating in young and adolescent girls. Yanover and Thomson (2007), found that students with “higher levels of eating disturbance and body dissatisfaction are associated with higher levels of interference in academic achievement”. In other words, there is such a huge preoccupation with one’s body or eating patterns, that the focus is taken away from academics, often resulting in less than desirable performance.

**Depression.** Depression is another emotional issue that children and teens may have to deal with. By definition, when a person suffers from a depressive disorder, “it interferes with daily life, normal functioning, and causes pain for the person with the disorder and those who care about him or her”. (National Institute of Mental Health, 2010). While many people have days where they feel sad or blue, those with real depressive symptoms experience these feelings much more often. As with the previous emotional issues mentioned, depression can be experienced by any child, but those who are obese or overweight are at a much higher risk (Rofey et al., 2009). Since depression can interfere with life and emotions, it can negatively affect a student's experiences and successes in school (Salmela-Aro, Savolainen, & Holopainen, 2009; Stark & Smith, 1995).

**Anxiety.** Students are at risk for more stressful school experiences since the pressure to perform at high academic areas has gone up (Barksdale-Ladd & Thomas, 2000). Schools place a high value on annual standardized tests and, therefore, students are expected to achieve high marks on the tests. The stress of these tests, combined with stressors commonly faced by school-aged children and adolescents, can create anxious
students. For students whose fitness level is compromised, there are additional peer group interactions which diminish a student’s ability to concentrate on academics. For instance, students who are obese, or overweight in schools face a much higher likelihood of being bullied by peers (Fox & Farrow, 2009; Theodore, Bray, & Kehle, 2009). Being bullied and picked on by others can cause great stress for a child and can result in higher anxiety levels while in the school setting.

Clearly students in our schools are facing academic, physical, and emotional challenges and/or pressures as they transition from childhood into adolescence and adulthood. Since educators have a strong influence over these young lives, it is important to examine what we can do in order to make this transition healthier. Using physical education to teach students the components of a physically active life is one option some are turning to, however, programs do not currently appear to meet the needs of the children.

The Link Between Physical Fitness and Student Success

This section of the literature review will examine research on the link between physical fitness and overall student success. Research on physical fitness and overall student physical and emotional health will be reviewed, as well as research on the direct correlation between physical fitness and academic achievement.

The effect of physical fitness on physical and emotional health. For optimal health, people need to lead lives in which they embrace a healthy diet, participate in exercise, get adequate sleep, and avoid stress. Though only one component of this puzzle, being physically fit is just as important as any of the others. There is ample research on
the connection between the mind and body, and being physically active in order to attain proper fitness levels can benefit participants both physically and mentally.

**Fitness and physical health.** Being physically active contributes to the overall physical fitness of participants (Bergeron, 2007; Dishman et al., 2006; Menestrel & Perkins, 2007). Students who are physically fit are typically seen to have a healthy body image, as well as lower overall body fat or weight (Centers for Disease Control and Prevention, 1996). As previously mentioned, childhood obesity is seen by many as a growing epidemic due to the increasing numbers of obese children each year (Menestrel & Perkins, 2007).

In addition to lowering the risk of obesity, being physically active can also build healthy bones and muscle, reduce the risk of developing heart disease or diabetes, and reduce feelings of depression and anxiety (Centers for Disease Control and Prevention, 1996). Each of these can assist in a healthy immune system, resulting in fewer sicknesses or injuries on a day to day basis.

**Fitness and emotional health.** As mentioned, young children have to cope with a great deal of emotional growth during the developmental years. Building a positive self-esteem is extremely important to help ease the transition into adolescence. Being physically active has been linked in numerous studies to the improvement in self-esteem amongst participants (Brand et al., 2010; Dishman et al., 2006; Fredricks & Eccles, 2006; Koehler, 1994; Pederson & Seidman, 2004). In fact, Dishman et al. (2006) not only found that physical fitness had a positive effect on self-esteem, but also an inverse relationship with depressive symptoms, which often go hand in hand with self-esteem. Additionally,
being physically active can have a positive effect on stress or anxiety relief among participants (D’Onofrio & Klesse, 1990; Silverman & Hanna, 1987).

Since the involvement in physical activity can boost self-esteem, involvement can help prevent participants from partaking in risky behaviors (Fredricks et al., 2002). As mentioned, risky behaviors often identified in schools are experimentations with drugs and alcohol, disordered eating, and delinquency (Button, Sonuga-Barke, Davies, & Thompson, 1996; Corbin, McNair, & Carter, 1996; Donnellan et al., 2005; Ghaderi & Scott, 2001; Kumpulainene & Roine, 2002; Trzensiewski et al., 2006). Because all of these behaviors can result in physical or emotional harm, eliminating them can help to create healthier students in our schools. The positive effects of being physically active on physical and mental well-being can also affect academic performance.

**Physical fitness and academic achievement.** The obvious health benefits gained from physical fitness are deserving of attention on their own. Additionally, each of the previously mentioned benefits resulting from participation in physical activity can, in turn, result in greater academic achievement among students.

**Relationship between fitness and academics.** There have been direct correlations between physical fitness and academic achievement for many years (Chomitz et al., 2009; Eveland-Sayers et al., 2009; Taras, 2005). One of the specific relationships worthy of mentioning is the connection between fitness and concentration (Brand et al., 2010; Hillman et al., 2009). In one study, athletes and non-athletes were tested in their sleep patterns and daytime concentration and functioning (Brand et al., 2010). Results suggested that those who participated in vigorous exercise slept better, resulting in better concentration during the school day, and even lowered anxiety and depressive symptoms.
The non-athletes proved to have significantly lower levels of regular sleep and daytime concentration.

Another area that research has contributed to is that of physical fitness and cognition. Cognition refers to thought processes and reasoning skills, which in turn, create knowledge. Many studies have shown that physically healthy individuals, children included, have better cognitive development (Etnier et al., 1997; Hillman et al., 2009). This is extremely important during the primary years of schooling when students are just beginning to learn and create educational habits that will follow them throughout their educational careers.

Higher test scores and grades have also been seen by those who participate in regular physical activity or engage sport participation (Cooper, Valentine, Nye, & Lindsay, 1999; Fejgin, 1994). In one study, researchers in Massachusetts investigated the specific link between physical fitness and proficiency on standardized tests (Chomitz et al., 2009). Students were measured in physical fitness as according to tests given in five fitness domains (similar to the six domains in California). The same students were also tested academically through the annual standardized test given each year in May. Students passing a higher number of fitness domains showed a greater score on their standardized achievement scores, specifically those scores in mathematics.

**Why is there a Relationship Between Fitness and Achievement?**

Though most of the research linking athletic participation to academic achievement describes the relationship between the two, very few describe why this relationship occurs. However, Broh (2002) examined reasons why academic achievement could be linked directly to athletic participation. The longitudinal study
provided results that supported the idea that athletic participation does in fact boost student achievement. In this study, three theoretical perspectives were examined and supported: the developmental model; the leading-crowd hypothesis; and the social capital model.

First, the developmental model suggests that sport participation increases work ethic and academic self-concept (Fejgin, 1994). This means that students take school more seriously and commit to their studies. The investigation yielded results suggesting that athletics helps build character in students, which directly impacts academic achievement.

Next, the leading-crowd hypothesis suggests “that by increasing social status, sports participation provides the student-athlete with membership in an academically oriented peer group that, in turn, facilitates higher academic performance” (p.72). He found that student athletes typically spend time with students who have a high rate of college attendance. This supports the idea that students follow the crowd that they associate with, and if that crowd is academically sound, the individuals will all do relatively well.

Finally, the social capital model refers to the social networks that a student is tied to. Broh (2002) states that, “participation in sports and other extracurricular activities may serve to create social capital within the family by providing opportunities for increased social interaction between the parents and the child” (p.72). The study findings showed that parents were more involved in the students’ academic ventures when they could involve themselves in sporting events with their child.
Clearly, there is a strong basis of literature supporting the idea that being physically active is beneficial for participating students. Not only does physical fitness contribute to the healthy overall development of children, it can also contribute to school success. With the rising obesity levels amongst children, it is important for schools to play a role in helping educate young children about leading healthy lives. In California, there are standards that schools are required to adhere to that aim to meet these educational goals in fitness and health.

**California Standards and Requirements in Physical Education**

The state of California has a framework in physical education that was designed to meet the needs of children of all ages enrolled in schools. This section will outline the current standards and requirements that schools have in the subject of physical education. As you will later see, though much work has been put into the creation of this physical fitness framework, it is not proving to be effective on a large scale based on assessment results.

**Physical education programs and requirements in California elementary schools.** The goal of physical education programs in schools is to teach students healthy lifestyle habits that will hopefully carryover into adulthood (Barnett, O’Loughlin, Paradis, & Hanley, 2006; Barrett, 2001). Students enrolled in California public schools are required to have physical education instruction. More specifically, students in elementary schools (grades 1-6) are required to have a minimum of 200 minutes of instruction in the area every two weeks, and students in middle and high schools (grades 7-12) are required to have 400 minutes (California Department of Education, 2006). Additionally, students are tested in physical education in the fifth, seventh, and ninth
grades. Despite what may seem like an appropriate amount of time required in the area of physical education, the results on these state tests do not indicate appropriate levels of proficiency.

**Physical education content standards.** As with all subject areas, there are standards in each grade level that are to be taught to the students in the area of physical education. In the model content standards handbook, the standards are preceded by a letter from the state board of education stating that, “mastering fundamental movement skills at an early age establishes a foundation that facilitates further motor skill acquisition and gives students increased capacity for a lifetime of successful and enjoyable physical activity experiences” (California Department of Education, 2009). A major goal in teaching physical education is to instill strategies that children can take with them into adolescence and adulthood in order to lead a healthy life.

In elementary schools, there are five “overarching” content standards that span each grade level (California Department of Education, 2006). Table 2.1 below displays the five standards.

*Table 2.1. California Physical Education Content Standards.*

| Standard 1 | Students demonstrate the motor skills and movement patterns needed to perform a variety of physical activities. |
| Standard 2 | Students demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities. |
| Standard 3 | Students assess and maintain a level of physical fitness to improve health and performance. |
| Standard 4 | Students demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance. |
| Standard 5 | Students demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity. |
In each of the five standard areas, there are specific tasks for each grade level that are to be attained by the end of the year. However, students are only tested in physical fitness during the 5th, 7th, and 9th grade school years. During the primary years, it is the sole responsibility of the teacher and school to monitor the proficiency of the students in the standards taught. Since the forthcoming study will focus specifically on physical education in elementary schools, the current fifth grade test results will be the version examined closely.

**Testing and Results.** As mentioned, the state of California requires that every student enrolled in public schools be tested in physical fitness in the fifth, seventh, and ninth grades. The tests focus on six fitness criteria: aerobic capacity, body composition, abdominal strength, trunk extensor strength, upper body strength, and flexibility. In each of these areas, specific activities are done to get a general assessment of a student’s overall fitness level. These activities are outlined below, as stated on the California Department of Education physical fitness testing website (2009).

- In aerobic capacity, students are required to participate in a paced run, a one mile run, or a walk (for students 13 and older).
- On the body composition test, students are weight and measured, as well as tested for body fat percentages using skin-fold or other devices. Body mass index (BMI) is also calculated for this portion of the test.
- In the area of abdominal strength, students are required to do curl-ups, which are fairly similar to sit-ups.
- In the trunk extensor strength area, students are required to do trunk lifts, meaning they raise their legs in the air while lying flat on the ground.
• For upper body strength, students can demonstrate proficiency by doing push-ups, modified pull-ups, or a flexed-arm hang.

• Finally, flexibility is determined by students participating in a sit and reach exercise, or by doing a shoulder stretch.

Each of these areas is tested with targeted goals in mind for students, whether it be a specific number of repetitions, or a time frame. These goals depend on the age and gender of the student participating. When students are assessed, they receive either a “pass” or “fail” in each of the areas. A passing score or time means that the student is considered in the “healthy fitness zone” in that particular area.

According to the Physical Education Model Content Standards for California Public Schools, “with adequate instruction and sustained effort, students in every school should be able to achieve the standards” (California Department of Education, 2006). However, all students in California schools are clearly not achieving all of the standards as seen by the results of the past fitness test results. In all three tested grade levels in 2009, scores ranged from approximately 30 to 38 percent of all students meeting the healthy fitness zone (HFZ) in all six of the tested criteria (California Department of Education, 2009). Table 2.2 below outlines these test results for just 5th graders in the state of California, and table 2.3 outlines the results for students only in San Diego (California Department of Education, 2009).
Table 2.2. Fifth grade physical fitness test results for the state of California from the 2008-2009 school year.

<table>
<thead>
<tr>
<th>Physical Fitness Area</th>
<th>Total Tested</th>
<th>% in HFZ</th>
<th>% not in HFZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerobic Capacity</td>
<td>454,281</td>
<td>65.7</td>
<td>34.3</td>
</tr>
<tr>
<td>Body Composition</td>
<td>454,281</td>
<td>68.4</td>
<td>31.6</td>
</tr>
<tr>
<td>Abdominal Strength</td>
<td>454,281</td>
<td>80.1</td>
<td>19.9</td>
</tr>
<tr>
<td>Trunk Extensor Strength</td>
<td>454,281</td>
<td>88.2</td>
<td>11.8</td>
</tr>
<tr>
<td>Upper Body Strength</td>
<td>454,281</td>
<td>69.8</td>
<td>30.2</td>
</tr>
<tr>
<td>Flexibility</td>
<td>454,281</td>
<td>70.8</td>
<td>29.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Physical Fitness Areas Meeting the Healthy Fitness Zone (HFZ)</th>
<th>Number</th>
<th>Percent</th>
<th>Cum. Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 of 6 fitness criteria</td>
<td>132,802</td>
<td>29.2</td>
<td>29.2</td>
</tr>
<tr>
<td>5 of 6 fitness criteria</td>
<td>121,171</td>
<td>26.7</td>
<td>55.9</td>
</tr>
<tr>
<td>4 of 6 fitness criteria</td>
<td>87,596</td>
<td>19.3</td>
<td>75.2</td>
</tr>
<tr>
<td>3 of 6 fitness criteria</td>
<td>58,289</td>
<td>12.8</td>
<td>88.0</td>
</tr>
<tr>
<td>2 of 6 fitness criteria</td>
<td>34,178</td>
<td>7.5</td>
<td>95.5</td>
</tr>
<tr>
<td>1 of 6 fitness criteria</td>
<td>15,682</td>
<td>3.5</td>
<td>99.0</td>
</tr>
<tr>
<td>0 of 6 fitness criteria</td>
<td>4,563</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total Tested</td>
<td>454,281</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.3. Fifth grade physical fitness test results for the county of San Diego from the 2008-2009 school year.

<table>
<thead>
<tr>
<th>Physical Fitness Area</th>
<th>Total Tested</th>
<th>% in HFZ</th>
<th>% not in HFZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerobic Capacity</td>
<td>36,224</td>
<td>68.9</td>
<td>31.1</td>
</tr>
<tr>
<td>Body Composition</td>
<td>36,224</td>
<td>71.5</td>
<td>28.5</td>
</tr>
<tr>
<td>Abdominal Strength</td>
<td>36,224</td>
<td>79.8</td>
<td>20.2</td>
</tr>
<tr>
<td>Trunk Extensor Strength</td>
<td>36,224</td>
<td>87.6</td>
<td>12.4</td>
</tr>
<tr>
<td>Upper Body Strength</td>
<td>36,224</td>
<td>67.1</td>
<td>32.9</td>
</tr>
<tr>
<td>Flexibility</td>
<td>36,224</td>
<td>70.8</td>
<td>29.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Physical Fitness Areas Meeting the Healthy Fitness Zone (HFZ)</th>
<th>Number</th>
<th>Percent</th>
<th>Cum. Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 of 6 fitness criteria</td>
<td>11,343</td>
<td>31.3</td>
<td>31.3</td>
</tr>
<tr>
<td>5 of 6 fitness criteria</td>
<td>9,475</td>
<td>26.2</td>
<td>57.5</td>
</tr>
<tr>
<td>4 of 6 fitness criteria</td>
<td>6,687</td>
<td>18.5</td>
<td>75.9</td>
</tr>
<tr>
<td>3 of 6 fitness criteria</td>
<td>4,387</td>
<td>12.1</td>
<td>88.0</td>
</tr>
<tr>
<td>2 of 6 fitness criteria</td>
<td>2,514</td>
<td>6.9</td>
<td>95.0</td>
</tr>
<tr>
<td>1 of 6 fitness criteria</td>
<td>1,128</td>
<td>3.1</td>
<td>98.1</td>
</tr>
<tr>
<td>0 of 6 fitness criteria</td>
<td>690</td>
<td>1.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total Tested</td>
<td>36,224</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As demonstrated through the above charts, a little less than one-third of 5th grade students across the state are passing each part of the test. This means that approximately two out of every three students are not in the healthy fitness zone in all six of the tested areas. Though results from San Diego County are slightly higher, the difference is not vastly significant. Because schools cannot control genetic or family factors that influence a student’s health, it is important to look at areas that can actually help to educate students about being physically active. Having quality physical education programs while at school is a good way to meet that need, however, in today’s time, there are many challenges associated with having high quality programs.

**Challenges to Quality Physical Education in California Public Schools**
It is apparent that children in our schools need education and experience in the areas of physical fitness and health. Since there is no way to monitor what type of health precautions are being taken in the home, providing this to them in the school setting seems like a very obvious start. Unfortunately, there are many issues that make delivering high quality physical education programs a big challenge. The issues of funding, high-stakes testing, time devoted to non-tested subjects, and teacher training all contribute to the overall struggle that schools face when trying to provide effective programs to their students.

**Funding.** The major objective of the No Child Left Behind Act of 2001 (NCLB) was to make administrators, teachers, and students more accountable for their adherence to the standards. Teachers were required to update credentials and training in order to attain “highly qualified” status, and schools began to get monitored more closely on standardized test scores (Fusarelli, 2004; Jennings & Renter, 2006). The ultimate goal in the passage of this act was to achieve 100 percent proficiency in student performance by the year of 2014 (United States Department of Education, 2009). While there are many merits behind the goals of this act, there are also several pitfalls.

In the past several years, California has had to make drastic cuts to its overall state and educational budgets. This has proved to create a complicated and trying time for districts who have had to decide what their schools can eliminate or reduce in order to remain within their allotted budget. In addition to these funding concerns, the No Child Left Behind Act has also made a huge impact on the distribution of state and federal funds in schools. The strict monitoring of a school’s performance based on student performance on standardized tests results has resulted in many districts failing to meet
their adequate yearly progress (AYP) (California Department of Education, 2009). Unfortunately, as schools fail to meet their AYP goals, or benchmarks, in this adequate yearly progress, they fall into a probationary status in which they have to devote a percentage of their funding to efforts of increasing student performance (Beveridge, 2010; Wilkins et al. 2003). Furthermore, if a school continues to fail to meet benchmarks, it moves into another classification known as “Program Improvement”. As a part of Program Improvement, districts are required to provide students with even more opportunity to increase test scores, meaning funding is devoted to intervention programs in the areas of math and language arts during and after school (United States Department of Education, 2009).

Though it is extremely important to ensure that all students are getting a high quality education in terms of math and language arts, these stringent requirements leave districts no choice but to focus primarily on improving the tested areas that factor into the AYP (Annesi, et al., 2005). Naturally, this results in school neglecting or cutting programs and areas that are not a piece of this statistic. Physical education, though instructionally required by the state, is no exception to this neglect.

**High-stakes testing.** Another challenge that schools are currently facing comes with the pressure to perform well on these “high stakes” standardized tests. Pressure to perform well comes from federal, state, district, and school administration for teachers and students to achieve measureable progress each year. Unfortunately, this pressure has seen to add stress to all stakeholders in the educational process (Barksdale-Ladd & Thomas, 2000; Woldk, 2001). Unfortunately, an anxiety-ridden school or classroom can greatly affect the atmosphere in which the students are expected to learn.
In one qualitative study, interviews done with teachers and parents reported both teachers and students feeling anxiety as a direct result of standardized tests (Barksdale-Ladd & Thomas, 2000). Teachers were unanimous about feelings of anxiety as a result of regular administrative pressure, as well as media coverage of test results. Additionally, the parents interviewed reported their children regularly felt stressed during the testing period. “Parents discussed high levels of anxiety and nervousness in their children related to taking the tests, and disappointment with test results even when higher scores were achieved” (p. 394).

**Time spent on non-tested subjects.** As mentioned, the only areas that are tested to factor into a schools adequate yearly progress (AYP) are math and language arts. The downfall to this is that when a school’s performance is not at its peak, the non-tested subjects are affected by funding first (Beveridge, 2010). While it makes sense to spend most of the funding on the areas that will be measured, areas that have once been valued in schools are being drastically altered. Additionally, even when funding is not an issue, the non-tested subjects are often pushed to the side in regards to instructional minutes per day and week. Music, art, and physical education have gotten the most attention as to the subjects that are being neglected.

Though many may think that cutting time spent on these non-tested subjects will help improve test scores, some studies suggest otherwise. A study done in Virginia explored this very phenomenon while surveying principals across the state (Wilkins et al., 2003). After questioning the participants about instructional minutes devoted to individual subjects and looking at standardized testing scores, there was no indication that reducing time in art, physical education, and music helped to increase overall scores.
In fact, the study found that schools that included these subjects on a regular basis, when taught by a trained professional, actually helped the test scores.

**Teacher training.** As mentioned earlier, current district budgets do not typically have much room to incorporate training in areas outside of the core subject areas (Beveridge, 2010). Additionally, physical education credentialed specialists are rarely hired to instruct students in elementary schools. Since these specialists are credentialed teachers, they require districts to fund them as they would with any other teacher, which proves to be costly. With the current budget conditions, positions such as these are often eliminated to save money, despite the fact that there is evidence that elementary students taught by specialists show significantly higher performance in the key areas (Beveridge, 2010; Sallis et al., 1997). As a result, general education teachers are left to instruct their students in the area of physical education. Unfortunately, studies have yielded results that show classroom teachers are not fully confident in their efforts to instruct in the area of physical education (Faucette, Nugent, Sallis, & MacKenzie, 2002).

Furthermore, with limited funds to incorporate new physical education programs or professional development, teachers are often left with just those skills learned in credential programs or from their personal background (Annesi, Westcott, Faigenbaum, & Unruh, 2005). Furthermore, with the budget restraints mentioned earlier, there is little funding devoted to professional development in the subject despite the fact that many teachers have stated it would be beneficial (Armour & Yelling, 2004; Morgan & Hansen, 2007). In fact, Morgan & Hansen (2007) conducted a study that yielded results stating that 90% of teachers would welcome more professional development in the subject.
The goal of a credential program for an aspiring teacher is to prepare him or her for a job in the classroom. Teaching methods and classroom management are typically covered, as well as activities in the field to familiarize the students with practice in the actual classroom setting. However, there is a noticeable gap in the credentialing programs as pertaining to physical education. Teachers receiving training in California programs receive little to no instruction on how to teach physical education. Below, table 2.4 outlines the credential requirements of three universities in the state of California and their requirements for education relating to health of physical education. The three universities described below reflect a representative from the California State University system, a private institution known for its efforts in research, and private religious institution that has a reputable teacher education program. This sample provides information from the different types of teacher preparation programs throughout the state of California.

*Table 2.4. Teaching credential requirements in the area of physical education.*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Program Requirements (in units)</th>
<th>Physical education/health program requirements (in units)</th>
<th>Physical education/health course titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford</td>
<td>45 units (minimum)</td>
<td>0</td>
<td>Not applicable</td>
</tr>
<tr>
<td>California State University, Fullerton</td>
<td>38 units</td>
<td>1</td>
<td>PE, Health, &amp; Mainstreaming Seminar</td>
</tr>
<tr>
<td>Pt. Loma University</td>
<td>33 units</td>
<td>0</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
The pending re-authorization of No Child Left Behind and the national and state economic forecasts leave schools with great uncertainty about instructional priorities and funding sources. Because of this, schools can assume that the funding, testing, and scheduling issues outlined above will continue to be issues in need of attention. Those in leadership roles are most likely to influence the development of stronger programs in the areas that prove inefficient.

**Educational Leadership Implications for Physical Education**

The data previously presented indicates that there is a significant need for improving the physical fitness levels of students. There is a clear connection between the physical condition of students and their ability to function and perform in the academic setting. Schools have a part to play in addressing the quality of physical fitness instruction, both from a compliance perspective, as well as an ethical perspective. California schools are obligated by education code to provide physical education to students in grades K-12. (Ed Code 51210, 1999). In addition, the primary purpose of public schools is to educate future citizens so the country can prosper and thrive because the citizens are well educated. Since being well educated has critical roots in physical well being, it would be a breach of the ethical duty of educators to ignore the data relative to student health and its direct connection to the achievement level of students.

Based on the legal and ethical imperative, school leaders must take the initiative to address the issues associated with delivering a quality physical education program. The state framework for physical education and the assessment protocols have been established. Therefore, what should be taught and measuring student progress are not issues. However, to complete the teaching-learning process, school leaders must address
how to teach, when to teach, and who is to teach physical education. As discussed above, issues associated with an already crowded instructional day, a lack of professional development for physical education, and gaps in teacher preparation in the instructional techniques for physical education, all present barriers to quality programs. Therefore, delivering high quality physical programs requires the application of leadership in the school setting.

This section will explore two distinct phases in the evolution of educational leadership and its place in improving education. They are instructional leadership and transformational leadership. Since educational leadership is applicable to all areas of instruction, such as those designated as core academic subjects such as math and language arts, it is applicable to physical education as well. Following this section is a discussion of distributive leadership, which is the conceptual framework used in this study.

**The evolution of educational leadership concepts.** Creating a single definition for leadership is a difficult task. Rost (1991) stated that “neither the scholars nor the practitioners have been able to define leadership with precision, accuracy, and conciseness so that people are able to label it correctly when they see it happening or when they engage in it” (p. 6). In spite of the difficulties in defining leadership, the evolution of thought in the educational leadership arena has been progressing. The concepts of instructional leadership and transformational leadership, and successor models such as professional learning communities and distributed leadership – all concepts that are attached to improvement of student performance - will be explored in this section.
**Instructional leadership.** The notion of *instructional leadership* was introduced by Edmonds (1979). It was a groundbreaking proposition at the time because it shifted the perception of a principal managing a school to a principal leading a school through change efforts in order to improve education. The meaning of instructional leadership was attached to the role of principal. Being an instructional leader meant that a principal would have in-depth knowledge of curriculum, instructional practices and how to bring about change and improvement (Hallinger and Murphy, 1985; Leithwood and Montgomery, 1992).

Instructional leadership takes place in a context, namely an educational setting. It cannot be divorced from the context in which it takes place. Edmonds (1979) added to the body of literature on instructional leadership with his notion of effective schools. When instructional leadership is successful in focusing the school culture on student outcomes, effective schools come into being, according to Edmonds.

The critique of the instructional leadership concept centered on the fact that it relies on one person – the principal – to do the lion’s share of the work. Thomas Sergiovanni noted, the term “instructional leader suggests that others have got to be followers. The legitimate instructional leaders, if we have to have them, ought to be teachers. And principals ought to be leaders of leaders: people who develop the instructional leadership in their teachers” (Brandt, 1992). This critique foreshadows the evolution of the concept of *distributed leadership* which will be discussed later as the theoretical framework used in this research study.

**Transformational leadership.** In the 1990’s, the complexities of school culture and the challenges facing the principal as instructional leader began to give way to a new
way of conceptualizing leadership in the school setting. While instructional leadership was based on a “command, control and coordinate” orientation, the emerging sense of educational leadership was that of transformational leadership. Just as instructional leadership had a context, that of effective schools, transformational leadership took root in restructured school settings (Hallinger & Wimpelberg, 1992).

Transformational leadership calls upon the principal to “not only assist staff in reaching their own conception of the problems facing the school, but also help generate and develop potentially unique solutions” (Hallinger, 1992, p. 37). He goes on to say that it is through the collective problem solving processes and capacity building that schools are transformed. Hallinger & Hausman (1992) note that the nature of restructured schools are places where decision making is decentralized and teacher and principals are viewed, not as followers and leader, but as active agents in problem identification and problem solving.

Educational leadership models have evolved over time. Instructional leadership and transformational leadership have served as foundational concepts in describing and predicting how leadership is manifested in the school settings. They have also served as springboards for new leadership models such as distributed leadership.

**Distributed Leadership Theoretical Framework**

Spillane’s (2006) distributed leadership model will serve as the conceptual framework for this study. As seen throughout this literature review, the area of physical education is in need of improvement. Distributed leadership holds promise as an approach to improving the quality of physical education programs because it takes into account shared responsibility among teachers and administrators. This section will define
distributed leadership, and then discuss how it may be connected to the work done in the proposed study.

**Defining distributed leadership.** The perspective of distributed leadership focuses on more than just the superintendent of a school district, the principal of a school site, or the lead teacher of a grade level. Distributed leadership examines leadership from a more cohesive lens. Spillane (2006) states that leadership practice is “the product of the joint interactions of school leaders, followers, and aspects of their situation such as tools and routines” (p.3). In other words, the focus is not just on the “sole leader” of the school site any longer. In this sense, the responsibilities of the organization are distributed in order to create more productivity. Gronn (2000) adds that distributed leadership may be even more important today due to downsizing because of budget restraints. Schools, in particular, have fewer employees in administrative positions, therefore “distribution needs to be incorporated into a reconceptualized view of the appropriate unit of analysis if we are to ensure that leadership is to retain its credibility, viability and utility (p. 318).”

According to Spillane, three elements are necessary in order to have a true distributed perspective on leadership (p. 4). They are:

- Leadership practice is the central and anchoring concern.
- Leadership practice is generated in the interactions of leaders, followers, and their situation; each element is essential for leadership practice.
- The situation both defines leadership practice and is defined through leadership practice.

Through three elements, it is clear that the idea of distributed leadership is not about one person leading and supporting the entire school enterprise. The idea is that leaders and
followers interact and share leadership in more of a give-and-take method where responsibilities can fluctuate within the parties involved. *Followers*, who were typically viewed as those who were influenced by the principal, are now being included in the leadership process.

Furthermore, in the distributed leadership process, Spillane states that teaching and learning should be at the heart of all routines. The goal of educational programs is to create students who are proficient learners who will ultimately be successful functioning in the real world; therefore, teaching and learning is the goal of all school programs. Physical education is one of those programs. Based upon the student fitness data, these programs are in need of leadership attention. The distributed leadership model provides a fresh perspective to improving physical education programs through shared commitment and effort.

According to Spillane, the distributed perspective “makes it possible for the work of leadership to be manageable” (p.88). In a time when districts are under scrutiny to perform at exceedingly high levels in the core subjects of mathematics and reading, there is limited time to focus on specifically strengthening physical education programs. By distributing the leadership amongst members of the school site or district, re-focusing programs may be a possibility that previously wasn’t an option.

Using this framework, this study will examine the survey responses and interview data of superintendents, assistant superintendents, principals, and teachers in the area of physical education.
Summary

The benefits of physical fitness for students in terms of emotional, psychological and emotional health are well established. The link between physical fitness and academic success has been determined. The ability of schools to provide a quality physical education programs have been negatively impacted by, among other factors, curricular demands that have reduced available time in the instructional day, lack of funding to provide credentialed physical education teachers in elementary schools, and lack of time and attention to the program on the part of administrators. In order to teach children to lead healthy and successful lives, we must instill in them a desire to grow in healthy ways. Therefore we need to examine how we can better their education in the area of physical fitness and health. This study will explore the current viewpoints of administrators and teachers in the area of physical education in order to better understand how we can strengthen these programs.
Chapter 3

Methodology

The overwhelming pressure on California school districts to perform at increasingly high academic levels has resulted in a decreased attention to some curricular programs, such as physical education. Additionally, due to funding and time restraints, physical education programs during the regular school hours are usually taught by general education classroom teachers who often have little to no experience or training in the area. A review of the literature suggested that physical activity and participation can increase academic achievement, social skills, self-esteem, and overall physical health. Therefore, in order to reduce the barriers to high quality physical education programs, it is important to examine how the programs are viewed by administrators and teachers in the state of California.

Purpose of the Study and Research Questions

This study explored the experiences and attitudes of administrators and teachers regarding physical education programs. The findings of the study may inform policy makers and practitioners about barriers that impede quality physical education programs and supports that promote quality physical education programs. The research questions were as follows:

1. How do superintendents exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?
2. How do elementary principals exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?
3. What do elementary teachers view as barriers and supports of a highly effective physical education program?

**General Research Design and Rationale**

This study followed a mixed methods research design using both the survey and interview process. Creswell (2006) states that the use of both quantitative and qualitative methods, in combination, provides a better understanding of the research problem and questions than either method by itself” (p.552). The nature of this study lends itself to the use of the mixed methods design because the data gives a broad and deep view into the perceptions of teachers, principals, and superintendents. By gaining insight via surveys and interviews into the thinking and experiences of the individuals who have various degrees of leadership and instructional responsibility for delivering curriculum, the researcher was able to analyze the multiple perspectives of the participants and the ways in which those perspectives differed or were similar.

**Participants**

The participants in this study included 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> grade teachers, the principals of the schools in which they teach, and the superintendents of the districts in which the schools are located. The rationale for selecting grades one through three was because physical fitness testing begins in the fifth grade. Because of this, the primary
grades are essential to the future success of students in terms of fitness levels and performing well on the state assessments. By understanding the physical education experience and attitudes of teachers and administrators in these grade levels, the findings and recommendations from the study can be applied at the earliest possible time in the school experience of children.

Schools that have credentialed physical education teachers who deliver the physical education instruction were not included in this study. This assures that the data reflects the perspective only of classroom teachers who are responsible for the delivery of physical education instruction as part of their regular teaching duties.

The participants for the survey and interview portions of the study were selected through convenience sampling, meaning they “were willing and able to participate” (Creswell, 2008, p. 155). Of the 43 districts in San Diego County, 37 serve elementary age students. These districts were contacted through the superintendent’s office with a request that teachers and principals in schools without physical education teachers be invited to participate in the survey portion of the research. Four districts responded with the desire to participate in the study. Access to teacher and administrative email addresses were requested and granted by the districts. All potential participants were invited to participate via an email with a link to the survey. A detailed explanation of the survey respondents is provided in Chapter 4.

To select the participants for the interview portion of the research, the researcher examined the completed survey data for the district with the highest percentage of survey completion by each of the different participant groups (superintendents, principals, and teachers). The district superintendent was contacted with the request to interview teachers
in grades one through three, principals of three schools, and the superintendent.

Permission was granted by the district and interviews were conducted. As with the survey data, a detailed explanation of the district and participants for the interview process is outlined in the forthcoming chapter.

**Instrumentation**

The survey was distributed and collected via SurveyMonkey. Three forms of the survey were used. The first survey was designated for district administrators, specifically superintendents and assistant superintendents (Appendix A). The second survey was used with elementary school principals (Appendix B). Finally, the third survey was used with elementary school teachers in the first, second, and third grade (Appendix C). Each of the surveys included a combination of likert scale questions as well as open-ended questions. Table 3.1 demonstrates how the survey questions are related to the research questions. Since three different surveys were used in the study, question numbers preceded by an “S” are those from the superintendent survey, preceded by a “P” are from the principal survey, and preceded by a “T” are from the teacher survey.
Table 3.1. Research questions and corresponding survey questions.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Survey Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring quality and outcome of programs</td>
<td>S5, S6, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S20, S21, S22, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P20, P21</td>
</tr>
<tr>
<td>Professional development</td>
<td>S5, S6, S7, S16, S17, S18, S19, P6, P7, P15, P17, P18, T21, T22</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>S5, S6, S16, S17, S18, S19, P5, P6, P15, P17, P18</td>
</tr>
<tr>
<td>Barriers</td>
<td>S5, S6, S7, S16, S17, S18, S19, P5, P6, P7, P9, P10, P15, P17, P18, T2, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T24, T25, T26, T27</td>
</tr>
<tr>
<td>Supports</td>
<td>S5, S6, S7, S16, S17, S18, S19, P5, P6, P9, P10, P15, P17, P18, T2, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T24, T25, T26, T27</td>
</tr>
</tbody>
</table>

The interview questions were developed by the researcher. The questions were designed to expand on the data gathered through the survey (Appendices D, E, & F). The interview protocol was followed with each participant, with follow up questions being asked when clarification was needed. Table 3.2 demonstrates how the interview questions are related to the research questions. Because three different participant groups were a part of this study, question numbers preceded by an “S” are those from the superintendent interview protocol, those preceded with a “P” are from the principal interview protocol, and those preceded with a “T” are from the teacher interview protocol.
Table 3.2. Research questions and corresponding interview questions.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Interview Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring quality and outcome of programs</td>
<td>S2, S4, S5, S6, P2, P4, P6, P7, P8, T2, T5</td>
</tr>
<tr>
<td>Professional Development</td>
<td>S4, S6, P4, P5, P6, P8, T2</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>S3, S4, S6, P3, P4, P5, P6, P8, T2</td>
</tr>
<tr>
<td>Barriers</td>
<td>S2, S3, S4, S5, S6, P2, P3, P4, P5, P6, P7, P8, T1, T2, T3, T4, T5, T6</td>
</tr>
<tr>
<td>Supports</td>
<td>S2, S3, S4, S6, P2, P3, P4, P5, P6, P7, P8, T1, T2, T3, T4, T5, T6</td>
</tr>
</tbody>
</table>

Data Collection Procedures

After receiving district permission to conduct survey research, potential participants were emailed the consent letter and a link to the survey created through the web-based program SurveyMonkey. As noted in the letter of invitation, by beginning the survey, the participants agreed to be a part of the research study. Once the surveys were completed and submitted, the researcher had access to the data. The surveys were completed in October and November of 2010, and at the end of the survey period, the researcher did an initial analysis of the data in order to create interview questions for the second portion of the data collection process.

Once interview participants were selected, informed consent was obtained and interviews were conducted and audio taped. Interviews took place at various locations suggested by the participants and agreed upon by the researcher. Interviews took place in January and February of 2011.

As the interviews were completed, the audio recordings were transcribed through the web-based company Casting Words. As the transcriptions were completed, the researcher reviewed them and contacted the participants with any clarification questions.
When the interview and transcription processes were complete, the researcher began the coding process. During this process, if there were additional follow-up questions or need for clarification, the researcher contacted the participants for further information.

**Data Analysis**

The survey results included likert scale responses, as well as open-ended responses. Both nVivo and the SPSS program were used in the data analysis of the surveys. nVivo was used in order to analyze the content of the open-ended responses, while SPSS was used to make comparisons using the likert scale responses.

The interview data was initially reduced through the careful examination of the researcher. The data was reviewed multiple times, and common topics, or themes, were identified as the first state of the coding process. According to Miles and Huberman (1984), this data reduction “sharpens, sorts, focuses, discards, and organizes data in such a way that final conclusions can be drawn and verified (p.24)”.

From there the codes were used in combination with the nVivo program in order to determine the frequencies of each theme in the interview data. These themes were then organized into charts in order to display the frequencies, as well as to highlight dialogue examples from each thematic area.

Using both the survey and interview data, the analysis revealed themes that were compared among and between the three participant groups – teachers, site administrators and district level administrators. These themes were explored to determine areas of overlap and how often they appeared in the data.

Through the data analysis process, the theoretical framework based on Spillane’s (2006) distributive leadership was utilized. When coding the information from the survey
and interview into themes, areas in which distributive leadership may strengthen physical education programs were noted. The data was then applied to the research questions, and findings and recommendations were developed.
Chapter 4

Findings

The purpose of this study was to examine perceptions of administrators and teachers in the area of physical education. Using the mixed-methods research design, the researcher was able to identify themes pertaining to the following research questions:

1. How do superintendents exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?

2. How do elementary principals exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?

3. What do elementary teachers view as barriers and supports of a highly effective physical education program?

The research provided insight from participants on the reality of district and site physical education programs, as well as ways to increase the quality of elementary school programs. An analysis of the data revealed themes in the following areas: equipment, accountability, funding, progress monitoring, time, parental involvement, professional
development, mandated minutes, nutrition and health, stress, program quality, test pressure, communication, desired personnel, and personal connections.

In the following sections, the survey and interview data will be reported, analyzed, and interpreted.

**Survey Data Presentation and Analysis**

This section presents data from the survey. The survey method was used in order to gather general information from a group of participants on their perceptions of physical education. With this data, the researcher was able to obtain initial data pertaining to the three research questions, as well as determine areas that needed further clarification that could be gathered through the interview process. First, the context of the survey portion of the study will be discussed, including information about the four districts that participated in the survey portion of the study. Next, the procedures used to organize and analyze the data will be discussed. Third, the findings will be displayed. Finally, an interpretation of the findings will be presented.

**Context.** Participants in the survey represented four districts in San Diego County. In order to protect the confidentiality of the participants and districts, no names were attached to survey responses and district names were labeled by numbers rather than by name. Table 4.1 displays the four districts that participated in terms of size and location. The chart outlines the size of each district in regards to the number of schools in each, however, it is presented as a range as opposed to an exact number in order to protect the identity of the districts. The location of each district is presented in terms of a general cardinal direction to ensure confidentiality.
Table 4.1. Summary of districts participating in survey research.

<table>
<thead>
<tr>
<th>District</th>
<th>Location</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 1</td>
<td>North San Diego County</td>
<td>0-15 Schools</td>
</tr>
<tr>
<td>District 2</td>
<td>North San Diego County</td>
<td>0-15 Schools</td>
</tr>
<tr>
<td>District 3</td>
<td>South San Diego County</td>
<td>16-30 Schools</td>
</tr>
<tr>
<td>District 4</td>
<td>North San Diego County</td>
<td>31-45 Schools</td>
</tr>
</tbody>
</table>

Of the four districts that participated in the study, only superintendents, principals, and first through third grade teachers were invited to participate. Additionally, if the teachers were not responsible for delivering physical education instruction to their students, they were eliminated from the sample.

Procedures. After the two month completion window for survey participation closed, the researcher evaluated the submissions for completion. The final sample of completed surveys included 2 superintendent surveys, 10 principal surveys, and 44 teacher surveys. In order to organize the data, the researcher used both the SPSS and nVivo computer programs. SPSS was used in order to analyze the likert scale questions, and nVivo was used in order to analyze the open-ended follow-up questions.

Findings. As mentioned, the likert scale responses were entered into the SPSS computer program which gave the researcher initial data in regards to the research questions. Additionally, they were a good indication of certain areas that needed additional clarification in the interview process. As with the likert scale questions analyzed in SPSS, the open-ended questions organized in the nVivo program helped mold the interview question topics that were covered in the second portion of the data collection process. Additionally, the open-ended questions acted as a starting point for
developing common themes that created a bridge between the two data collection pieces. Since three categories of participants participated in this portion of the research, the findings will be presented separately in terms of superintendents, principals, and teachers.

**Superintendent survey data.** Two of the four superintendents completed the survey (Appendix A). The commonalities and differences found in the superintendent survey responses are discussed as follows.

The survey showed that both superintendents felt strongly about physical education needing to be a high priority in their districts. However, both also disagreed with the statements that funds were annually set aside for use in physical education. Both participants also stated that they had specific ways to monitor physical education, but in the open-ended question asking how they monitor, both stated the state physical fitness testing that is only done in the 5th and 7th grades is the primary tool they use. Both respondents did state they received the annual physical fitness results directly from the state, and both stated they discuss the annual scores with teachers in their districts.

There were two areas to which both superintendents responded with “neutral”. First, neither participant was in agreement or disagreement with the question regarding annual professional development in the physical education arena. Second, both were neutral in response to the question about whether or not they ensure that teachers are basing physical education instruction on state standards.

**Principal survey data.** Ten principals completed the survey (Appendix B). In tables 4.2 and 4.3 below, statements are displayed for which there was a 50% or more agree or strongly agree responses or disagree or strongly disagree responses.
Table 4.2. Survey statements in which principals were in agreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of Respondents in Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.E. equipment funding is an area that is present during my annual budget planning and conversations.</td>
<td>50 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I feel my teachers would benefit from more physical education professional development.</td>
<td>90 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I schedule time to observe teachers during their physical education time.</td>
<td>60 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I have specific ways in order to monitor how well students at my site are performing in the area of physical education.</td>
<td>60 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I seek out opportunities to speak with teachers about physical education instruction.</td>
<td>50 percent agreed</td>
</tr>
</tbody>
</table>

Table 4.3. Survey statements in which principals were in disagreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of Respondents in Disagreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities for professional development in the area of physical education are included in annual budget planning and conversations.</td>
<td>60 percent disagreed</td>
</tr>
<tr>
<td>During the hiring process, I evaluate potential teachers on their attitudes and skill levels regarding physical education instruction.</td>
<td>70 percent disagreed or strongly disagreed</td>
</tr>
<tr>
<td>The district administration is highly involved in physical education efforts in our district.</td>
<td>70 percent disagreed or strongly disagreed</td>
</tr>
</tbody>
</table>

The data collected from the principal surveys identified areas that bear discussion.

Professional development in the area of physical education was noted by 90% of the respondents as a high area of need. Sixty percent stated they regularly monitor physical
education instruction, and have specific ways to monitor the success of their students in physical education. Half of respondents stated that they make an annual allocation in the site budget to purchase new physical education equipment. Finally, 70% of respondents stated that the district office is not very involved with the implementation and maintenance of physical education, and it is not often used as a hiring qualification for teachers.

*Teacher survey data.* Forty-four teachers completed the survey (Appendix C). In tables 4.4 and 4.5 below, statements are displayed for which there was a 40% or more agree or strongly agree responses or disagree or strongly disagree responses.

*Table 4.4.* Survey statements in which teachers were in agreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of Respondents in Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel supported by administrators in my P.E. instructional efforts.</td>
<td>50 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I feel that I have been properly trained in the area of physical education instruction.</td>
<td>65.9 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>More professional development in the area of P.E. would be beneficial to me.</td>
<td>50 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I feel that having credentialed P.E. education specialists at my school site would increase the success of P.E. among students at the school.</td>
<td>69.4 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I am familiar with the California content standards in P.E. for my grade level.</td>
<td>75 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I feel competent in my abilities to deliver instruction in P.E. based on the California content standards.</td>
<td>83 percent agreed or strongly agreed</td>
</tr>
<tr>
<td>I feel confident in my abilities to deliver instruction in P.E. based on the California content standards.</td>
<td>77 percent agreed or strongly agreed</td>
</tr>
</tbody>
</table>
Table 4.5. Survey statements in which teachers were in disagreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of Respondents in Disagreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My school site has adequate equipment for my use in instructing physical education.</td>
<td>41 percent disagreed or strongly disagreed</td>
</tr>
<tr>
<td>Teaching P.E. is a high priority in my weekly teaching efforts.</td>
<td>61 percent disagreed or strongly disagreed</td>
</tr>
<tr>
<td>It is evident that administrators at my school consistently monitor the instruction of physical education on campus.</td>
<td>59.1 percent disagreed or strongly disagreed</td>
</tr>
</tbody>
</table>

The survey completed by teachers provided some insight into the barriers and supports that teachers perceive in the area of physical education instruction. First, 75% of the teachers stated they were familiar with state standards, 77% felt confident and 83% felt competent in their physical education instruction expertise. However, 61% of teachers stated that physical education was not a high priority in their daily teaching efforts.

There were contradictions in the teacher survey data. First, though 75% of teacher respondents stated that they were familiar with the content standards in physical education, 77% felt confident and 83% competent in delivering the instruction, and 66% felt they had been properly trained in the area, 50% of respondents went on to say that additional professional development in the area would be desired. Next, though half of teacher participants stated that administration was supportive in the area of physical education, 41% stated there was not adequate equipment for use, and 60% stated administration did not frequently monitor the instruction of physical education on their campus. The areas of professional development, equipment, and administrative
monitoring needed additional clarification, so questions pertaining to these areas were included in the interview question topics.

**Interpretation of survey data.** This section interprets the data with regard to the research questions. The section also discusses how the survey responses informed the development of the interview questions.

**Superintendents.** The first research question for superintendents had three parts. The data associated with each is discussed below.

*How do superintendents exert their leadership in the area of physical education in terms of monitoring the quality and outcome of programs?* Both respondents stated they have specific ways to monitor the quality and outcome of the physical education programs within their district. When asked to elaborate on those methods in the open-ended question, four methods were identified: a) annual state testing results, b) informal observations, c) report card marks, and d) conversations with teachers and site administrators. Of the four methods reported by the superintendents, report card marks and the annual state testing results were empirical in nature. Depending on the way informal observations and conversations with site administrators and teachers are conducted, they may render empirical or anecdotal data. One superintendent reported that report card marks in physical education do not reflect the grade level standards in the subject. The data generated by the report cards would be less specific than if it was linked to the state standards.

*How do superintendents exert their leadership in the area of physical education in terms of professional development?* Though the superintendents in this study viewed physical education as important, there was no mention of budget allocation for the
purpose of professional development in the area of physical education. The superintendents both neglected to answer the question regarding professional development. Both selected “neutral” their answer to whether funds are allocated for professional development in the area of physical education.

*How do superintendents exert their leadership in the area of physical education in terms of resource allocation?* As mentioned above, superintendents view physical education as an important part of the school day, however, neither noted that allocating funds for physical education programs was done on an annual basis. In referencing the lack of annual allocation of resources to physical education, one superintendent stated that there is “minimum implementation” in the area of physical education. The other superintendent said the physical education program is funded through a grant, so there was no need to allocate annual funds.

*Principals.* The research question for principals had three parts. The data associated with each is discussed below.

*How do principals exert their leadership in the area of physical education in terms of monitoring the quality and outcome of programs?* Sixty percent of the principals stated they schedule time to observe physical education instructional time and have specific methods in which to monitor student progress. The follow-up question asking participants to provide the amount of time spent observing physical education revealed that principals spend under one hour per week for this task. Additionally, the follow-up question pertaining to the methods for monitoring student progress revealed that principals get most of this information through conversations with the classroom
teachers. This data supports the statement about speaking with teachers about physical education in which half of the respondents stated they do.

How do principals exert their leadership in the area of physical education in terms of professional development? When questioned about whether or not funding was annually allocated for professional development opportunities at the school sites, 60 percent of participants disagreed. There was a contradiction to this data in that 90% of respondents stated that they felt teachers at their prospective sites would benefit from professional development in the content area. In order to explore this contradiction, the topic of professional development was included in the interview process.

How do principals exert their leadership in the area of physical education in terms of resource allocation? As mentioned above, 60% of the principal participants stated that professional development opportunities were not annually funded at their school sites. On the other hand, 50% stated that funding was allocated on a yearly basis for new physical education equipment.

Teachers. The research question pertaining to the teachers was designed to examine teacher perceptions of supports and barriers that teachers face in delivering physical education instruction to their students. The review of the survey data is presented in two separate sections: supports and barriers.

What do elementary teachers view as supports of a highly effective physical education program? Teachers reported four categories of supports at 50% or higher rates: a) administrative support (50%), b) confidence (77%) and competence (83%) in their ability to teach physical education, c) proper training in the area of physical education, and d) trust in their abilities to deliver high quality instruction.
What do elementary teachers view as barriers of a highly effective physical education program?

Forty-one percent of teachers disagreed that they have access to adequate equipment for use in instructing physical education. Fifty percent of the principals surveyed stated that physical education equipment is funded annually. Both superintendent participants indicated that annual allocations to physical education are not made. The high rate of principals (50%) and teachers (41%) reporting access to equipment as a barrier to quality physical education instruction merits further investigation. Therefore, this subject is included in the principal and teacher interview process.

Sixty-one percent of survey participants stated that teaching physical education was not a priority in their daily teaching efforts. Because teachers also mentioned feeling confident, competent, and fully trained in the area of physical education, it was important to incorporate interview questions as to why physical education was not a high priority in the daily teaching efforts of the teachers.

By looking at both the likert scale and open-ended data gleaned from the surveys, the researcher was able to create an interview protocol for the three subgroups of participants for the second part of the data collection (Appendices D, E, & F). The interviews were used in order to fill the gaps in specific areas pertaining to the research questions, as well as provide a rich piece of data that could be presented in a narrative format. Following the presentation of the interview data is an integration of both the survey and interview portions.
Interview Data Presentation and Analysis

This section outlines data obtained during the interview process. The context of the study in regards to participants and district information is presented first. Next, the procedures and overall findings will be outlined. Finally, an interpretation of the data in terms of participant groups will be revealed.

**Context.** Participants in this portion of the study were from one school district in San Diego County. In order to protect the confidentiality of the participants and districts, instead of referring to the teachers by name, each was given a pseudonym in the form of a code. These codes are used in the following sections in the analysis of the interview data. Additionally, the three schools used in the study were assigned a letter (A, B, and C). Table 4.3 outlines the participant information by revealing the participant pseudonym code, position, gender, school location, and years of experience, and the date the interview was conducted.
Table 4.6. Participant Data.

<table>
<thead>
<tr>
<th>Code</th>
<th>Position</th>
<th>Gender</th>
<th>School</th>
<th>Years of Experience</th>
<th>Interview Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>Superintendent</td>
<td>M</td>
<td>N/A</td>
<td>31; 2 as superintendent</td>
<td>02-04-11</td>
</tr>
<tr>
<td>P1</td>
<td>Principal</td>
<td>F</td>
<td>A</td>
<td>15; 5 as principal</td>
<td>02-01-11</td>
</tr>
<tr>
<td>P2</td>
<td>Principal</td>
<td>F</td>
<td>B</td>
<td>24; 13 as principal</td>
<td>02-14-11</td>
</tr>
<tr>
<td>P3</td>
<td>Principal</td>
<td>M</td>
<td>C</td>
<td>15; 5 as principal</td>
<td>02-22-11</td>
</tr>
<tr>
<td>T1</td>
<td>1st Grade Teacher</td>
<td>F</td>
<td>A</td>
<td>10</td>
<td>02-07-11</td>
</tr>
<tr>
<td>T2</td>
<td>1st Grade Teacher</td>
<td>F</td>
<td>B</td>
<td>6</td>
<td>02-24-11</td>
</tr>
<tr>
<td>T3</td>
<td>1st Grade Teacher</td>
<td>F</td>
<td>C</td>
<td>30</td>
<td>02-08-11</td>
</tr>
<tr>
<td>T4</td>
<td>2nd Grade Teacher</td>
<td>F</td>
<td>A</td>
<td>24</td>
<td>02-07-11</td>
</tr>
<tr>
<td>T5</td>
<td>2nd Grade Teacher</td>
<td>F</td>
<td>B</td>
<td>21</td>
<td>02-02-11</td>
</tr>
<tr>
<td>T6</td>
<td>2nd Grade Teacher</td>
<td>F</td>
<td>C</td>
<td>20</td>
<td>02-08-11</td>
</tr>
<tr>
<td>T7</td>
<td>3rd Grade Teacher</td>
<td>F</td>
<td>A</td>
<td>8</td>
<td>02-11-11</td>
</tr>
<tr>
<td>T8</td>
<td>3rd Grade Teacher</td>
<td>F</td>
<td>B</td>
<td>26</td>
<td>02-08-11</td>
</tr>
<tr>
<td>T9</td>
<td>3rd Grade Teacher</td>
<td>F</td>
<td>C</td>
<td>34</td>
<td>02-10-11</td>
</tr>
</tbody>
</table>

The three schools included in the study had kindergarten through sixth grade classes, similar enrollment and demographics, and qualified for Title I services at the
time of the study. Furthermore, none of the sites had physical education specialists at the time of the study leaving physical education instruction to the general education teachers.

**Procedures and overall findings.** In order to organize the data, the researcher initially identified the themes common within the interviews across all participant groups. The researcher identified the initial themes after analyzing each of the 13 interview transcripts three times. The transcripts were imported into the computer program nVivo and data was coded in order to determine the frequency each identified theme was discussed within the interviews. Table 4.7 outlines the 15 most common themes discussed throughout the interviews. The list is organized in order from most frequent to least frequent.
Table 4.7. Themes and Frequencies.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Overall Frequency</th>
<th>Superintendent (1)</th>
<th>Principals (3)</th>
<th>Teachers (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>31</td>
<td>0</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Accountability</td>
<td>24</td>
<td>3</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Funding</td>
<td>23</td>
<td>6</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Progress Monitoring</td>
<td>21</td>
<td>2</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Time</td>
<td>19</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Parental Involvement</td>
<td>19</td>
<td>2</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Professional Development</td>
<td>17</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Mandated Minutes</td>
<td>15</td>
<td>1</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Nutrition &amp; Health</td>
<td>14</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Stress</td>
<td>13</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Program Quality</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Test Pressure</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Communication</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Desired Personnel</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Personal Connection</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

Representative comments from each of the three participant groups as they relate to the 15 themes are displayed in table 4.8. All comments were from participant interviews that took place between the months of January and February 2011. The examples include samples from each of the three participant groups, when possible, and are identified as S for superintendent, P for principal, and T for teacher.
Table 4.8. Themes and Dialogue Examples.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Dialogue Example(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>“We don’t have enough equipment. It’s either missing or we don’t have enough of it.” (T1) “I had to buy my own equipment for P.E.” (T8) “We have very old equipment.” (P2)</td>
</tr>
<tr>
<td>Accountability</td>
<td>“No one checks to see what we are doing or if we are getting our minutes in.” (T5) “No one monitors me. Nobody has ever come out and told me, you’re not getting enough minutes in.” (T1)</td>
</tr>
<tr>
<td>Funding</td>
<td>“It is very limited in regards to oversight for physical education” (S1). “Lack of funds in the district has hindered us.” (T6) “I think the limited budget really hurts P.E.” (T2)</td>
</tr>
<tr>
<td>Progress Monitoring</td>
<td>“It’s up to the classroom teachers. I don’t monitor the progress.” (P1) “I just visually monitor the student progress. We don’t do any written records or anything,” (T3) “The state test scores are reviewed by myself, and then that data goes out to the school sites. I have not had follow-up conversations at any district or site level administration.” (S1)</td>
</tr>
<tr>
<td>Time</td>
<td>“There’s too much going on. I don’t have time for P.E.” (T5) “We have so many responsibilities, and more every year. It’s P.E. that ends up suffering because there isn’t any time for it.” (T7)</td>
</tr>
<tr>
<td>Parental Involvement</td>
<td>“I think the responsibility should be shared with the parents and schools.” (T5) “Parent education is key I think”. (T6) “I think we could do a better job educating not only the students, but the families too.” (P1)</td>
</tr>
<tr>
<td>Professional Development</td>
<td>“I piloted the SPARK program last year, so I was the only one trained.” (T6) “We were trained in a program years ago. I’d imagine any of the new teachers in the last five years don’t even know about it.” (T1) “Professional development in P.E. hasn’t been a priority in the district. I think it’s a concern because our new teachers don’t come in with these skills. So those are the kids that are going to be missing out on those different foundations of physical education.” (P1) “No where in the training to complete your tier two administrative credential has anything to do with physical education.” (P1)</td>
</tr>
<tr>
<td>Theme</td>
<td>Dialogue Example(s)</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mandated Minutes</td>
<td>“To be honest with you, I doubt I make the state requirement of, what is it? 100 minutes a week or something?” (T5)  “I’d like to see thirty minutes a day, but can’t squeeze it in with all of the other curriculums.” (T6)  “I’ve always made sure teachers put their P.E. minutes in their schedule.” (P2)</td>
</tr>
<tr>
<td>Nutrition &amp; Health</td>
<td>“The older students are bringing to school real unhealthy choices of food like Hot Cheetos.” (P1)  “In the past three years we’ve had the highest number of children with high blood sugar ratio, and it tends to be our Hispanic population.” (P1)</td>
</tr>
<tr>
<td>Stress</td>
<td>“I think teachers are really stressed with getting the allotted minutes for academics and so if something is going to be cut, it’s P.E.” (P1)  “There is a frustration with teachers thinking they need to be sports experts.” (P2)</td>
</tr>
<tr>
<td>Program Quality</td>
<td>“Free time is going on a lot more than it should be.” (P2)  “Then there are other teachers that say, ‘well it’s just required, and so we’ve got to do it.’ What are the students gaining from that? Probably not much.” (S1)</td>
</tr>
<tr>
<td>Test Pressure</td>
<td>“When I’m forced to look at scores at the end of the year for reading and math, I mean, that’s what comes first. Until they allow me a more balanced curriculum, it’s not going to change” (T8).  “If it wasn’t for reading, writing, and math, I’d probably be out there every day.” (T5)</td>
</tr>
<tr>
<td>Communication</td>
<td>“A barrier is the lack of education that our parents have and our inability to communicate out to them the dangers of those types of food and proper diet and exercise.” (P1)</td>
</tr>
<tr>
<td>Desired Personnel</td>
<td>“If I had the utopia of what I liked to, we would have P.E. specialists.” (S1)  “I want a P.E. specialist” (T1).  “When I grew up we had a P.E. teacher. I’d like that again.” (T3)</td>
</tr>
<tr>
<td>Personal Connection</td>
<td>“P.E. was always my favorite thing to do, so I make time for it.” (T3)  “I have bought my own equipment in the past, because I enjoy doing it.” (T1)</td>
</tr>
</tbody>
</table>
Once the initial list of themes was created, frequency rates determined, and representative comments were identified, the researcher organized the themes as they related to the research questions. The following sections will present an interpretation of the interview data in regards to each specific research question.

**Interpretation of interview data.** This section connects the themes that were coded and introduced in the previous section with the three research questions in the study. The interpretation is organized using information and dialogue from the different interviews in order to best depict the participant voices. In order to best display the data, each of the research questions is broken down into smaller questions since each research question has two or more sub-questions embedded. The interpretation will begin with the question regarding superintendents, then the principals, and finally the teachers. The themes that helped answer the three questions were those of equipment, accountability, funding, progress monitoring, time, parental involvement, professional development, mandated minutes, nutrition and health, stress, program quality, test pressure, communication, desired personnel, and personal connections.

**Analysis of the superintendent data.** The superintendent participant shared significant concerns about the current state of physical education programs in the district. Though knowing the importance of physical education, and even citing research of it’s benefits to students, he cited funding, time, a lack of desired personnel, specific program dynamics and quality, parental involvement, and the overall monitoring of programs as areas that were either in the way of building a high quality program, or as areas that needed to be strengthened in order to build a better program. These areas are discussed
below in detail in specific relationship with the first research question pertaining to superintendents.

*How do superintendents exert their leadership in the area of physical education in terms of monitoring the quality and outcome of programs?* In regards to monitoring the quality and outcome of programs, the superintendent interviewed stated, “It is very limited in regards to oversight for physical education” (S1, Interview, February 4, 2011). He indicated that this was due to budget constraints, followed by a lack of desired personnel and the ability to designate those personnel to tasks specifically targeting the subject of physical education.

*Funding.* The initial concern of the superintendent participant in the area of monitoring physical education programs was the lack of funding designated to the area. He claimed the *pressures of standardized testing* in the core subject areas was monopolizing categorical funds, leaving little for areas such as physical education. Despite knowing it is a state-wide requirement for each student to have 200 minutes of instruction in, he stated that there is little follow-through by those at the state and federal level in the way of *accountability.* The following is a statement the participant made regarding the irony of physical education as a mandated subject:

P.E., as I said, is the only content area that has mandated minutes, but yet there are no accountability measures to it other than a coordinated compliance review or something of that nature. However, the chances of a district getting called out on that are pretty minimal when you know every year you’re going to get called out on the FBBs, the BBs, or the fact that you are a PI district (S1, Interview, February 4, 2011).

In the above statement, the participant is referring to students who are Far Below Basic (FBB) and Below Basic (BB) based on STAR testing, and schools that are in Program
Improvement (PI) as a result of not attaining their goals on the Academic Performance Index (API). All of these reasons, he stated, are why it is difficult to concentrate on an area such as physical education that is not likely to be scrutinized if not up to par. As a result, funding primarily goes to programs, personnel, and resources in order to monitor the quality of core subject areas, leaving little for physical education.

*Desired Personnel.* Another factor impeding the monitoring of programs according to the superintendent participant was the lack of desired personnel to oversee such programs. The first position mentioned was that of an Assistant Superintendent of Educational Services. Due to funding limitations, as mentioned above, the district was unable to have a person in this position, making it very difficult to have someone at the district level devoting time to the curricular area of physical education. He feels the absence of someone in this role results in “a loss of emphasis that physical education needs in regards to the connection of academic achievement and physical fitness” (S1, Interview, February 4, 2011).

The immense task of overseeing the core curricular areas such as math and language arts left the administration in the district office no other choice but to rely on site principals to oversee the physical education programs. He mentioned the only thing he does directly as far as working with the site principals in the subject area is looking over the fifth and seventh grade physical fitness test results and handing them off to the principals. He stated, “I have not had follow-up conversations at any direct and detailed level with the site level administrators” (S1, Interview, February 4, 2011). However, as noted later in this chapter, it was no easier for the principal participants to devote much energy to the quality of physical education at their school sites.
The other area involving personnel that the superintendent felt was a barrier to physical education in the district was the inability to fund credentialed physical education specialists in the district. He stated that even just two credentialed teachers “could really give the district a full blown physical education program, as well as bring in the recreational piece” (S1, Interview, February 4, 2011). He indicated these specialists could split their time between the different schools in the district, taking classes out with the classroom teachers to instruct with high quality physical activities and games. The specialists would have an overall view of the student progress throughout the district, and the classroom teachers, in turn, would be receiving ideas and training in how to better instruct the kids in physical education on a more regular basis. Unfortunately, he mentioned, funding is again preventing this from happening.

*How do superintendents exert their leadership in the area of physical education in terms of professional development?* As you will see below, because the superintendent did little in the area of resource allocation in the area of physical education, little could be done in the area of professional development. However, the participant did mention several things he would like to see in place regarding professional development. First, he would like to have additional personnel, in the role of credentialed physical education specialists, who could work with and train the teachers in physical education instruction. Next, he would like to train both teachers and parents in areas specific to physical fitness and health.

*Desired Personnel.* The superintendent participant was very clear in his stated desire to adopt a structured physical education program and hire credentialed specialists to begin implementing the program and training teachers. However, funding was the
main inhibitor of executing this desire. In previous years, the district did devote
categorical monies at certain school sites to implement a physical education program
entitled SPARK. He stated, “Some schools have incorporated some elements of SPARK”
(S1, Interview, February 4, 2011). Most of the schools he mentioned only had portions of
the program, and the few schools that had a whole staff training had it many years ago.
Additionally, as some of the teacher and principal participants also mentioned, additional
training has not been offered, and new teachers have not yet been exposed to the SPARK
model. Therefore, the participant would like to see a program that the entire district could
adopt that could create more physical education instructional opportunities for all
teachers.

As previously mentioned, the superintendent would like to see credentialed
physical education specialists in the district in order to strengthen programs. He said, “If I
had the utopia of what I liked to, we would have P.E. specialists” (S1, Interview,
February 4, 2011). He would like to have one or two teachers in this position so each
site would have access to them in order to train general education teachers and model
sample lessons.

*Parent Involvement.* The superintendent participant mentioned bringing parents
and teachers together to train more in the area of physical fitness and health in order to
strengthen the home and school connection and in turn, strengthen physical education
programs. He stated the district Wellness Committee has been effective at
communicating with parents about the importance of these particular areas and that the
message needs to be spread even further. He stated:
The Wellness Committee is trying to grow and bring in more community resources to educate our students and families on the importance of balanced nutrition and getting out and getting some exercise, even if it’s walking, or throwing a Frisbee, whatever the case may be. Again, we need families to recognize that fitness doesn’t have to be that of a pure born athlete. Going for a walk, walking the dog, playing tag. All games that we played growing up. Now kids are doing that in front of a television with thumbs and fingers as compared to what we did 15 years ago when the technology wasn’t there (S1, Interview, February 4, 2011).

The participant went on to say that unless the community continued to be trained to recognize the importance of fitness and health, there would not be that buy in to strengthen programs at the site level. Fortunately, he said, the district was on target in regards to continuously building upon this program and developing new ways to strengthen student health.

How do superintendents exert their leadership in the area of physical education in terms of resource allocation? The superintendent participant noted that there is not much done at the district level in terms funding physical education programs. The thematic areas touched upon in response to this issue were those of funding and time.

Funding. As mentioned in both of the above questions, funding was the biggest barrier in providing leadership in the area of physical education at the district level. Because of this, the superintendent participant stated that the oversight he has in physical education programs in the district is limited. The responsibility is really that of the site principals to allocate their site funds to incorporate new equipment or other program necessities to ensure that the students are receiving the mandated 200 minutes of physical education instruction every two weeks.

Time. In addition to funding, allocation of time to provide leadership in the area of physical education was not a priority at the district office level. With the innumerable
tasks placed upon the superintendent to oversee and monitor the quality of education occurring at every school site in the district, there was little time to devote to subjects that did not factor into the overall (Academic Performance Index) API and (Adequate Yearly Progress) AYP scores of the district. As mentioned above, the participant stated a desire for additional personnel who could assist with working more closely with the area of physical education, but until then, the time spent looking at resource allocation in the area would continue to be limited. Since there is no state or federal compliance pressure relative to the quality or outcomes of physical education instruction, exerting leadership from the district level was not a priority. In direct reference to this accountability piece, he stated, “It’s required, but there’s no real hammer. I think human nature is going to say, yes, we’re meeting the requirement, but it’s not going to go to that next level until there is something to hold us to a higher standard” (S1, Interview, February 4, 2011).

**Analysis of the principal data.** The three principal interviews revealed four common and consistent themes. They are a) accountability, b) mandated minutes, c) professional development, and d) parental involvement. In the following sections, these themes are discussed relative to the three research questions.

*How do principals exert their leadership in the area of physical education in terms of monitoring the quality and outcome of programs?* The three principal participants had similar methods to monitoring the quality and outcome of physical education programs at their respective sites. All three identified mandated minutes and accountability expectations as two monitoring tools they use.

*Mandated Minutes.* At the start of each principal interview, they were asked to describe their direct role in physical education at their sites. The first thing that each
participant mentioned was that he or she ensured that all teachers had scheduled in the mandatory 200 minutes of physical education time for every ten days. One of the principals stated, “I’m conscious that you have to have 200 minutes of physical education over the period of 10 days, and I have always made sure teachers document that in the schedule turn into me” (P2, Interview, February 14, 2011). The other two principals also accounted making sure the mandated minutes are written in their teachers’ annual schedules.

Another issue regarding mandated minutes that was consistent among all principal participants was the awareness they had that most teachers were probably not actually completing the 200 minutes, despite writing it in their schedules. The three stated that physical education is the first thing to get cut when there are any interruptions to the regular schedule. One participant stated:

Yeah, I think teachers are really stressed with getting the allotted minutes for academics, so if something’s going to be cut, it’s going to be P.E. Unfortunately, some of their kids are our most needy kids who really need that physical education. But I know teachers are quick to say, and I have heard it from many of them, that if there’s a shortened day due to a fire drill or some other school event, they’re going to cut the P.E. instead of reading or writing (P1, Interview, February 1, 2011).

Though all three principals discussed noticing similar things to the above quote at their sites, none mentioned trying to do anything about it in order to meet the state requirements in minutes. In fact, one of the participants stated the teacher schedules with the documented 200 minutes do not leave his office. He mentioned that the state requires it, but that is where it ends.

Accountability. Accountability was a frequent topic throughout each of the principal’s interviews. The three participants mentioned accountability when discussing
the mandated minutes as well as within their own roles when adhering to district and state policies in the area of physical education. Participants expressed minimal concern when responding to the questions regarding demands or pressure from the district or the state regarding physical education. They all shared that there did not seem to be a sense of urgency in schools becoming proficient in physical education. One participant stated the following about the emphasis the district and state places upon him in the area:

Really, it’s just the minimum requirement. Other than that, there’s been some board policies by the district to improve student nutrition. But just in terms of the types of food students bring to school, and the times of celebrations that teachers might have, making sure that everything that is brought in is of nutritional value, and not just sugar and sweets all the time. So really, it doesn’t seem to me that there is really any sense of urgency. The sense of urgency right now is math and language arts. If you don’t meet AYP markers, you end up in Program Improvement, but if you don’t meet physical fitness standards, what happens (P3, Interview, February 22, 2011)?

Another principal participant also mentioned the emphasis that was on the core curricular areas such as math and reading, with little emphasis on physical education. She stated the following pertaining to her training as an administrator:

When I was a new principal and had to get the Tier Two credential, the only training that I had to have pertained to technology, language arts, reading intervention, and public relations. It had nothing to do with physical education. No where in that training is there anything to do with physical education, and I don’t feel it’s been addressed enough as it is (P1, Interview, February 1, 2011).

The consistency between the principals on the demands they feel are placed upon them in the area of physical education all go hand in hand with the fact that the focus of public education is currently on the academic success of students. Therefore, most of the pressure and demands placed upon administrators are in those core subject areas. This
results in the area of physical education getting minimal attention when it comes to the monitoring of these programs.

*How do principals exert their leadership in the area of physical education in terms of professional development?* Professional development was, in most cases, an area of mere desire for the three principal participants. There was discussion of past professional development efforts. Principals also talked about ideas in terms of future professional development implementation. In all three cases, the professional development ideas had not yet become a reality due to the funding in the district at the time of the study.

*Professional development.* Within the three principal interviews, the only mention of current professional development was that of teachers researching a particular program or just one or two teachers being sent to a training. One participant mentioned that she was unable to find prices of a current program (SPARK), which coupled curriculum, equipment, and training, so she gave the job of researching it to a teacher at her site. Another participant sent two teachers to the SPARK training over the summer, with the goal of having them training the other teachers at their site. He stated, “The teachers that went to the training will discuss and share materials with other teachers to give them ideas on more organized formats for coordinating a physical education chunk of time (P3, Interview, February 21, 2011).

One participant stated that the teachers hadn’t had current professional development in physical education, but the entire staff had been trained in the SPARK program approximately six years ago. However, she also mentioned that there had not
been any follow up training since she started as an administrator around that same time.

She stated:

I think part of what the new teachers were lacking, in my opinion, or that I didn’t receive, was the training. Even just knowing which essential skills, large motor and fine motor skills, need to be addressed. It’s a concern because our teachers don’t come in with those skills, so those are the kids that are going to be missing out on those different foundations of physical education (P1, Interview, February 1, 2011).

All three principals interviewed voiced their concerns over not being able to offer consistent professional development to their staff.

_How do principals exert their leadership in the area of physical education in terms of resource allocation?_ According to the principal participants, resource allocation in the area of physical education is usually limited to equipment purchases at the start of the year. As mentioned in the previous section, professional development in the area is typically desired, but the funding has not been there to support it.

_Equipment_. Equipment is one area that all the principal participants stated they allocate annual funds to. However, where these funds came from differed from participant to participant. Two of the participants stated that most of the support comes from the Parent-Teacher Association (PTA). One of them stated the following regarding PTA support:

In the past, actually every year, our big fundraiser, which is the Jog-a-thon, makes all the money for new P.E. equipment. That’s how we supplement our P.E. equipment. I’ve made it more of a community issue because we don’t have the funds for it. So I’ve brought in the PTA and other associations to help us (P1, Interview, February 1, 2011).

The third participant credited a grant for the money she was able to devote to physical education. She stated that receiving $5,000 to use directly in correlation with
health and wellness opened up the opportunity to replace equipment that was old and inadequate.

**Analysis of the teacher data.** The nine interviews that were conducted with classroom teachers responsible for delivering physical education instruction offered information regarding barriers and supports to highly effective physical education. A noticeable commonality among most participants was that all were more verbal about barriers than supports of the subject area. The theme most frequently identified by teachers as a support for quality physical education was the personal connection to it, whereas the themes that correlated with barriers were equipment problems, test pressure, limited time to meet the mandated minutes, and a lack of professional development. The following section presents the interview data by first highlighting the supports and then the barriers to a highly effective physical education program.

*What do elementary teachers view as supports of a highly effective physical education program?* Though most of the teachers discussed they felt physical education was an important subject that they valued, the barriers greatly outweighed the supports in terms of program quality. There was only one theme that was consistent throughout the interviews in terms of supports, and that was the theme of the personal connection that the individuals had with physical education.

*Personal connection.* Teachers reported that they viewed their personal attachment or appreciation of physical education and overall health to be a significant support to their ability to provide a highly effective physical education program. Six of the nine participants stated they make time to do physical education because they enjoy it.
or feel it is very important, not because it is mandated by the state. When asked about getting in the mandated minutes for instruction, three of the teachers stated they try their hardest to meet the 200 minutes because they know how beneficial it can be. One teacher stated, “I just feel P.E. is important, so I have to put it into my day” (T1, Interview, February 7, 2011). Another said, “First graders really need it [physical education] every day, because they just need to go out and run. I know how important that is for them”. (T3, Interview, February 8, 2011).

This sense of personal connection resulted in four of the participants reporting that they purchased some equipment for physical education with their own money. As mentioned in the following section, this was partly due to the lack of equipment at their sites, but more because they felt it was worthwhile. One participant said, “P.E. was always one of my favorite things to do. So, I always would just buy and invest in my own P.E. equipment because I enjoy doing it” (T5, Interview, February 2, 2011). A second teacher mentioned she used to ask her family for physical education equipment as a Christmas present because she loved playing games with the kids.

The final evidence suggesting the teacher participants felt a personal connection to the physical education and health was their concern for the current overall health of students enrolled in their schools. Teachers spoke of the need for physical education to try and combat some of the unhealthy eating patterns and lifestyles of the children. One of the participants spoke of her love for exercise and healthy eating and how she would really like to see it carry over into the schools. She said:

My son is in the third grade and I try to exercise with him. I think the schools are responsible too. The standards come from the state, but I really think it should be shared. How about that? I think parents are responsible,
and I am not perfect. My son loves sugar, but I try to regulate what he eats and how active he is. I think we need to do that in the schools too (T3, Interview, February 8, 2011).

Another teacher also mentioned wanting to have more of a connection with the parents in terms of fitness and nutrition. She stated:

I personally think that those children that I have seen who are obese have parents who are obese. Their parents are feeding them and feeding them horribly. Then they get to a point where they cannot even participate in physical education if they are too big. My family is basically vegan, so we don’t eat that way, and I try to encourage the plant-based choices into snacks and nutrition with my kids so they have some healthy advice (T5, Interview, February 2, 2011).

Several other teachers mentioned the urgency behind educating the students how to eat healthy and continue to exercise as well. Each of the teachers who mentioned this made statements such as the two above, mentioning that they are working hard and feel it’s important, so the parents should too.

*What do elementary teachers view as barriers of a highly effective physical education program?* Throughout the teacher interviews, barriers hindering the quality of physical education were frequently mentioned. The frequent barriers in teaching physical education as seen by the teachers were equipment problems, test pressure, limited time to meet the mandated minutes, and a lack of professional development. This section will reveal the perspectives of the teacher participants regarding each of these major barriers.

*Equipment.* One of the barriers mentioned by teachers in the area of physical education instruction was equipment. According to the participants, equipment commonly used in first, second, and third grade physical education were items such as
balls, jump ropes, and Frisbees. Teachers stated equipment was limited, out of date, and unorganized.

All teacher participants stated that a lack of equipment was an issue at their school sites. Four of the nine participants actually mentioned equipment problems as being a barrier before the interview question pertaining to equipment was even broached. One teacher stated, “We don’t have enough equipment for P.E. Either it’s missing, or there just isn’t enough” (T1, Interview, February 7, 2011). One participant said:

We don’t have enough equipment for the kids to actively participate. There was a time when I had enough soccer balls for every pair of kids to use. Now I am struggling for just a few. It makes it hard for the kids to really understand the concepts or even get a good exercise when they are standing around waiting for their turn to play. It’s just not effective (T9, Interview, February 10, 2011).

As reflected in the previous quote, the lack of equipment made it very difficult for the teacher participants to get all of the students involved in the physical education routine. The teachers mentioned that there is too much standing around in physical education. One teacher even suggested the lack of equipment may be the reason she saw a lot of teachers just taking their students out onto the field to have free play.

As mentioned in the previous section regarding supports of physical education programs, several of the participants mentioned using their own money to go out and purchase their own equipment for the subject because it was so hard to come by in previous years. One participant stated, “I have my own balls, jump ropes, and a parachute to use during P.E. I learned over the years that it was hard to come by, so I just started collecting my own” (T3, Interview, February 8, 2011).
In addition to the lack of equipment, several of the teacher participants mentioned that the equipment they did have on campus was often old or out of date. One teacher stated, “Having so many kids use the equipment every year, it gets very worn out, very quickly” (T7, Interview, February 11, 2011). Another participant alluded to the fact that the equipment purchased is sometimes not of very high quality, therefore resulting in a shorter lifespan of use. Though most of the sites received some new equipment at the start of each school year, teachers felt that much needed to be replaced before the end of the year.

The final comments on physical education equipment at the sites were regarding the organization of it. The teachers stated the equipment they did have on their campuses was usually very unorganized. One teacher mentioned her site having a locked closet where all the equipment was kept. She stated, “We just go in and grab what we need. There is no sign out sheet or anything. If it’s there, it’s there” (T1, Interview, February 7, 2011). Another teacher mentioned a similar system of organization:

We used to have a room where all of the equipment was kept. We had a sign up sheet, but no one enforced it or even used it. People would come in, grab what they wanted, and then it seemed as if it would never return. It would get really frustrating because you would go in and look for it every week, and it would just never be there. So now we have our own few pieces of equipment in each of our rooms, but there is just not enough for the whole class (T7, Interview, February 11, 2011).

While equipment issues were mentioned frequently throughout the interviews, the problem was strictly causing the physical education programs to suffer in terms of student participation or the variety of games and activities that could be played. The issue of test pressure was one barrier that actually prevented teachers from making it out to physical education in the first place.
Test Pressure. As mentioned, test pressure was often seen as a barrier for getting out to physical education on a regular basis or for the mandated amount of time. Participants mentioned that this test pressure impacted the curricular areas focused on during the day, largely because of the huge importance the district, state, and federal government placed upon the annual standardized tests. One of the participants claimed she did not put as much effort into planning for physical education instruction because of the rigid core subject standards. She stated, “Where’s the focus? I have to teach them to read and write. Read and write” (T3, Interview, February 8, 2011). Another teacher raised concerns about physical education never getting the attention it deserved. She stated, “When I am forced to look at scores at the end of every year in reading and math, I mean, that’s what comes first. Until they allow me a more balanced curriculum, it’s not going to happen” (T8, Interview, February 8, 2011).

The recognition of administration focusing primarily on the tested areas appeared to impact the teachers as well. Not one of the nine teacher participants mentioned any administrative monitoring of the physical education instructional time. In fact, all were in agreement that the only requirement they have is to put the mandated minutes in their annual schedules. One of the participants referred to this fact in the following statement:

I don’t think I have ever seen an administrator observe my class during physical education time. In fact, I am pretty sure no teacher is monitored during that time because many of them just let the kids run around and have free time, and the others are rarely out. This reinforces the fact that physical education is not a big priority right now. I think the focus on all of the core academics makes teachers view physical education more of a burden. After all, our schools are being judged on how well we perform academically, not how healthy our kids are (T7, Interview, February 11, 2011).
These stressors the teacher participants felt in regards to the standardized testing contributed to the lack of time left in the day to accommodate the mandated physical fitness minutes.

*Limited time.* The pressure placed upon teachers to focus on the core content areas such as mathematics, reading, and writing restricted the time teachers had in the school day for physical education. In addition, things such as assemblies, library, computer lab, and disaster drills were seen as barriers to being able to fit in physical education on a regular basis. One teacher stated, “Finding time is really hard. We’re asked to do so many different things right now that to fit in anything is hard” (T8, Interview, February 8, 2011). In regards to the many different directions teachers were being pulled, another participant stated:

I’m going here, there, and everywhere. I love shortened Wednesdays, don’t get me wrong, but with that, and now that we take Mandarin and it is a half an hour long. But it’s five minutes to get them ready, and takes them 10 minutes to unwind when they come back. That’s 45 minutes, plus the hour early for dismissal. That’s almost two hours out of our day right there. It’s a concern to me (T5, Interview, February 2, 2011).

These additional programs during the day caused many of the teachers stress. A second teacher mentioned the restraints as the main reason her physical education minutes get cut. She said:

We have too many restraints these days. We have the Academic Language Development block now embedded in our schedules every morning, and now the elective wheel. There are only so many minutes in the day. So it tends to be the performing arts and P.E. that are getting crunched and not getting the minutes they are entitled to (T9, Interview, February 10, 2011).

Another teacher mentioned the fact that her students recognize when the physical education time is getting cut short. She said, “You know, there’s never enough time. We
really need more minutes in the day to fit it in, but the kids love it and complain when we
don’t go out, so I do my best to fit it in” (T4, Interview, February 7, 2011).

Unfortunately, like all the participants, reduction in physical education time had to be
made from time to time. One teacher mentioned that her program does not get nearly the
time she would like. She said, “I’d like to see thirty minutes a day, but I just can’t fit it in
with all of the other curriculums” (T6, Interview, February 8, 2011).

Throughout all the interviews, time was mentioned as a major barrier to physical
education. Most teachers voiced that it made getting any minutes in very stressful to
them. One participant mentioned:

It’s frustrating because there are always things interrupting our
instructional minutes. There are assemblies, fire drills, the new elective
wheel twice a week. When all these things cut into the reading and math
time, P.E. is what suffers. Even though the kids really benefit from doing
it, it is the first thing to go. (T2, Interview, February 24, 2011).

Unfortunately, as the previous section reviewed, most teachers were aware of the
fact that not much would change in terms of time allotment for physical education unless
something was done about the pressures associated with the standardized tests.

Professional Development. The last barrier teachers mentioned in terms of
adequate physical education instruction was the lack of professional development. Five of
the nine participants felt they had the skills needed to deliver instruction, but did not
have, or had not been trained in a specific physical education program.

Teachers referenced the SPARK program either being used in the past or as
something that their site was looking into. Four of the participants stated the program was
purchased by their site several years ago. However, one participant said the training was
inadequate because it was done in one short time period. Another said when she changed
grade levels, she was not given the new curriculum folder that matched up with her new
grade level. A third participant mentioned the fact that anyone who was new in the
district or at the site did not receive materials or training because there had never been
any follow-up. She stated, “New teachers might get some of the old binders with the
activities in them, but they probably don’t have the training. I think the year after our
initial training they did a follow-up with anyone new to our site, but they haven’t done
that since” (T1, Interview, February 7, 2011).

Throughout the interviews, those who had not been trained in the SPARK
program really voiced concern over the fact that there was no set program for them to use
in physical education. One participant stated:

You know, in our core subject areas, we have specific curriculum we can
follow in order to deliver the content standards. Though some teachers use
it as a supplement, it is there for us and very scripted. It makes teaching
the subjects more manageable. We don’t have that in P.E. We are left with
a few pieces of equipment and a requirement stating we need to meet the
minutes. It would make sense to have the same type of curriculum that
could help drive our instruction (T2, Interview, February 24, 2011).

Another teacher expressed that she did not have the skills necessary to teach
physical education. She said, “I just don’t have the knowledge to teach physical
education. I don’t know. I just go out and play a few games and do the best I can” (T8,
Interview, February 8, 2011).

**An Integrated Analysis of the Data**

In this section the survey and interview data will be considered as a whole. The
data from all three participant groups will be integrated and analyzed to determine the
common themes among the groups, as well as where there are differences among the
groups.

Problems with physical education were commonly mentioned throughout the data
collection process. There was a lot of mention about how programs could be improved,
and why they are currently suffering. One commonality among the participant groups
was that principals stated they schedule time to observe physical education in action,
however they typically do not monitor progress on a regular basis, aside from having it
documented in the schedules. Teachers too mentioned they did not see principals observe
them during the physical education time block. Some teachers mentioned this as a reason
they felt physical education was not a valued subject at their site, whereas others
recognized it may have been due to the fact that administrators have very busy schedules.
The contradiction between the principal data and teacher data on this topic may be due to
teachers and principals being in different districts or school sites.

Equipment was another big concern of the teachers and principals. Though it was
stated during the survey process that principals allocate funds towards equipment, the
interview process proved different. There was concern over the lack of equipment, or the
poor condition of it. However, all participant groups noted the continued lack of funding
prevented most sites from allocating funds directly to physical education, in turn,
affecting the ability to purchase adequate equipment.

Professional development was an area that all three participant groups mentioned.
Each group stated that professional development was not part of an annual plan, but all
felt it would be beneficial. The superintendents and principals all felt the teachers would
benefit from more training, and the teachers felt it could help them run better programs. However, the funding just was not making its way to that arena in the budget.

Lastly, test pressure seemed to be a concern of each participant group in that it affected the quality of the physical education programs in their district or site. Everyone feels the pressures to have the students perform well in the core academic areas, so physical education is put on the backburner. Time in the school day is affected because teachers and administrators want to ensure that students are proficient in the tested subject areas. Participants recognize this, and it discourages many of them, but they do not feel like anything can be done about it without legislative change.

**Conclusion**

The data that came from the surveys and interviews in this study provided insight as to the current reality of physical education programs. The survey data presented a solid background of common areas of concern for the subject, while the interview data provided a rich description of the different phenomena’s facing administrators and teachers in the area. Though much of the data suggested that administrators and teachers are not happy with the current reality of the programs, it was also able to provide numerous suggestions as how to make programs stronger. It is important to look at the implications this data can have on people in positions of leadership in school districts with physical education programs taught by classroom teachers, in order to attempt to strengthen programs. The following chapter will outline these implications, as well as make connections to literature.
Chapter 5
Discussion

The ever-growing body of research regarding childhood obesity, health problems in America, and the importance of exercise warranted the need for research pertaining to the health of students in public schools. Therefore, the objective of this study was to examine common perceptions of administrators and teachers in the area of elementary physical education. Topics involving the current leadership practices of administrators, as well as supports and barriers to quality physical education programs were broached throughout the mixed-methods research design study. The data collected and analyzed throughout the study were able to provide important information in addressing the three research questions:

1. How do superintendents exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?

2. How do elementary principals exert their leadership in the area of physical education programs in terms of:
   a. Monitoring the quality and outcome of programs?
   b. Professional development?
   c. Resource allocation?

3. What do elementary teachers view as barriers and supports of a highly effective physical education program?
This chapter will provide a summary of the study findings, an interpretation of those findings, a connection to the literature reviewed for the study, implications for professionals in the field of elementary education, limitations of the study, and comments on future direction.

Summary of Findings

This section will review the findings from this study. In order to best display findings, the results will be displayed in terms of the three research questions. First, the survey and interview data from the superintendent participants will be used to review the components of the first research question. Next, the data from principal participants will be used in regards to the second question. Finally, data from teacher participants will be presented in order to support the third research question.

How do superintendents exert their leadership in the area of physical education in terms of monitoring the quality and outcome of programs? All three superintendent participants noted that their ability to engage in monitoring the quality and outcome of physical education programs was significantly hampered by a lack of time, budget restraints, the urgency of monitoring the core academic areas due to accountability pressures, and the lack of qualified or desired personnel such as assistant superintendents and/or credentialed physical education instructors.

All three indicated that they review report card and/or state testing data to gain some sense of student progress in the area of physical fitness and participation level in physical education programs.

How do superintendents exert their leadership in the area of physical education in terms of professional development? Time and money affected the area of
physical education professional development amongst all of the superintendent participants. The interview participant noted that professional development would be desired in his district, but funding needed to be allocated for that specific purpose.

**How do superintendents exert their leadership in the area of physical education in terms of resource allocation?** The three superintendent participants stated that funds were not annually allocated to the specific purpose of physical education. There were just too many demands placed upon the role of a superintendent to allow for time designating funds for the subject. This was typically left up to the site principals in order to ensure adequate equipment and/or training was provided at each school.

**How do principals exert their leadership in the area of physical education in terms of monitoring the quality and outcome of programs?** The principal participants stated that monitoring physical education programs came from having teachers document the mandated minutes in their annual schedules, allowing for informal observation time, and conversing with teachers about the subject. Interview participants mentioned that though the minutes were documented, they were not always being met. Participants also mentioned that there was no real pressure in terms of accountability placed upon them in the area of physical education. This was not coming from the district, or the state level.

**How do principals exert their leadership in the area of physical education in terms of professional development?** Participants stated there was not much in the terms of funding for professional development. However, almost all of the principals stated that their teachers would most likely benefit from more training in the area. Principals were concerned with the lack of professional development, because those teachers who were
trained in physical education, had the training many years previous, and there were never additional follow-up trainings.

How do principals exert their leadership in the area of physical education in terms of resource allocation? Principal participants stated physical education equipment as the major area annually funded in regards to physical education. Principals mentioned funding as a barrier in trying to purchase the adequate needs for the program. However, participants ensured that monies from the annual budget, grants, or the PTA were designated for this specific purpose.

What do teachers view as supports of a highly effective physical education program? Teachers in this study mentioned the personal connection to physical education and student health as being a support. Teachers also stated they were familiar with the content standards and felt confident and competent in their abilities to deliver high quality instruction. However, each of these supports was affected by the many barriers as described by the teacher participants.

What do teachers view as barriers of a highly effective physical education program? The teacher participants stated they experienced problems accessing adequate equipment for physical educational use. Additionally, most stated that physical education was not a priority in their daily teaching efforts. Participants accredited this to standardized test pressure, limited time to meet the mandated minutes, and a lack of professional development.

Interpretation of Findings

Analysis of the data suggests that all sub-groups of participants valued the premise of physical education and felt it was important. While there is universal
agreement that physical education is important, four factors were preventing the delivery of high quality physical education programs. First, pressure to perform well on standardized tests in core subject areas such as math and reading were dominating the time and funding in many school settings. The lack of funding prevented schools from providing adequate equipment for physical education use. Next, though many teachers felt they came into the profession with adequate knowledge of physical education instructional strategies, they felt there needed to be more structure or scripted programs, as well as additional professional development in the curricular area. Finally, many felt as though there was not a strong enough connection between the schools and families in the area of health and physical fitness. Each of these factors appeared to impede programs, resulting in a less than positive outlook on current physical education programs amongst the study participants.

The pressures of standardized testing. The biggest factor that seemed to impede physical education programs in the schools and districts that participated in this study was the pressure from standardized testing. Each of the participant groups mentioned it as a barrier in devoting funding and making time for physical education programs. Superintendents recognized that physical education was put on the back burner because of these reasons. Since the state monitored programs based on the standardized test results of each school, this had to be the focus for the district office. Funding, though already limited, had to be devoted to program improvement for all schools, especially those that proved to be underperforming in the past. Superintendents were juggling many different roles regarding student achievement in these core areas, leaving little to no time for devotion to physical education instruction.
Principals were not seen to have much time to devote to physical education instruction either. Funding was not plentiful, and as it was, money for physical education had to come from outside sources such as parent groups or grants. The monitoring of programs, though claimed to have been done, was not seen by teachers. Principals also appeared to have a lot on their plate in terms of program monitoring, and time was an issue in regards to physical education as well.

Lastly, though teachers stated they felt confident and competent in their abilities to deliver high quality instruction in the area, there just was not enough money or time to make it happen. The pressure for them to instruct students in the core subject areas so they were adequately prepared for the culminating examinations appeared to guide their day, therefore preventing high quality physical education from happening.

Each participant group felt the pressure to prepare students for the standardized tests in the core area, therefore, money was allocated to those subjects, and physical education was simply not seen as a priority.

**Professional development in physical education.** As mentioned, funding for all aspects of public education was hard to come by. Therefore, professional development for teachers was limited. Additionally, because of the pressures of standardized testing mentioned above, professional development that was specific to physical education was negatively affected because monies were used to train teachers in strategies specific to the core subject areas tested. The superintendents did not deal with any type of professional development in physical education, and principals limited any training to that of one or two teachers at most. However, all participant groups stated professional development in the area would greatly improve programs.
The home-school connection in health and fitness. A last major area of concern for all participant groups was that of the connection between home and school. Topics mentioned were those regarding educating families and teachers together about the importance of fitness and nutrition. The superintendent participant interviewed mentioned the desire to provide training to teachers and parents in this important area. He stated that until the community had buy in, physical education would not have much pull in the community. Therefore, parents and teachers needed to come together in order to place more importance on the subject.

Principals were often concerned with the lifestyle habits that were passed on from parents to their children. According to several participants, the sedentary lifestyles and poor nutritional habits of students were learned from their parents. Better communication was mentioned as a possible solution in order to try and combat part of this problem.

Finally, teachers mostly noted the poor choices and nutrition that parents were sending with their kids for lunches and snacks. Participants, like some principals, voiced concern over the health of students being learned from parents. They stated that children who were overweight or obese, typically, had parents who were the same.

Each of these areas suggested that the parental involvement is increasingly important in improving physical education programs. Just as students need to have parents who place emphasis on an education in the core subject areas such as math and reading, they need to do so with fitness as well. Students who feel their families value a particular subject might in turn perform better.

Each of these areas factored into a perception by participants that physical education was not a subject area to be proud of. It is important to not only look at ways
this date connected to previous literature, but also to look at ways to improve upon these areas is important for leaders in all aspects of the subject.

**Placing the Findings in Context**

This research study provided information about physical education programs using the voices of administrators and teachers. The data obtained connected to several areas of previous research. This section will expand upon the connections to student health, the effect physical education can have on academics, statewide physical fitness testing, funding issues, high stakes testing, and teacher training.

**Student health.** Research has previously stated there were rising obesity rates amongst children and adolescents in the United States (Menestrel & Perkins, 2007; Ogden & Flegal, 2008). This is largely due to the increasingly sedentary lifestyles of children, as well as nutritional habits (Green & Reese, 2006; McKenzi & Kahan, 2008). Though exercise is one way to combat obesity, this study has shown that many administrators and teachers do not feel physical education programs are adequately meeting the needs of the students in this area. Both teachers and principals shared a concern that the lack of equipment results in too much “standing around” during physical education time. Additionally, all participant groups admit that most teachers are very likely not getting in the mandated amount of physical education minutes every week.

Another area the study touched upon was that of student nutrition. Several teachers and one principal participant voiced concern over the eating habits of students in both what they bring from home, as well as the current cafeteria offerings. Participants noticed students bringing more and more processed foods to school, and the cafeteria tended to serve up meal choices that contained a lot of preservatives. Though some
participants also mentioned the need for parents to get involved in the fitness and nutrition aspect, the study revealed that the schools are perhaps not doing enough to try and combat the growing phenomenon of obesity and inactivity.

**Effects of physical education on academics.** There are some direct correlations between physical fitness and academic achievement (Chomitz et al., 2009; Eveland-Sayers et al., 2009; Taras, 2005). However, as participants stated in this study, teachers are hard-pressed for time and often cut physical education time because they want to make sure students are proficient in the academic areas tested and factored into the schools annual reports. But it is wise to look at including physical education as it can have a positive effect on these academics. Many studies have shown that those involved in physical activity are able to better concentrate (Brand et al., 2010; Hillman et al., 2009). Better concentration results in a higher likelihood of retention. Furthermore, exercise is seen to reduce stress or anxiety in participants, which are two factors which can also impede concentration (D’Onofrio & Klesse, 1990; Silverman & Hanna, 1987). Finally, higher test scores are seen by those participating in regular physical activity (Chomitz et al., 2009; Cooper, Valentine, Nye, & Lindsay, 1999; Fejgin, 1994). All of these reasons suggest schools should consider looking towards physical education as not only a way to improve the physical condition of students in schools, but also their mental conditions.

**Statewide physical fitness testing.** The California Department of Education (2006) stated that all students should be able to achieve the physical education standards if the school is providing a high quality program. However, only 30 to 38 percent of all students met the healthy fitness zone in all six of the tested criteria. Lack of equipment,
teacher training, and mandated minutes spent on the subject were areas that participants mentioned might hinder the programs in their districts. The patterns seen within the participants at schools with first, second, and third grade classes could presumably suggest that most kids are not receiving the adequate physical education instruction that they need in the earlier years of school in order to pass this test.

**Funding.** The No Child Left Behind Act of 2001, coupled with the budget problems in California have made physical education programs harder to focus on. Schools failing to meet their Adequate Yearly Progress have to devote a percentage of funding to increasing student performance (Beveridge, 2010; Wilkins et al. 2003). This leaves little money for programs such as physical education. Participants in the study noted that the pressures to meet their Adequate Yearly Progress have indeed pulled the schools in a different direction. Participants mentioned that equipment and professional development are not often factored into the budget. With all the pressures of standardized tests, it is simply pushed aside.

**High Stakes Testing.** Though much of the school budget is dependent upon the economy, part of the funding problems from above, come with the high stakes testing in schools. Research suggests that this testing process adds stress to all stakeholders in the educational process (Barksdale-Ladd & Thomas, 2000; Woldk, 2001). This study added to that notion in that participants felt a lot of pressure to perform well on the standardized tests at the culmination of the school year. Administrators mentioned this as one of the major reasons physical education has not received the attention it deserves. Additionally, teachers mentioned feeling even more stress when it comes to trying to fit in physical education time. Rather than using physical education as a healthy outlet for the students,
teacher participants often view the subject as just one more thing to try to squeeze in to an already very busy schedule.

**Teacher training.** The majority of teachers in this study mentioned feeling confident and competent in their abilities to deliver high quality physical education programs. However, they also mentioned wanting more training in specific programs or activities that can be done during the mandated minutes. This correlated with previous research that also mentioned teachers desiring additional training in the curricular area (Armour & Yelling, 2004; Morgan & Hansen, 2007). However, as Beveridge (2010) also found, budgets don’t typically allow a lot of training outside core subjects. Administrators at the district and site level both stated in this study that there was not often a lot of consideration for professional development in the area of physical education.

**Using Distributed Leadership to Improve Physical Education Programs:**

**Recommendations for Elementary Districts and Site Administrators and Teachers**

This study has identified specific barriers and supports to the delivery of high quality elementary physical education programs. The barriers have a common foundation: lack of time and financial resources. The lack of time and financial resources are, to a great degree, created by external factors (e.g. accountability requirements relative to core academic subjects, absence of accountability for fitness levels of students, continued reductions in school budgets, diminished flexibility in using available funds, and lack of initial teacher preparation in physical education instruction). Therefore, administrators and teachers must join forces to use internal factors to overcome these external factors. Distributed leadership is a model that could be useful in this effort.
As stated in Chapter 2, the concept of distributed leadership encompasses the idea that leadership at a school site involves leaders, followers, and their situation (Spillane, 2006). However, when the leadership is truly distributed, all participants become leaders in the task at hand, and there are no longer followers. This distribution of leadership allows for a higher level of production in terms of program development or maintenance. As Gronn (2000) pointed out, administrative personnel at school sites are being reduced, and those that are left are being pulled in more directions than ever before. This leaves administrators little time to spend on non-tested curricular areas such as physical education. Though teachers have little time in the school day to focus on physical education either, by coupling their efforts with those of administrators, there is a greater likelihood that progress can be made in the targeted areas.

The distributed leadership lens is utilized with student learning at the heart. The goal of physical education is no different in that the purpose is to provide skills essential for the well-being of children as they develop into functioning adults. Therefore, using this framework in order to strengthen instructional programs, including physical education, can be beneficial to students, teachers, and administrators alike. The following sections will suggest ways in with distributed leadership may be used in order to address five specific factors impacting physical education programs that were identified in the study: a) standardized test pressure, b) lack of funding, c) lack of time, d) professional development, and e) parental involvement in physical education.

**Standardized test pressure.** Students in public schools will likely always be tested in the core academic areas to ensure they are learning the required standards throughout the year. Unfortunately, as seen in this study, the pressure that evolves from
these high-stakes tests affects the students in the area of physical education because more
time is spent in the tested areas, and professional development for teachers is often
offered in areas other than physical education. Distributed leadership can be used in order
to relieve some of this testing pressure and allow for teachers and administrators to create
more opportunities to strengthen programs such as physical education.

One way distributed leadership can alleviate this testing pressure is to create
opportunities for teachers and principals to plan for engaging lessons in physical
education. As mentioned by many of the teacher participants, physical education
currently involves a lot of standing around by the students. In order to actively engage all
participants, teachers and principals could create lessons that involve all students.
Because time is an issue, the principal and teachers could divide the responsibilities of
planning and delivering the physical education instruction.

An example pertaining to this planning time would be a team of six teachers
having a consistent time block for physical education. For several weeks, half of those
teachers could take the students out for physical education instruction, and the other half
could meet and plan future lessons. The principal could assist in this planning or help
with the monitoring outside, but all team members would be involved. Once the teachers
planning the lessons have a good grasp on what they will be teaching, the teachers who
were doing the instructing could switch roles and begin planning new lessons of their
own. Using this model, by the end of the school year, the team would have plentiful high-
engagement, standards-based lessons for physical education for the upcoming school
years. Not only would the students be getting higher quality instruction, the team of
teachers and administrators would not be adding any time or stress onto their already
busy days, because the planning would take place during the mandated physical education minutes already embedded into their schedules.

**Lack of funding.** Funding in public education may always be an area of concern. Utilizing the distributed leadership model can provide ways for school leaders to create more opportunities for funding to be used specifically for physical education.

Since funding is so hard to come by, the only option for districts to get additional funds for specific subject areas is to apply for grants and work with the communities. Many participants in the study stated they use these resources in order to purchase physical education equipment, but as mentioned, the lack of time makes it difficult to organize or apply for these funds. By using distributed leadership, school sites could create teams responsible for finding grants or programs and applying for them. Having teams of administrators, teachers, and even parents can make the immense task more manageable. For example, a team of teachers might be responsible for researching options for grant opportunities, then presenting the options to the site principal. The group could then select the best option for the current goals of the school site. In this example, it could be a grant. Then the team of teachers and the principal can present the idea to the parents at a school site meeting, and discuss the best method for applying for funds. A team of grant writers can be established in order to best meet the requirements and deadlines. This process takes the pressure off just the administrator, and creates opportunities for funding that will result in more physical education instructional opportunities for delivering a higher quality of program that will better meet the needs of students.
Lack of time. Time was a consistent barrier in providing high quality physical education programs. Distributed leadership is one way to reduce the amount of time teachers have to spend in regards to planning for physical education and health activities. As mentioned above in the section pertaining to standardized test pressure, creating “planning” teams within grade levels is one way to utilize distributed leadership despite time restraints.

Another way to use distributed leadership to enhance physical education programs would be to provide lessons or presentations that are delivered by community members. By doing this, teachers save their own preparation time. One idea would be to have the site principals and teachers at schools with students in grades 5 and 7 encourage the incoming students at their site to work hard in physical education for the upcoming state fitness test. They could motivate the students in the 7th grade by offering an incentive if they improve upon their 5th grade scores. This incentive could be an event planned by parents or a student committee. In addition, the schools could bring in student athletes from the local junior high and high schools to deliver speeches on health and fitness, or to deliver a physical education lesson to the students. The responsibilities between all parties would be important, and all would save time in the planning arena for teachers.

A second example in regards to time would be to have superintendents build time into the regular educational leadership team meetings to discuss issues pertaining to physical education. This way, the team of principals and other district employees are already together. These leaders could spend a few minutes at each meeting sharing strategies seen at their sites, ideas read in research, or simply suggestions that may
enhance district programs. Using this method, site representatives would be able to bring information back to their sites to discuss during scheduled staff meetings.

**Professional development.** Funding, as mentioned above, is not likely to become plentiful in the years to come. Therefore, professional development for physical education is going to continue to be a problem. Districts and school sites can utilize the idea of distributed leadership in order to create more opportunities for teacher training in this curricular area.

An idea for implementing professional development in the area of physical education without utilizing the districts depleting funds, would be to use the distributed leadership model to provide online training for teachers though the district website. The distribution of leadership within this model would be to pair up teachers, administrators, and technology team members in order to create videos of high quality physical education lessons or techniques that teachers can readily access at any time.

In order to make this happen, principals could select teachers who are confident in their standards-based physical education lessons who could have their lessons video taped. Once taped, the technology department could upload the video, and any lesson plans or notes, from the teacher to the district website. From there, teachers could watch lessons and download instructions they could use to in order to deliver similar instruction. To take it a step further, the superintendent, principals, and model teachers could arrange trainings at specific school sites that show interest in improving physical education instruction across the board.

**Parental involvement.** Parental involvement is key in a students’ education. Therefore, to incorporate more involvement in the area of physical fitness and overall
student health is important for school districts. The distributed leadership framework can be used in order to create more opportunities to involve parents in this important subject area.

An example of utilizing the distributed leadership model in order to strengthen parental involvement in the area of physical education would be to schedule annual, biannual, or triennial meetings of all stakeholders in the district. These meetings could include the superintendent, principals, some teachers, district nurses or health technicians, and community members such as parents or Rotary members. Within these meetings, each of the participants would be considered as a valuable and equal team member. Discussions about the state of physical education programs and ways they could be strengthened would be covered.

Topics such as school events regarding physical education or health could be covered. For example, if the team thought schools in the district should have a family fitness night, the group would have to distribute the responsibilities to make it a success. The principal and teachers might have to reserve space for the event and ensure that proper supervision is provided. District and site administrators might create newsletters advertising the event. Parents and community members could plan the different components of the event and recruit volunteers. Whatever the group decided, there would be a leader for every aspect of seeing that decision through.

**Additional Leadership Implications**

The reality of student fitness levels in the United States is alarming. Coupled with the dramatic increase in childhood obesity, the future health of the nation is at risk. School leaders have an opportunity to take specific action by increasing the quality of
physical education programs throughout the K-12 system. This study found that teachers recognized the lack of accountability and monitoring by site and district administrators, and principals and superintendents stated the pressure from the county and district is minimal in the area of physical education. Change needs to come from within individual districts if there is no change at the state or federal level. Two ways administrators can begin to place more emphasis on physical education are by increasing visibility and communication.

Since teachers in this study associated the lack of visibility by administrators during physical education instructional time with a lack of importance, creating time to observe programs might increase the willingness teachers have to get in the allotted minutes. Administrative visibility is important in ensuring teachers are delivering high quality instruction, creating more accountability, and can also provide opportunities for growth in areas a teacher may struggle with. Additionally, by regularly observing the delivery of physical education curriculum, administrators can better understand what is effective and what needs strengthening at their school sites.

Communication is another area that administrators can capitalize on in order to give physical education more attention. Simply bringing physical education into conversations during staff meetings, or in informal conversations with teachers, could make all stakeholders more aware of the expectation at the school and district level relative to physical education. By having conversations about physical education, the subject may begin to feel like more of a priority. This change in attitude could contribute to improving the overall quality of physical education programs.
Limitations

The limitations of this study include the use of convenience sampling techniques. A convenience sample does not allow for generalizing the findings of the study beyond the settings in which the participants are located. Additionally, the narrow range of grade levels represented by the participants, as well as the single geographical region in which they are located are also limitations to the study. Finally, the lack of assistant superintendent and assistant principals in the sample is a limitation of the study since professionals in those roles may have some responsibility in the implementation and maintenance of physical education programs.

Comments on Future Direction

There are many paths in which this research can be continued or built upon in the future. First, the research should be continued in other districts, counties, and possibly states in order to help generalize data to areas outside of San Diego County. Determining whether the themes uncovered in this study are consistent in other districts would help to suggest implementation for successful programs or strategies that could be beneficial in many different school settings.

Next, due to the high frequency of conversations about parental involvement in the pursuit of healthier students at school and in the community, it would be helpful to survey or interview parents of school-aged students on their perceptions of physical education and health. By better understanding the experiences and beliefs of parents, school districts can bridge programs and communication in order to better meet the needs of students while in school as well as at home.
Finally, finding schools with exemplary physical education programs that both administrators and teachers are excited about being a part of would be a very informative method to determine how schools balance the pressures of standardized testing and overall student health.

Conclusion

This study was able to provide information regarding the perceptions of many stakeholders in the area of physical education in elementary schools. The data suggested several areas of need in improving the programs in several San Diego school districts. It could be presumed that many districts elsewhere are facing similar problems in the curricular area. Therefore, it is important to examine ways in which to improve upon them utilizing frameworks such as distributed leadership. Since the areas of both education and health are increasingly important in a child’s life, both core curricular areas, as well as physical education programs need to be updated in order to best meet the needs of children in schools.
Appendix A

District Administrator Survey

Please answer the following questions to the best of your ability. Your time is much appreciated.

1. What is your current professional title?
   a. Superintendent
   b. Assistant Superintendent of Curriculum & Instruction
   c. Other, please explain:

2. How many years have you been in this position?
   a. 0-1 year
   b. 2-3 years
   c. 4-5 years
   d. 6+ years

3. What is the name of your school district (for demographic purposes only; name will not be used in data analysis)?

4. How many schools are in your district?
   a. 1-5
   b. 6-10
   c. 11-15
   d. 16+

5. Physical education is a high priority in my district.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

6. I believe that physical education should be a high priority in my district.
   a. Strongly Agree
   b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

7. Teachers in my district are highly qualified to teach physical education.
   a. Strongly Agree
   b. Agree
   c. Neutral
d. Disagree
e. Strongly Disagree

8. Report card marks in my district in physical education are based on performance on the California state standards in physical education.
   a. Strongly Agree
   b. Agree
   c. Neutral
d. Disagree
e. Strongly Disagree

9. I seek out opportunities to speak with site administrators about physical education instruction.
   a. Strongly Agree
   b. Agree
   c. Neutral
d. Disagree
e. Strongly Disagree

10. I have specific ways to monitor how well students in my district are performing in the area of physical education.
    a. Strongly Agree
    b. Agree
    c. Neutral
d. Disagree
e. Strongly Disagree

11. If you answered “strongly agree” or “agree” in above question 10, please select the answers below pertaining to what you do to monitor student performance in physical education in your district. If you answered “neutral”, “disagree”, or “strongly disagree”, please skip this question and proceed to number 12.
a. Unscheduled/Informal observations
b. Report card marks
c. Conversations with administrators
d. Conversations with teachers
e. Other, please explain ____________________________

12. I ensure that teachers in my district are basing physical education instruction on state standards.

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

13. If you answered “strongly agree” or “agree” on above question 12, please select the ways below that you ensure teachers are basing physical education instruction on state standards (check all that apply). If you marked “neutral”, “disagree”, or “strongly disagree”, please proceed to number 14.

a. Board policy documentation
b. School schedules
c. Teacher schedules
d. Conversations with site administrators
e. Conversations with teachers
f. Observations
g. Other, please explain ____________________________

14. I believe that physical fitness should be measured and be included in the API and AYP formulas.

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

15. If you answered “disagree” or “strongly disagree” on above question 14, please explain why you do not think that physical fitness should be measured and included in the API and AYP formulas. If you answered “strongly agree”, “agree”, or “neutral”, please proceed to number 16.

________________________________________________________________________________________
16. I regularly receive information on physical education from various sources.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

17. If you answered “strongly agree” or “agree” on above question 16, please select the areas below that you receive physical education information and updates from (check all that apply). If you marked “neutral”, “disagree”, or “strongly disagree”, please proceed to number 19.
   a. I receive materials from the county.
   b. I receive materials from the state.
   c. I receive materials from the federal government.
   d. Other, please explain ________________________________

18. In what ways do the sources, information, and materials mentioned above assist you in physical education instruction in your district?
   _________________________________________________________________
   _________________________________________________________________

19. The school board in my district is supportive of ideas and/or conversations about physical education instruction.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Strongly Disagree

20. I receive the annual scores in physical fitness for grades 5 and 7 (if middle school is included in district).
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

21. If you answered “strongly agree” or “agree” in the above question 20, please mark the areas below from which you receive state testing scores in physical
fitness. If you answered “neutral”, “disagree”, or “strongly disagree”, please proceed to number 23.

a. I receive scores directly from the state.
b. I receive scores from the pupil services department in my district.
c. I receive scores from site principals.
d. Other, please explain ______________________________________

22. What do you do with (or how do you use) the annual physical fitness reports?

_________________________________________________________________

_________________________________________________________________

23. Is there anything else you would like to share about your experiences with monitoring and evaluating, professional development, or resource allocation in the area of physical education? If so, please do so in the space provided below.

_________________________________________________________________

_________________________________________________________________
Appendix B

Site Administrator Survey

Please answer the following questions to the best of your ability. Your time is much appreciated.

1. How many years have you been a principal?
   a. 0-1 year
   b. 2-3 years
   c. 4-5 years
   d. 6+ years

2. What is the name of your school district (for demographic purposes only; name will not be used in data analysis)?

3. How many students are enrolled in your school?
   a. 1-200 students
   b. 200-400 students
   c. 401-600 students
   d. 600+ students

4. Does your school qualify as a Title I school?
   a. Yes
   b. No

5. Physical education equipment funding is an area that is present during my annual budget planning and conversations.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree
6. Opportunities for professional development in the area of physical education are included in my annual budget planning and conversations.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

7. I feel my teachers would benefit from more physical education professional development.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

8. During the hiring process, I evaluate potential teachers on their attitudes and skill levels regarding physical education instruction.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

9. I seek out opportunities to speak with teachers about physical education instruction.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

10. If you answered “strongly agree” or “agree” in above question 9, please describe what types of things are commonly covered in your conversations with teachers about physical education. If you answered “neutral”, “disagree”, or “strongly disagree”, please proceed to number 11.

___________________________________________________________
________________________________________________________________
11. I schedule time to observe teachers during their physical education instructional time.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

12. If you answered “strongly agree” or “agree” in above question 11, please select the answer below pertaining to the amount of time you schedule for physical education instruction observations. If you answered “neutral”, “disagree”, or “strongly disagree”, please skip this question and proceed to number 14.
   a. 0-1 hours per week
   b. 1-2 hours per week
   c. 2-3 hours per week
   d. 3-4 hours per week
   e. Other, please explain

13. I have specific ways in order to monitor how well students at my site are performing in the area of physical education.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

14. If you answered “strongly agree” or “agree” in above question 13, please select the answers below pertaining to what you do to monitor student performance in physical education at your site. If you answered “neutral”, “disagree”, or “strongly disagree”, please skip this question and proceed to number 15.
   a. Unscheduled/Informal observations
   b. Report card marks
   c. Conversations with teachers
   d. Conversations with students
   e. Other, please explain

15. The district administration is highly involved in physical education efforts in our district.
   a. Strongly Agree
   b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

16. During annual meetings, or goal setting, with individual teachers, I ensure that he or she is basing physical education instruction on California state standards.

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

17. I regularly receive information on physical education from various sources.

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

18. If you answered “strongly agree” or “agree” on above question 17, please select the areas below that you receive physical education information and updates from (check all that apply). If you marked “neutral”, “disagree”, or “strongly disagree”, please proceed to number 20.

a. I receive materials from the district office.
b. I receive materials from the county.
c. I receive materials from the state.
d. I receive materials from the federal government.
e. Other, please explain ____________________________

19. In what ways do the sources, information, and materials mentioned above assist you in physical education instruction at your school site?

__________________________________________________________________
__________________________________________________________________

20. I believe that physical fitness should be measured and be included in the API and AYP formulas.

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

21. If you answered “disagree” or “strongly disagree” on above question 20, please explain why you do not think that physical fitness should be measured and included in the API and AYP formulas. If you answered “strongly agree”, “agree”, or “neutral”, please proceed to number 22.

____________________________________________________________________

22. Is there anything else you would like to share about your experiences with monitoring and evaluating, professional development, or resource allocation in the area of physical education? If so, please do so in the space provided below.

____________________________________________________________________
Appendix C

Teacher Survey

Please answer the following questions to the best of your ability. Your time is much appreciated.

1. What is the grade level that you currently teach?
   a. 1st grade
   b. 2nd grade
   c. 3rd grade
   d. Other, please describe ____________________________

2. How many years have you been teaching?
   a. 0-2
   b. 2-4
   c. 5-6
   d. 7+

3. What is the name of your school district (for demographic purposes only; name will not be used in data analysis)?

__________________________________________________________________

4. How many students are enrolled in your school?
   a. 1-200 students
   b. 201-400 students
   c. 401-600 students
   d. 600+ students

5. Does your school qualify as a Title I school?
   a. Yes
   b. No

6. Are you the primary provider of physical education instruction to your students?
   a. Yes
   b. No
If you marked “yes” in the above question, please continue the survey. If you marked “no”, you may discontinue the survey and submit at this time.

7. California law states that students in elementary schools are required to participate in a minimum of 200 minutes of physical education every ten days (Education Code Section 51210). Given the demands on your instructional schedule, how many minutes per week, on average, do you regularly teach physical education?
   a. 0-30 minutes
   b. 31-60 minutes
   c. 61-90 minutes
   d. 90-120 minutes
   e. 121+ minutes

8. Based on your answer from number 6 above, do you feel that the amount of time you are able to instruct in the area of physical education is adequate?
   a. Yes
   b. No

9. I am familiar with the California content standards in physical education in my grade level.
   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

10. I feel competent in my abilities to deliver instruction in physical education based on the California content standards.
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

11. If you marked “disagree” or “strongly disagree” in above question 10, please describe what you feel would make you more competent in your abilities to deliver instruction in physical education based on the California content standards. If you marked “strongly agree”, “agree”, or “neutral”, please proceed to question 12.
12. I feel confident in my abilities to deliver instruction in physical education based on the California content standards.

   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

13. If you marked “disagree” or “strongly disagree” in above question 12, please describe what you feel would make you more competent in your abilities to deliver instruction in physical education based on the California content standards. If you marked “strongly agree”, “agree”, or “neutral”, please proceed to question 13.

14. My school site has adequate equipment for my use in instructing physical education.

   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

15. Physical education equipment is easy to access at my school site.

   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

16. I feel supported by administration in my physical education instructional efforts.

   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
17. Teaching physical education is a high priority in my weekly teaching efforts.

   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

18. If you answered “disagree” or “strongly disagree” to the previous question 14, please select the areas below that prevent physical education from being a high priority in your daily teaching efforts (mark all that apply). If you marked “neutral”, “agree”, or “strongly agree”, please proceed to number 16.

   a. The strong emphasis on areas tested by the state (Language Arts and Mathematics)
   b. Lack of time to fit in required minutes
   c. Physical education is not a priority at my school site
   d. Lack of administrative support in the area
   e. Lack of administrative monitoring in the area
   f. Other, please explain ____________________________________________

19. I feel that I have been properly trained in the area of physical education instruction.

   a. Strongly Agree
   b. Agree
   c. Neutral
   d. Disagree
   e. Strongly Disagree

20. If you marked “agree” or “strongly agree” in the above question 16, please mark the areas below that you feel MOST prepared you to instruct physical education (check all that apply). If you marked “neutral”, “disagree”, or “strongly disagree”, please proceed to number 18.

   a. Teacher credential program
   b. Professional development at my school site
   c. Personal experience or training
   d. Other, please explain ____________________________________________

21. More professional development in the area of physical education would be beneficial to me.
a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

22. If you marked “strongly agree” or “agree” in the above question 21, please describe what benefits you feel you would receive from professional development in physical education.

23. It is evident that administrators at my school consistently monitor the instruction of physical education on campus.

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

24. Some sites have credentialed physical education teachers to instruct students or support teachers. I feel that having credentialed physical education specialists at my school site would increase the success of physical education among students at the school.

a. Strongly agree
b. Agree
c. Neutral
d. Disagree
e. Strongly Disagree

25. If you marked “strongly agree” or “agree” in the above question 24, please describe below how you think your students and/or school site would benefit by having a credentialed physical education specialist.

26. There is a person I can go to on my campus if I need assistance with the instruction of physical education.

a. Strongly Agree
b. Agree
c. Neutral  
d. Disagree  
e. Strongly Disagree

27. If you marked “agree” or “strongly agree” in the above question 21, please mark the person/s whom you can go to for assistance (check all that apply). If you marked “neutral”, “disagree”, or “strongly disagree”, please proceed to number 23.

a. A teacher in my grade level  
b. A teacher in another grade level  
c. My principal  
d. My assistant principal  
e. Other, please explain ______________________________________________________________________

23. Is there anything else you would like to share about your experiences with barriers or supports of physical education instruction? If so, please do so in the space provided below.

________________________________________________________________________________________

________________________________________________________________________________________
Appendix D

Superintendent Interview Protocol (Adapted from Asmussen & Creswell, 1995)

Project: Elementary Physical Education: In What Ways Might Leaders Best Facilitate Positive Change?

Time of Interview:

Date:

Place:

Interviewer:

Position of Interviewee:

Length of time Interviewee has been in position:

District of Interviewee’s Employment:

Briefly discuss project with participant, give consent form, ask if there are any questions, have them sign consent. Begin recording at this point.

Sample Questions:

1. Could you please describe your role in physical education programs in your district?

2. How do you monitor the progress of students in your district in the area of physical education?

3. Do you feel that current funding is adequate for delivering high quality physical education programs?

4. What do you think are the most important components that must be in place in order for a district to deliver high quality programs?
5. How much emphasis do you feel the state and county place upon you as a superintendent to create/monitor/improve physical education programs in your district?

6. With all the research that continues to surface on the health of children in our country, how much of a responsibility do schools have in order to tackle this burden (if any)?

Thank participant and assure him/her of the confidentiality of the responses.
Appendix E

Principal Interview Protocol (Adapted from Asmussen & Creswell, 1995)

Project: Elementary Physical Education: In What Ways Might Leaders Best Facilitate Positive Change?

Time of Interview:

Date:

Place:

Interviewer:

Position of Interviewee:

Length of time Interviewee has been in position:

District of Interviewee’s Employment:

Briefly discuss project with participant, give consent form, ask if there are any questions, have them sign consent. Begin recording at this point.

Sample Questions:

1. Could you please describe your role in physical education programs in your school?

2. How do you monitor the progress of students at your school site in the area of physical education?
3. Do you feel that current funding is adequate for delivering high quality physical education programs?

4. What do you think are the most important components that must be in place in order for a district to deliver high quality programs?

5. How often are you able to offer professional development in the area of physical education at your site? How do you think your teachers would benefit from this?

6. Are there any resources you would find helpful in order to enhance your site physical education program?

7. How much of an emphasis do you feel the state places on you as an administrator to create/monitor/improve your physical education program?

8. With all the research that continues to surface on the health of children in our country, how much of a responsibility do schools have in order to tackle this burden (if any)?

Thank participant and assure him/her of the confidentiality of the responses.
Appendix F

Teacher Interview Protocol (Adapted from Asmussen & Creswell, 1995)

Project: Elementary Physical Education: In What Ways Might Leaders Best Facilitate Positive Change?

Time of Interview:

Date:

Place:

Interviewer:

Position of Interviewee:

Length of time Interviewee has been in position:

District of Interviewee’s Employment:

Briefly discuss project with participant, give consent form, ask if there are any questions, have them sign consent. Begin recording at this point.

Sample Questions:

1. Do you feel you have enough time to adequately teach physical education to your students?

2. What (if anything) would help you or your site improve the physical education program for your students?

3. Are there any barriers for you in the area of physical education instruction?
4. How much of an emphasis do you feel that your district/site places upon you as a teacher in the area of physical education instruction?

5. How do you monitor the progress of your students in the area of physical education?

6. With all the research that continues to surface on the health of children in our country, how much of a responsibility do schools have in order to tackle this burden (if any)?

Thank participant and assure him/her of the confidentiality of the responses.
References


Beveridge, T. No child left behind and fine arts classes. *Arts Education Policy Review, 111*(1), 4-7.


Sallis, J.F., McKenzie, T.L., Alcaraz, J.E., Kolody, B., Faucette, N., & Hovell, M.F.


