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STANDARDS AND STANDARD PRACTICE OF ELEMENTARY PHYSICAL EDUCATION TEACHERS IN NORTHERN CALIFORNIA

By

Doreen Marie Espinoza

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Kinesiology

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ABSTRACT

STANDARDS AND STANDARD PRACTICE OF ELEMENTARY PHYSICAL EDUCATION TEACHERS IN NORTHERN CALIFORNIA

By

Doreen Marie Espinoza

Almost a quarter of a century of efforts to make a positive influence on young people's physical activity, fitness levels, and health -- through school physical education (PE) policies -- has had minimal impact. The lack of progress may stem from a lack of understanding by policy makers of the PE program context at the level of the teacher and how that context interacts with PE policies. The purpose of the study was to examine how factors that influence elementary school teachers' practice of PE are related to PE policies.

The research questions of the study were: (a) In what California educational context do PE policies exist? (b) What factors influence California elementary teachers' practice of PE? (c) How were the factors related to California PE policies? Study participants were selected from three categories of elementary teachers of PE in one county in northern California: teacher certificated physical education teachers (cert-PETs), paraprofessional physical education teachers (para-PETs), and classroom teachers (CTs).

Results from qualitative data analysis of coding and category formation of teacher observations, questionnaires, and interviews revealed three major findings. First, the structure and path of elementary school physical education programs are determined by three critical decision-making points: (a) providing CTs with preparatory time, (b) filling the prep time in part or whole with PE, and

(c) hiring a PET. The behaviors surrounding the decisions were consistent with the garbage can theory of decision-making and indicated that the choices were of convenience and necessity, rather than solutions consistent with defined PE program goals.

Second, there were two sets of influences, usually in opposition, that shaped the elementary PE program, internal teacher factors and the external school system factors. The internal teacher factors consisted of teacher qualifications and teacher leadership traits and were factors used by teachers to build and create the PE program. The external school system factors were composed of time for PE instruction, financial resources for the PE program, administrative support for the PE program, and access to facilities to teach PE. Those factors impacted the PE program and the teacher's practice in ways that were usually hindering.

Third, the circumstances of PETs' work context meant that they had little to no control over the decisions that impacted their teaching environment. The environment necessitated that they minimize the inhibiting factors that impinged on their ability to provide a quality PE program, however the ability to implement the California PE policies was challenging at best.

DEDICATION

I dedicate my dissertation to my grandmother, Josephine "Chepa" Contreras, who passed away while I was completing the writing of my dissertation. Her work ethic, personal strength, and devotion to truth have always been a tremendous source of inspiration for me.

ACKNOWLEDGMENTS

I wish first to thank my guidance committee members for their time, support and contributions throughout the doctoral program and dissertation completion process. My advisor, Crystal Branta, provided continual support, patience, and words of encouragement throughout the long distance arrangement of my work. During my doctoral program she encouraged me to develop independent thinking and research skills, valuable tools during and hopefully after the doctoral work. The inspiration for doing my work came from the interactions I had with faculty and graduate student colleagues during the Motor Development Journal Club meetings.

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There is one person above all others who warrants my deepest thanks and respect for his unending support and tolerance, my companion in life, Jeffrey White. The long journey has been arduous and now we can enjoy the simplicity of down-time. Our two children, Nicolas and Anthony, were incredibly

understanding during the data collection and writing stages. They tolerated my absence and the endless weekend, daytime, and nighttime hours of my hiding in a "turtle shell" to write.

In addition, I would like to thank my graduate student colleagues who made graduate studies at Michigan State well worth it, especially Dave Wisner, Geoffrey Colon, and David Kinnunen. My dissertation coach, Dave Hudson who helped keep me focused during my last year of writing, and Sue Leskiw who proofread and edited my manuscript and made valuable suggestions and comments. Also, I am grateful to the time, energy, and sincerity given me by all the participants in this study. They gave of their valuable time without asking for something in return. None of this work would have been possible without their sacrifices.

Finally, I would like to thank my parents, Bernardo and Dolores Espinoza. They have provided the encouragement and support to pursue my educational aspirations, even though such opportunities were unavailable to them.

Funding for my doctoral program was provided in part by the Department of Kinesiology and the College of Education both of Michigan State University. Partial funding for the dissertation was provided by the National Association of Sport and Physical Education of the American Association of Health, Physical Education, Recreation and Dance.

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KEY TO ABBREVIATIONS

AHK	Action for Healthy Kids
API	Academic Performance Index
BER	Bureau of Education and Research
CA EC	California Education Code
CAHPERD	California Association of Health, Physical Education, Recreation and Dance
CDC	Centers for Disease Control and Prevention
CDOE	California Department of Education
Cert-PET	Certificated Physical Education Teacher
COPEC	Council of Physical Education for Children
CSMP	California Subject Matter Projects
CT	Classroom Teacher
CT-Prep	Classroom Teacher Preparatory Period
EAA	Educate America Act
EL	English Language Learner
FRM	Free and Reduced Meal Program
FTE	Full-Time Equivalent
GCT	Garbage-Can Theory
HP	Healthy People
MPR	Multi-Purpose Room
NASPE	National Association for Sport and Physical Education
NCEE	National Commission on Excellence in Education
NCHS	National Center for Health Statistics
NCLB	No Child Left Behind
Para-PET	Paraprofessional Physical Education Teacher
PE	Physical Education
PEP	Physical Education for Progress later renamed Carol M. White Physical Education Program
PET	Physical Education Teacher
PL	Public Law
PTA	Parent Teacher Association
SGR	Surgeon General's Report
SIP	School Improvement Program
TA	Teaching Assistant
UCOP	University of California Office of the President
USDHEW	United States Department of Health Education and Welfare
USDHHS	United States Department of Health and Human Services
USDOE	United States Department of Education

CHAPTER 1

OVERVIEW

Over a quarter of a century of efforts to positively influence young people's physical activity, fitness levels, and health -- in the form of policies and reports by government agencies and professional organizations -- has had minimal impact. Some activities culminated in the creation of national and state standards for physical education, efforts concomitant with the current education standards movement. In an effort to understand why such strategies appear to be ineffective, this study explored the subjective perspectives of teachers who were faced with the challenge of establishing an effective, high-quality physical education (PE) program amid state policies. The purpose of my study was to examine the factors that shaped the elementary teachers' practice of PE and how those factors were related to PE policy implementation. The study population was a sample of elementary teachers of PE in one county in northern California.

For the remainder of this dissertation, I will use the phrase "youth fitness" to include physical fitness, skill-related fitness and health levels of people between the ages of five and eighteen years. Also, I will use "teacher" to include individuals with teaching credentials and those without, including classified personnel, also referred to as paraprofessionals.

Background to the Study

The landmark document that energized the youth fitness movement and thrust it into the spotlight was the 1979 publication, *Healthy People (HP): The Surgeon General's Report on Health Promotion and Disease Prevention* (United States Department of Health Education and Welfare [USDHEW], 1979) and its follow-up, *Promoting Health/Preventing Disease: 1990 Objectives for the Nation* (United States Department of Health and Human Services [USDHHS, 1980). Those documents were the first in a series that laid out a national public health agenda and specified fitness, health, wellness, and school PE objectives. During the 25 years since the release of the first *HP* report, changes have occurred on two fronts. First, and of major significance, is the status of American youth fitness. Inactivity levels have increased, fitness has decreased, and the incidence of obesity and overweight has reached epidemic levels (USDHHS, 2001). Second, education standards have defined the current education reform movement and have led to federal and state efforts that codify the significance of standards.

The youth fitness movement and the education reform movement have been linked by their mutual target of schools as the venue for social reform. The development of a PE framework and standards in California and the national standards of the National Association for Sport and Physical Education (NASPE) are explicit examples of the educational context in which the youth fitness movement has occurred. Reform efforts have spurred researchers to investigate the impact of advocated changes. Youth fitness research has focused on

outcomes related to students, PE programs, and community and health programs. For education reform, the research focus has been on student and education program outcomes, but also on policy and process. The latter focus has enabled researchers in the education community to identify and elaborate on factors that constrain or augment policy implementation within the various layers of the educational system. Of interest to my study was policy research from the perspective of teachers during the process of policy implementation.

The Puzzle

Attention accorded to youth fitness has been extensive since the release of the first *HP* report. The efforts, in the form of documents and research publications, have successfully established health objectives; data sets of young people's physical activity, fitness levels, and health; PE standards and frameworks; school and community physical activity guidelines; and strategies to promote physical activity. However, these achievements have not translated into improved fitness.

The apparent lack of success of policy efforts to improve youth fitness may be attributable, in part, to how the problem has been perceived. Policies have been written that interpret the problem as one of health issues, rather than one of lack of progress toward stimulating changes advocated in policies. If the focus turns to lack of progress, that suggests an underlying defect in the policies and/or systems that support the desired changes. Schwille et al. (1983) refer to such policies as "policies of ignorance" in that there is inadequate understanding of how external policies affect teacher's actions. My supposition is that, to some

extent, the problem with translating policy into desired outcomes stems from a lack of understanding by policy makers of the PE program context, teacher's work, and how that context and teacher interacts with PE policies.

The teacher's role as an agent of change (and the identification of factors that influence construction of the PE program) must be taken into account before initiating further attempts to create policies intended to improve youth fitness. Certainly, developers of PE policy want to assist school systems in providing an environment that fosters attainment of physical fitness; however, understanding what role, if any, policy plays in the classroom environment is necessary. Analyses of the teachers of the PE programs, how those teachers teach PE, and the extent to which their practice is related to policy, are likely to inform the creation of future policies.

The Purpose and Rationale

Poor youth fitness is a societal concern that impacts children's lives. Since public schools do not exist in a vacuum, it is only logical to assume that the same concerns are ever present within the classroom. Although the problem of poor youth fitness has been acknowledged, there has been scarce recognition of the limited impact of policy on youth fitness. To enhance our understanding of youth fitness, PE programs, and PE policies, the role of policy in PE programs and the needs of teachers to implement quality programs must be addressed.

The study's purpose was to identify the factors that shape California elementary school teachers' practice of PE and how those factors were related to California PE policies. Understanding these interrelationships may provide

insight into the sources for teachers' practice, their conceptions of PE programs and policies, and the dynamic educational context of policies.

Unfortunately, little is known about the influences, or lack thereof, of PE policies for educational life within classrooms. To my knowledge, only six studies in the United States - two by Chen et al. (2002a, 2002b), one by Berg, Fishburne, and Hickson (2004), one by Petersen et al. (2004), one by Ferguson, Keating, and Guan (2005), and one by Davis, Burgeson, Brener, McManus, and Wechsler (2005) - have investigated the relationship between teacher practice and PE policy. Similar to my research, these studies examined teacher perceptions of PE policy (Petersen et al., 2004; Chen et al. 2002b; Ferguson et al., 2005), and examined supports and barriers to policy implementation (Petersen et al., 2004; Berg et al., 2004; Chen et al., 2002a; Davis et al., 2005). However, these studies approached PE policy as a known text by teachers not as an essential component that teachers contend with. I proposed to study the relationship between PE teacher practice and policy from the perspective of the teachers situated in their environment, which may or may not include knowledge of PE policies. This approach allowed for an analysis of factors that influenced teacher practice and an examination of how those factors were influenced by policies.

The proposed research focused on non-charter public elementary school teachers for several reasons:

1. These schools involve more than 95% of 5- to 17-year-olds in the United States (Burgeson, Howell, Brener, Young, & Spain, 2001), representing the public institution that reaches the greatest percentage

of youth. Therefore, elementary school teachers are in the best position to improve both the education and health status of young people.

2. Although social concerns and government policies influence educational change (Cuban, 1992), teachers are the dominant force in curriculum and lesson plans decisions (Schwille et al., 1983).
3. Elementary PE programs can help establish, at an early age, beneficial activity patterns - motor and fitness skills, and physical activity - that can serve as a foundation for an active lifestyle and help prevent chronic diseases (Aarts, Paulussen, & Schaalma, 1997).
4. Charter schools were excluded because their unique position was not representative of the majority of elementary public schools. In California, charter schools are exempt from selected state or local rules and regulations, can be structurally a school-within-a-school involving only some grades or classrooms, or are a satellite school of an out-of-area district (California Department of Education [CDOE], n.d.).

Summary of the Study

The main research questions of the study were:

1. In what educational context did PE policies exist?
2. What factors shaped teachers' practice of PE?
3. How were the factors related to implementation of California PE policies? (The specific California policies were the mandated PE

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minutes and physical fitness test, and physical education framework and standards.)

To provide the data necessary to answer these questions, the following qualitative methods were used: (a) purposeful sampling of elementary teachers of PE; (b) an on-site observation at the teachers' school site; (c) collection of curriculum and instructional material documents; (d) questionnaires concerning teachers' demographics, PE programs, and professional development; (e) audio-taped, semi-structured in-person interviews for PE teachers and structured phone interviews for classroom teachers ; and (f) analysis of observation, document, questionnaire, and interview data. Analysis occurred throughout and following the data collection period and involved summarizing, coding, and contextualizing the data.

Operational Definitions

Academic Performance Index (API) - The API is a measurement of the academic performance and growth of schools and is the basis of California's Public Schools Accountability Act of 1999. It is a numeric index that ranges from 200 to 1000 with a statewide target for all schools of 800. The API score summarizes the results of the Standardized Testing and Reporting (STAR) Program which consists of statewide tests that measure: English-language arts, mathematics, history-social science, and science.

Classified Staff - A classified employee is anyone in a position that does not require a certification. The classified staff is listed in three subgroups: the "Paraprofessional" subgroup includes teaching assistants, teacher aides, pupil

services aides, and library aides; the "Office/clerical" staff are those with clerical or administrative support duties, such as the school secretary; and the "Other" subgroup includes all the remaining non-certificated staff, including custodians, bus drivers, and cafeteria workers.

English Learner (EL) - Students for whom there is a report of a primary language other than English and who have been determined to lack the clearly defined English language skills necessary to succeed in the school's regular instructional programs. In previous years these students were referred to as Limited English Proficient (LEP).

Free /Reduced Price Meals Program (FRM) - A federal food program administered by the US Department of Agriculture. Program participation is by application and is based on the income of the child's parent or guardian. Participants receive free or reduced priced school meals.

Health-related Fitness - Comprised of cardiorespiratory endurance, muscular endurance, muscular strength, body composition, and flexibility.

Inducements - Policies usually in the form of funding that are frequently provided as components of federal and state policy to increase the likelihood that a mandate or a valued policy goal will be carried out at the local level. An example is the extra funding that districts and schools receive to implement Title I programs, which carry numerous mandates if the funding is accepted.

Mandates - Policies often enforced through rules, regulations, and procedures, enacted by high level governments that require action by a lower jurisdictional level.

Multiple Subject Teaching Credential – State awarded teacher certificate that authorizes the holder to teach in a self-contained classroom such as the classrooms in most elementary schools.

Obesity - A measure used in the adult population defined as a BMI greater than 30 kg per meter squared.

Overweight – The term is generally substituted for obese when describing children. For children, appropriate BMI ranges differ according to age and gender and correspond with percentile rankings on a standard growth charts. Children with a BMI between the 85th and 94th percentile are considered to be at risk of overweight, while those with a BMI above the 95th percentile are considered overweight.

Physical Education Program – Comprised of both the PE course, inclusive of curricula, lesson plans, and assessment; instructor; equipment; and facilities.

Physical Fitness – A set of attributes that people have or achieve that relates to the ability to perform physical activity, comprised of health- and skill-related fitness.

Policy - The laws, regulations, formal and informal rules and understandings that are adopted on a collective basis to guide individual and group behavior.

School Improvement Program (SIP) – A California state categorical program designed for K-12 schools to improve instruction, services, and school environment and organization according to plans developed at the local level by School Site Councils.

Single Subject Teaching Credential – State awarded teacher certificate that authorizes the holder to teach the specific subject(s) named on the credential in departmentalized classes such as those in most middle and high schools. However, a teacher authorized for single subject instruction may be assigned to teach any subject in his or her authorized fields at any grade level.

Skill-related Fitness - Comprised of agility, balance, coordination, speed, power, and reaction time.

Standard Elementary Teaching Credential – State awarded teaching credentials issued from 1961 to 1974, what is now the Multiple Subject Teaching Credential. These credentials are no longer issued but renewals are granted.

Supplementary Authorization - Holders of Multiple Subject or Standard Elementary Teaching Credentials may have one or more designated subjects added to their credential as a supplementary authorization. The authorization allows the holder to teach the subject named on the credential at any grade level including K-12, preschool, and classrooms organized primarily for adults.

Tracking – Stability of a characteristic over time; the maintenance of relative rank or position within a group over time; the ability of a characteristic measured early in life to predict values of the same characteristic later in life.

CHAPTER 2

THE CONTEXT OF SCHOOL PHYSICAL EDUCATION PROGRAMS

Physical Fitness and Physical Education in the Context of School Reform

Over the past 25 years, interest in the fitness status of youth has grown out of a concern that U.S. children and youth are inactive, overweight, and not physically fit (Sallis, 1987; Simons-Morton, O'Hara, Simons-Morton, & Parcel, 1987; USDHHS, 2000b). That interest had spawned policies aimed at improving the youth fitness in the United States. Despite the rich array of efforts, fitness and activity levels among children have remained the same, if not declined, with obesity reaching epidemic levels. The following discussion focuses on landmark national and California state policies targeting school PE, one setting that is specifically designed to improve youth fitness.

Early Indicators of the Standards Movement

The publication *Healthy People* (USDHEW, 1979), the initial Surgeon General's Report (SGR) on health promotion and disease prevention, described for the first time a national public health agenda that focused on preventative measures to improve the quality of life. The report noted the value of PE programs that promote lifestyle habits of vigorous exercise.

The following year, the USDHHS published the complementary document to the SGR, *Promoting Health/Preventing Disease: Objectives for the Nation* (USDHHS, 1980). One of the physical fitness and exercise objectives targeted PE stating, "By 1990, the proportion of children and adolescents ages 10 to 17

participating in daily school physical education programs should be greater than 60%" (see Table 2.1). Data from the mid-course review (Centers for Disease Control and Prevention [CDC], 1985) revealed that only 36% of students in grades 5-12 had participated in daily PE and by the final report the objective had not been met (McGinnis, Richmond, & Brandt, 1992). Despite the disappointing results the SGR was significant in that it represented the beginning of a movement by a national governing body targeting youth fitness and PE.

As in physical fitness and health, a reform movement was also occurring in the education arena. In 1981, Secretary of Education T.H. Bell created a National Commission on Excellence in Education (NCEE) to "report on the quality of education in America" The ensuing report, *A Nation at Risk: The Imperatives for Educational Reform* (NCEE, 1983), criticized American public schools and called for a revamping of American education. The report called for widespread reform, including the development of rigorous and measurable standards. Its "alarmist tone" set the stage for numerous education reform efforts and initiatives (Vinovskis, 2002). In response, states, federal government bodies, and professional organizations set out to improve the education system through new policies - most notably, establishing goals and standards (Fuhrman, Clune, & Elmore, 1988; Marzano & Kendall, 1997; Shepard, 1993).

Many educators considered *A Nation at Risk* to be the beginning of the standards movement (Shepard, 1993), a movement some viewed as a drain on resources, a burden for low performing students, and a retooling of previous reform movements (Marzano & Kendall, 1997). Nevertheless, by the end of the

decade, enthusiasm for standards as a mechanism for school improvement had increased dramatically. The groundwork was laid by the SGR and *A Nation at Risk* for at least two simultaneous changes, the beginning of the youth fitness reform efforts and the educational standards movement, which would later embrace youth fitness reform through school PE. Both changes indicated the increased role for states and the federal government in schools.

The History of National and California Physical Education Policies

During the 1990s, several documents were published that stressed the importance of youth fitness and school PE. In the education arena, the standards movement was solidified during the 1990s by a sequence of actions that culminated in the 1994 enactment of the *Educate America Act*, a landmark federal education law. Links between youth fitness and the standards movement are summarized below.

In 1990 the DHHS published their second comprehensive health agenda, *HP 2000*. The document advocated leadership from organizations, including schools, to address disease prevention and health promotion to improve the quality and length of life; and provided an arena to review progress toward meeting national level health objectives. Again the DHHS promoted daily PE with an additional objective aimed at increasing the amount of time students were active during PE class (see Table 2.1).

The midcourse and final reviews (National Center for Health Statistics [NCHS], 1994, 1997, 2001) showed that less than 30% and 40% of 9th through 12th-grade students participated in daily PE, and were active for 20 or more

minutes during PE class, respectively. Although progress was being made toward meeting the objectives, the *HP* agenda appeared to be failing by the year 2000.

In the education arena, concern was growing about the preparation of American youth. In 1991, President Bush announced the launch of *America 2000: An Education Strategy* (United States Department of Education [USDOE], 1991). The document had six broad goals for education in core subjects through the establishment of "new world standards." The "core subjects" were defined as English, mathematics, science, foreign languages, civics and government, economics, art, history, and geography, but not PE.

The drive to establish education goals carried into the Clinton administration. In 1994, the *Educate America Act* (*EAA*) was passed. The *EAA* wrote into federal law eight *National Education Goals*, stemming from America 2000's six goals plus two new ones. Although weak, PE was included within the student achievement and citizenship goal, "all students will have access to physical education and health education to ensure they are healthy and fit" (Public Law [PL] 103-227, 1994). Inclusion of PE in the *EAA* directly linked the standards movement with youth fitness reform.

The EAA also established a National Educational Standards and Improvement Council that defined student standards as both *what students should know* and the level of performance they *should be able to do* (National Council on Education Standards and Testing, 1992). Although state participation in the educational objectives officially was voluntary, some perceived the

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standards as a means by which states could articulate outcomes for students (Elmore & Fuhrman, 1995) and a mechanism to develop a comprehensive educational reform strategy. However, others argued that national standards signaled federal intrusion into the functioning of local school systems (Cookson, 1995).

In the same year that the national education goals were announced, the state of California released its *Physical Education Framework for California Public Schools Kindergarten Through Grade Twelve* (CDOE, 1994). The document was based partly on the report, *Outcomes of Quality Physical Education Programs* (NASPE, 1992) a report that provided guidelines and outcomes for quality PE programs.

In step with the development of education standards by national professional organizations, NASPE published *Moving into the Future: National Standards for Physical Education* (NASPE, 1995), now in its second edition *National Standards for Physical Education* (NASPE, 2004; see Appendix A). The standards for PE were written in a format consistent with other education standards. That is, standards formed the basis for *what students should know* and *be able to do* in various subject areas at targeted points throughout their K-12 education program. Such actions by professional organizations helped support standards-based educational reform initiatives and were a means by which states could articulate outcomes for students (Elmore & Fuhrman, 1995). The establishment of PE standards was a necessary move, from a political perspective, so as not to be disregarded given that competition for time and

Table 2.1 Significant National and California School Physical Education Policies

Document	Policy
Promoting Health/ Preventing Disease: Objectives for the Nation (USDHHS, 1980)	By 1990, the proportion of children and adolescents ages 10-17 participating in **daily school PE** programs should be greater than 60%.
Healthy People 2000 (USDHHS, 1990)	Increase to at least 50% the proportion of children and adolescents in 1st-12th grade who participate in **daily school PE**.
	Increase to at least 50% the proportion of school PE **class time that students spend being physically active**, preferably engaged in lifetime physical activities.
National Education Goals of the Educate America Act (PL 103-227, 1994)	All students will have **access to PE** and health education to ensure they are healthy and fit...
Outcomes of Quality Physical Education Programs (NASPE, 1992)	Guidelines for the **development of quality PE programs**. Based on 10 outcomes that were specific, grade appropriate statements consistent with NASPE's definition of a physically educated person.
Physical Education Framework for California Public Schools Kindergarten Through Grade Twelve (CDOE, 1994)	Described a **sequential, developmental, age-appropriate PE program** (a) designed to provide students with the knowledge and ability needed to maintain an active, healthy lifestyle; and (b) that balances and contributes to children's academic learning.
Moving into the Future: National Standards for Physical Education (NASPE, 1995)	Established **seven PE standards** for K-12 grades and assessment guidelines based on and complimentary to the "Outcomes" (NASPE, 1992) document.
National Standards for Physical Education (NASPE, 2004)	Established **six PE standards** for K-12 grades with grade grouped student expectations and outcomes for each standard.
California *Challenge Standards for Student Success: Physical Education* (CDOE, 1998)	Established **seven standards** for each of K-12 grades within three goal areas of, movement skills and knowledge, self-image and personal development, and social development.
Physical Education Model Content Standards (CDOE, 2005a)	Established **five standards** for each of K-8 grades and **three standards** for each of 9-12 grades. All of the standards represent essential skills and knowledge students need to maintain a physically active, healthy lifestyle.
Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People (USDHHS, 1997).	Establish policies that promote enjoyable, lifelong physical activity among young people. [e.g., Require comprehensive, **daily PE** for students in grades K-12]
	Provide physical and social **environments that encourage and enable safe and enjoyable physical activity**.
	Implement PE curricula and instruction that emphasize enjoyable participation in physical activity and that help students develop the knowledge, attitudes, motor skills, behavioral skills, and confidence needed to adopt and maintain physically active lifestyles.
	Include parents and guardians in physical activity instruction and in extracurricular and community physical activity programs, and encourage them to support their children's participation in enjoyable physical activities.

Table 2.1 (cont) Significant National and California School Physical Education Policies

Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People (USDHHS, 1997).	**Provide training** for...personnel that imparts the knowledge and skills needed to effectively promote enjoyable, lifelong physical activity among young people.
	Regularly evaluate school and community physical activity instruction, programs, and facilities.
Healthy People 2010 (USDHHS, 2000a)	Increase the proportion of the Nation's public and private **schools**, 25% middle and 5% high school, that **require daily PE** for all students.
	Increase the proportion of adolescents, 50%, who **participate in daily school PE.**
	Increase the proportion of adolescents, 50%, who spend at least 50% of school PE **class time being physically active.**
Promoting Better Health for Young People Through Physical Activity and Sports: A Report to the President from the Secretary of Health and Human Services and the Secretary of Education (USDHHS, 2000b)	Help all children in preK-12 grades to receive **quality, daily PE.** Help all schools to have **certified PE specialist**; appropriate class sizes; and the facilities, equipment, and supplies needed to deliver quality, daily PE.
	Publicize and disseminate tools to help schools improve their PE and other physical activity programs.
	Enable state education and health departments to work together to help schools implement quality, daily PE and other physical activity programs.
	Implement an ongoing media campaign to promote PE as an important component of a quality education and long-term health.
Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity (USDHHS, 2001)	**Ensure daily, quality PE** in all school grades. Such education can develop the knowledge, attitudes, skills, behaviors, and confidence needed to be physically active for life.
Commitment to Change (Action for Healthy Kids, 2003)	**Provide age-appropriate and culturally sensitive instruction** in health education and PE that help students develop the knowledge, attitudes, skills, and behaviors to adopt, maintain, and enjoy healthy eating habits and a physically active lifestyle.
	Provide all children, from preK-12 grades, with **quality daily PE** that helps develop the knowledge, attitudes, skills, behaviors and confidence needed to be physically active for life.
Physical Education for Progress Act (2000)	Initial fund allotment of $400 million over five years for school districts and communities to initiate, expand, or improve K-12 PE programs.
No Child Left Behind Act (PL 107-110; 2002)	The *Carol M. White Physical Education Program* (PEP) **funds** are for school districts and community-based organizations that initiate, expand, or improve PE programs for students in grades K-12.

CDOE California Department of Education
DHHS Department of Health and Human Service
NASPE National Association of Sport and Physical Education

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resources existed in schools (Darling-Hammond, 1990) and the competition was likely increasing as a result of the standards movement.

The goals of California's PE framework and NASPE's 1995 national PE standards served to guide the development of the California *Challenge Standards for Student Success: Physical Education* (CDOE, 1998). Recently, California adopted the new *Physical Education Model Content Standards* (CDOE, 2005a). California's PE framework and standards will be discussed later in this chapter.

In 1997, the DHHS published *Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People* (USDHHS, 1997). The report laid out specific guidelines for programs and policies in schools and communities that promote lifelong physical activity among youth. Among the guidelines were for schools to require daily PE in kindergarten through grade 12; implement PE curricula and instruction that emphasized enjoyment and helped students develop, adopt and maintain physically active lifestyles; promote collaboration among all teachers within a school; and provide in-service training on PE topics (see Table 2.1).

Activities in the New Millennium

National reports of the previous two decades and the establishment of PE frameworks and standards exemplified the tremendous efforts of national and state governmental bodies and professional organizations to inject policies into communities, especially schools, that would promote the adoption of healthy

lifestyles. Although youth fitness was not improving in a manner consistent with policy goals, the policy activities continued into the new millennium.

Healthy People 2010 (USDHHS, 2000a) was launched in 2000 as yet another "comprehensive, nationwide health promotion and disease prevention agenda" that identified physical activity as the nation's high-priority public health area. Three objectives were related to PE. Consistent with the previous *HP* documents, increasing daily PE participation and the amount of time students were active during PE class was promoted, as well as increasing the number of schools requiring daily PE (see Table 2.1). Mid-course reviews (CDC, 2004) have shown that fewer than 30% and 40% of 9th through 12th-grade students participated in daily PE, and were active 20-minutes or more during PE class, respectively. The data indicated that the objectives were not being met. Data were not available for the objective promoting school requirement of daily PE.

The report *Promoting Better Health for Young People Through Physical Activity and Sports: A Report to the President from the Secretary of Health and Human Services and the Secretary of Education* (USDHHS, 2000b) identified strategies that promote "better health for our nation's youth through physical activity and fitness" (p. 1). The painfully pragmatic executive summary stated: "Our nation's young people are, in large measure, inactive, unfit, and increasingly overweight...physical inactivity has contributed to an unprecedented epidemic of childhood obesity that is currently plaguing the United States" (p. 1). Interestingly, the report contained one strategy that specifically encouraged multiple levels of government to actively engage in the promotion of daily PE:

"The President, the Secretary of Health and Human Services, the Secretary of Education, and the nation's governors and majors should educate the American public in general, and educational policy makers in particular, about the importance of having all children participate in quality, daily physical education" (USDHHS, 2000b p. 31).

In recognition of the critical role schools play in helping youth adopt healthy lifestyles, the report included four strategies to improve school PE programs including providing (a) quality daily PE; (b) qualified PE teachers, appropriate class sizes, and the resources needed to deliver a quality program; (c) tools to improve school programs; (d) arenas for collaboration among education and health departments to implement school programs; and (e) media tools to promote school programs (see Table 2.1).

In 2001, the Surgeon General issued the *Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity* (USDHHS, 2001). The report echoed the concerns of childhood overweight and obesity articulated in the *Report to the President.* In 2000, more than 10% of children aged 2-5 years and 15% of children and adolescents aged 6-19 years were overweight (Ogden, Flegal, Carroll, & Johnson, 2002), rates which were double and triple, respectively, of just 20 years prior (USDHHS, 2001). The Surgeon General identified national priorities for immediate action; one targeted PE: "Ensure daily, quality physical education in all school grades" (p. 34). Given the severity of the obesity problem, the language of the recommended action seemed mild especially following the *Report to the President.*

In response to the *Surgeon General's Call to Action*, the Action for Healthy Kids (AHK) initiative was launched. The AHK was a nonprofit organization whose purpose was to integrate national and state groups working to improve children's nutrition and physical activity. The AHK produced *Commitment to Change* (AHK, 2003), a guidance document that outlined specific actions that schools could take to promote sound nutrition and PE. Two actions advocated providing age-appropriate and culturally sensitive instruction in health education and PE that supports a physically active lifestyle, and pre-kindergarten through grade 12 children with quality daily PE that helps develop physically active lifestyles (see Table 2.1).

The *HP 2010*, *Report to the President*, *Call to Action*, and *Commitment to Change* were all examples of how actions taken by the federal government established the basis for PE policies and initiatives (Siedentop, 1999). Each document advocated daily PE, yet during the year the Call to Action was released, data indicated that only 8% of schools offered daily PE, and 25% offered PE three days a week (Burgeson et al., 2001). Those documents may represent decisions taken by governing bodies to legitimize public concerns without knowing effective and necessary steps to address the concerns, what Elmore and Sykes (1992) referred to as "symbolic" policy. That is, policymakers act on public concerns by creating policy even though uncertainty may exist regarding the correct course of action.

A dramatic change occurred in PE policy with the passage of the *Physical Education for Progress (PEP) Act* in 2000. For the first time a federal

inducement program specifically for PE was developed and represented a dramatic change from the primarily symbolic PE policies (Elmore & Sykes, 1992) of the past. The PEP funds were for school districts and community-based organizations to initiate, expand, or improve PE programs for students in kindergarten through grade 12. The *PEP Act* was integrated into the *No Child Left Behind Act* ([NCLB], PL 107-110) of 2002 under the new name of the *Carol M. White Physical Education Program.* However, PE as a separate subject area was not a component of NCLB.

The *NCLB Act* was a significant and comprehensive federal education policy with three core principles: (a) hold schools accountable to improve student achievement, (b) provide quality options for all students, and (c) ensure highly qualified teachers for every child in core subjects. The core subjects were English, reading or language arts, mathematics, science (general, life, and physical science), foreign language, social studies (history, civics and government, economics, geography), and visual and performing arts.

Despite assertions about the importance of PE programs, evidenced by policies, PE is neither a core subject nor an objective within a single education goal of *NCLB.* Such exclusions maintain the hierarchical position of high pressure subjects (Schwille et al., 1983), perpetuate the low status of PE (Evans & Penney, 1999), and potentially slow the momentum of youth reform efforts. Because the *NCLB Act* emphasized schools having to demonstrate student proficiency on assessment tools tied to state standards, the pressure to perform in the core subject areas may have caused schools to decrease or eliminate PE

programs (AHK, 2003; Dodd, 2002). The omission of PE in *NCLB* has since prompted many PE professionals to advocate for state and local support to include the subject in the core curriculum (Illinois Association for Health, Physical Education, Recreation and Dance, 2004). However, simply enacting policy does not make it immune to the pressures of the accountability environment that persists in public schools.

Summary

A quarter of a century after release of the landmark SGR *Healthy People* (USDHEW, 1979), the state of youth fitness appears to have worsened instead of improved, despite the "bumper crop" (Cohen & Ball, 1990a) of reports and policies sowed by national and state governments, and professional organizations aimed at improving the poor status of youth fitness. Several of the policies may have simply served to legitimize public concern, without providing instrumental action (Elmore & Sykes, 1992). However, what was successful were the tremendous contributions from researchers toward increasing our understanding of, awareness of the extent of, and information about potential solutions to the issues related to youth fitness. Additionally, success was made in creating policies that helped educators move towards developing quality PE programs, providing resources for schools and communities to build or enhance PE programs, and disseminating information about issues surrounding youth fitness and PE.

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The Role of Physical Education in Schools

Comprehensive PE programs have been deemed essential for children to attain physical competence, health-related fitness, movement knowledge, self-esteem, personal development, social development, and overall enjoyment of physical activity (CDOE, 1994; Council of Physical Education for Children [COPEC], 2001; NASPE, 2004). In this capacity, school PE programs have been slated to play a major role in supporting policies that promote youth fitness and have the potential to be the primary source of physical activity promotion (McKenzie, 1999).

Relationship between Physical Education and Academic Performance

School administrators sometimes view PE as an activity that takes time away from core academic subjects (Shephard, 1997). The logic here is that spending less time on core subjects undermines academic learning and lowers scores on high stakes tests. However, evidence does not support this assumption. Research has shown that allowing time for PE, music, or art, does not negatively impact high stakes test scores (Graham et al., 2002) or reduce academic learning (Shephard et al., 1984; Shephard, LaVallee, Volle, LaBarre, & Beaucage, 1994).

Longitudinal research studies that have focused on the impact of increased PE time on academic subject learning suggest that increased PE time did not negatively affect academic learning. Elementary students who spent more time in PE have outperformed their classmates in fitness, psychomotor abilities, English, and natural science (Shephard, 1997); physiological and fitness

variables (Dwyer, Coonan, Worsley, & Leitch, 1979); and reading (Sallis et al., 1999). However, there were no differences between the students in math (Shephard, 1997; Dwyer et al., 1979), or foreign language (Shephard, 1997).

A more recent study in California (CDOE, 2002) matched reading and math scores with fitness scores of fifth-, seventh-, and ninth-graders. The results showed a distinct relationship between academic achievement and physical fitness. For all grade levels, high reading and math scores were associated with increased levels of fitness, with a stronger relationship with math scores. Students who met minimum physical fitness measures showed greater gains in math and reading scores than those not meeting those measures.

The contention that fitness and activity are related to academic performance is enhanced by these study findings. They provide compelling evidence that participation in PE does not negatively impact academic performance or ability, despite the loss of time in academic curricula, and may actually improve it.

Role of Elementary School Physical Education

The purpose of elementary school PE is to improve physical fitness and teach a variety of motor skills, knowledge, and other competencies that not only bring short-term benefits but also serve as the foundation for an active lifestyle (Sallis & McKenzie, 1991; Shephard, 2000). Many skills used in adult recreation and leisure are learned early in life. People who do not learn these skills may be less likely to obtain the health and fitness benefits of lifelong physical activity (NASPE, 2003).

There is growing evidence to suggest that some tracking of physical activity behaviors exists over varying periods of childhood and, in some instances, to adulthood, although the magnitude of tracking has often been found to be limited and its strength generally decreases as the interval between observations increases. In studies over relatively short time intervals (i.e., 3-5 years), performance- and health-related physical fitness tracks significantly in children and preadolescents (Marshall, Sarkin, Sallis, & McKenzie, 1998; Pate, Baranjowski, Dowda, & Trost, 1996; Sallis, Berry, Broyles, McKenzie, & Nader, 1995; Saris, Elvers, Van't Hof, & Binkhorst, 1989). Tracking of physical activity often has been measured indirectly, via questionnaires and interviews, with results displaying moderate to high levels of tracking in childhood and adolescence (Janz, Dawson, & Mahoney, 2000; Raitakari et al., 1994; van Mechelen & Kemper, 1995; Vanreusel et al., 1993).

Over longer follow-up periods, the evidence supporting tracking is weak. Results of some longitudinal studies of adolescence to adulthood (i.e., spanning 5-14 years) indicate limited tracking in physical fitness and physical activity levels (Anderson, 1996; Twisk, Kemper, van Mechelen, & Post, 1997). Results from a 20-year longitudinal study (spanning childhood to mid-adult life) comparing participants in a daily (five hours a week) versus control (40-minutes a week) PE program was also limited (Trudeau, Laurencelle, Tremblay, Rajic, & Shepard, 1998, 1999). The 20-year impact of daily PE showed that females self-reported more active lives, and males and females perceived themselves to be healthier than the controls. However, intentions to be physically active were not different

between groups, either in males or females. These results may indicate that skill development at an early age is the key to maintaining physical activity later in life, as physical activity has been found to track at moderate to high levels during short and long time intervals.

What has been consistently demonstrated across differing age spans of subjects and follow-up periods of studies is that youth at the extremes of the physical activity distribution (i.e., those with the highest and lowest levels of physical activity) maintain their physical activity status over time (Kelder, Perry, Klepp, & Lytle, 1994; Pate et al., 1999; Raitakari et al., 1994; Sallis, Prochaska, & Taylor, 2000; Twisk et al., 1997). In other words, people who were more active during youth were more active later in life than their peers, while children with inactive and sedentary behaviors are at risk of being inactive, sedentary adults.

Taken together, these studies provide evidence to suggest that the level of participation in physical activities in childhood and adolescence influences to varying degrees the extent to which those individuals will continue to participate in physical activity as an adult (COPEC, 2001). There exists an opportunity during childhood to form the foundation for a lifelong health benefit of physical activity.

California Physical Education Policies

The state of California has poured considerable resources into supporting PE programs through policies. California has mandated instructional PE minutes, developed a PE framework with a revision forthcoming, developed PE *Challenge Standards*, then the revised *Content Standards*, and mandated annual

administration of a physical fitness test. In this section, I will introduce the policies and discuss the goals and visions stated by California for each policy.

Physical Education Instructional Time

In California, PE is required by state mandate: "Instruction in physical education in an elementary school maintaining any of grades 1 to 8 shall be for a total period of time of not less than 200-minutes each 10 schooldays, exclusive of recesses and the lunch period" (California Education Code [CA EC] 51210). The legislation acknowledged that children are physically unfit, overweight and are at risk of early heart disease and stated, "It is, therefore, the intent of the Legislature that all children shall have access to a high-quality, comprehensive, and developmentally appropriate physical education program on a regular basis" (CA EC 51210.1). Additionally, California proposed to randomly monitor school district compliance with mandated PE minutes for grades one through six. For school districts out of compliance, the state requires the district to "issue a corrective action plan" (CA EC 51210.1b). To further elevate PE, the legislation established additional components to the education code:

> The Legislature hereby finds and declares that the physical fitness and motor development of children in the public elementary schools is of equal importance to that of other elements of the curriculum. It is, therefore, the intent of the Legislature to encourage each school district maintaining an elementary school...to do one of the following: (1) Employ a credentialed physical education teacher to provide instruction in physical education...(2) Provide each teacher providing instruction in physical education...with yearly theoretical practical training in developmental physical education, as set forth in the Physical Education Framework (CA EC51210.2).

Little is currently known about the teachers of and their capacity to teach elementary PE in California. A study from over 20 years ago (Petray, Hennessey, & Coulter, 1984) found that classroom teachers were responsible for 97% of elementary PE instruction, a high percentage given classroom teachers' limitations of time, training, and ability (McKenzie, Sallis, Faucette, Roby, & Kolody, 1993). Nationwide, the percentage is reverse: in those schools that required PE, the subject was taught by PE specialists in 70% and classroom teachers in 10% of the schools (Burgeson et al., 2001).

California's efforts to support PE through required PE minutes, monitoring compliance with the mandated minutes, and encouragement of districts to support quality instruction are significant. The impact of such efforts on PE programs and students' experience of PE is not yet known, but may serve as an indirect call to the research community to engage in PE policy and practice studies.

Physical Education Framework

California's PE framework represents another effort to change PE, this time through an instructional and curriculum guidance tool (Cohen & Spillane, 1992). The *Physical Education Framework for California Public Schools Kindergarten Through Grade Twelve* (CDOE, 1994) defined a physically educated person as one who "has mastered the necessary movement skills to participate confidently in many different forms of physical activity, values physical fitness and understands that both are intimately related to health and well being" (p.4). But the framework moved beyond health-related physical fitness

component and called for PE programs that balanced and contributed to children's academic learning and that worked together with students, family, and communities to develop the knowledge and skills needed to achieve personal goals as well as a healthy lifestyle.

California's vision for PE focused on students' achievement and personal goals for improvement in three major areas of development: movement skills and knowledge, (the framework's primary goal); self-image and personal development; and learning about and through social interaction. The movement skills and knowledge goal emphasized learning how to move, a "basic element" of students' PE experience and necessary for physical activity to be successful and enjoyable. The framework also aimed to help students develop and maintain a positive self-image, recommending de-emphasizing competition and emphasizing students' discovery of their capabilities. The physical education curriculum must include opportunities for students to engage in self-appraisal of skill development and create a personal plan for skill improvement. The third goal, social development, included independent and group work for students during physical activities. The framework recommended that PE programs include opportunities for students to work cooperatively, practice fair competition, and support one another to meet challenges, all positive contributions to students' ethical and moral development.

Beyond the goals, the framework also identified the necessary environment and instructional elements for a quality PE program. The elements of an environment conducive for a quality program include recognition of PE as

an integral part of school curriculum; integration of PE with other subject areas; support for professional development; availability of facilities, equipment, and supplies; providing a nonthreatening environment; and involvement of the home and community in physical activity. The elements of quality instruction in PE include model PE lessons; a variety of teaching styles including strategies for students with special needs; and different forms of student assessment such as portfolios, observations, and performance tests.

The framework represented an ambitious vision for California PE programs. The framework urged districts, schools, and teachers to deliver quality PE to students through a comprehensive, integrative, sequential, and age-appropriate program; a supportive and adequate environment; and effective and quality instruction.

Physical Education Standards

The goals of California's *Physical Education Framework* helped guide the California *Physical Education Challenge Standards for Student Success* (CDOE, 1998) as did NASPE's national PE standards. For each grade level, the seven challenge standards specified learning sequences of *what students should know* and established objectives within each standard that all students should *be able to do* to demonstrate accomplishment of the standard (see Appendix B). For example, students in third-grade who meet standard one ("The student will be competent in many movement activities") will *be able to* develop a sequence of physical activities and movement patterns that match appropriately (rhythm, speed, emotion, etc.) to a selection of music. Table 2.2 illustrates the number of

objectives for each of the seven standards by grade level. For grades kindergarten through sixth there were a total of 164 objectives.

Recently California adopted new standards, *Physical Education Model Content Standards* (CDOE, 2005a) which were based on NASPE's new national PE standards (NASPE, 2004) and will be used to guide the forthcoming revision

Table 2.2 Number of Objectives for the Challenge Standards by Grade Level

Grade	Stnd 1	Stnd 2	Stnd 3	Stnd 4	Stnd 5	Stnd 6	Stnd 7	Totals
K	7	3	3	3	3	4	4	27
1	5	3	3	3	3	3	1	21
2	4	3	3	3	4	4	1	22
3	3	5	3	3	2	4	1	21
4	7	2	4	5	4	3	2	27
5	4	4	4	3	3	4	1	23
6	4	3	4	4	3	3	2	23
Totals	34	23	24	24	22	25	12	164

Stnd = Standard

of the *Physical Education Framework.* The content standards represented the skills and knowledge needed for students to maintain a physically active and healthy lifestyle, and provided guidance for PE programs on *what students should know* and *be able to do* at each grade level. Different from the challenge standards in which all seven standards applied to all kindergarten through twelfth-grades, the content standards were separated into five elementary and middle school content standards, and three high school content standards (see Appendix B). Also the number of objectives for each content standard was higher than the number of objectives for the challenge standards. Table 2.3 illustrates that there are a total of 380 objectives for the kindergarten through sixth-grade levels and each grade level has 40 or more objectives.

Table 2.3 Number of Objectives for the Content Standards by Grade Level

Grade	Stnd 1	Stnd 2	Stnd 3	Stnd 4	Stnd 5	Totals
K	17	8	7	9	5	46
1	22	13	8	12	6	61
2	19	14	7	15	7	62
3	15	7	8	15	6	51
4	21	10	9	17	6	63
5	19	5	9	16	8	57
6	10	12	6	7	5	40
Totals	123	69	54	91	43	380

Stnd = Standard

Physical Fitness Test

California requires school districts to administer annually a physical fitness test to grades five, seven, and nine (CA EC 60800). The test chosen by California was the FITNESSGRAM, an assessment tool developed by the Cooper Institute in 1982 (www.fitnessgram.net/). The FITNESSGRAM was designed to measure health-related physical fitness and includes test items in aerobic capacity; body composition; and muscle strength, endurance, and flexibility. Students performance measures are compared to specific criterion-referenced health fitness standards. The California Department of Education states four functions the test serves: it provides information for (a) students to assess their fitness levels and plan a fitness program, (b) teachers to use in designing their curriculum, (c) parents and guardians to learn of their child's fitness levels, and (d) the state to monitor changes in students' physical fitness levels (CDOE, 2005b).

Although California developed the PE framework and standards and mandated instructional time for PE, those policies did not ensure daily PE, adequate training or qualifications by those teaching PE, or quality programs. The development of PE policies was intended to minimize a casual approach to

what was taught. If the policies were haphazardly implemented or simply unknown, the efforts achieved thus far may be seriously compromised. If we are to understand how these policies impact the practice of elementary physical education, we must address several questions: What are the factors that shape PE programs? Do those factors reflect the policies intended to affect PE? This study will address these and other questions.

The Research Framework

The framework that was useful in formulating my proposed research and guided the data collection and analysis was that of Darling-Hammond (1990). To better understand educational policy, Darling-Hammond advocated talking to teachers and observing their practice to gain insight into the relationship between choices teachers make and the ideas conveyed in policy. By focusing on teachers, an understanding can be gained on how they cope with, adapt to, and reconstruct the context in which they teach. Darling-Hammond's policy analysis paradigm outlined four areas of focus: policy implementation, the educational context in which the policy exists, the foundation of teaching, and the process of change.

Policy Implementation

Policy makers spend much more time deliberating about and enacting educational policies than they do planning for implementation of said policies (Fullan, 1991). The process of translating policy into action, policy implementation, has been identified as a complex interrelation between educators and layers of the education system (Elmore, 1983). The process at

the local level, the focus of this study, consists of several elements, including the political arena in which the policy was created, the degree of importance accorded the policy, teachers' knowledge and beliefs, and support for change in teacher practice (Darling-Hammond, 1990). Teachers' knowledge and beliefs, according to Darling-Hammond, must be "transformed" through experiences and explorations of policies for the change to take place.

That is, for teachers' to implement policy they must first be knowledgeable of the policy, have a content knowledge base in which to interpret and understand the policy, and have an environment in which to discuss and engage in the process of implementation, such as collegial interactions. An essential issue for this study is to examine teacher's knowledge of and knowledge base in which to interpret PE policies. As mentioned earlier, other PE policy research (Petersen et al., 2004; Chen et al. 2002b; Ferguson et al., 2005) did not study teacher's familiarity with PE policies. An assumption of policy awareness may have limited the ability to fully understand the process of policy implementation.

Examining these elements uncovers the reality that policy does not simply travel from policy makers' vision to implementors' practice and become the practice of what was intended. Instead, it has been discovered that context matters for (Darling-Hammond, 1990; McLaughlin, 1998) and causes variation in (Elmore, 1983) the process of policy implementation.

Context of Education and Policy

Policy travels through multiple levels of the education system and inevitably becomes altered along the way. Darling-Hammond (1990) noted that

policy arrives at the local level to an educational context filled with resource considerations, student needs, and competing priorities and belief systems. Additionally schools must contend with, manage, and coordinate several prior and existing education policies and programs (Cohen, 1982) in a manner that fits within the local context but also in a way that relates new policies or programs to existing and prior ones. However, state and national agencies often do not provide instructions about how teachers might connect their current practice to a new program in order to improve education. Policy makers have given little attention to the consequences of adding new policies onto an array of previous and existing ones (Cohen, 1982; Cohen & Ball 1990b; Darling-Hammond, 1990).

Teachers make daily decisions about topics to highlight or de-emphasize, while determining personal allocations of time and energy (Bennett, 1994). They must contend with various concerns to somehow relate, integrate and prioritize policies (Cohen, 1982). The potential for discrepancy between policy and the realities of teachers' practice is a critical issue for the understanding of policy implementation and is a focus of this study.

The Foundation of Teaching and Educational Change

Teachers' capacity, motives, and attitudes matter in policy interpretation and enactment (Cohen & Ball, 1990b; Elmore & Fuhrman, 1995; Darling-Hammond, 1990) and are strong forces that help maintain certain ways of thinking and behaving (Fullan, 1991). Education policy makers often fail to understand that for teachers' instruction to change, their beliefs must be transformed (Fullan, 1991). According to Darling-Hammond (1990), education

reform efforts are often received by educators through a lens of what they know, experience, and believe prior to encountering new policies. In PE, Chen et al. (2002a) found that teachers who had a strong content knowledge base used standards for improving teacher practice, curriculum development, and assessment. However, when proposed changes are not consistent with teachers' repertoire, they are not likely to adopt the new practices (Schwille et al., 1983). What is required are *alterations* in teacher thinking, knowing, and practice developed through a professional development process of intellectualizing, struggling with, and reconstructing "new ways of thinking and teaching" (Darling-Hammond, 1990). In the context of policy implementation, teacher attitudes, knowledge, and practice take on a heightened level of importance.

Summary

Darling-Hammond (1990) has pointed out important lessons about policy: (a) opportunities must be provided for discussion about policy if understanding is to take place, (b) new policies land on top of previously introduced policies, (c) teachers often teach from a familiar base knowledge, and (d) the process of policy implementation and change is slow and often challenging at all levels of the education system.

Local circumstances of policy layering, specialized concerns, teachers' knowledge and beliefs, and policy adaptation change over time, which in turn revise the context in which policy rests. Local implementation thus represents a process of adaptation between perceptions of policy and local realties. According to the Rand Change Agent study (Berman & McLaughlin, 1973-78)

"mutual adaptation and local variability" are good in that they help educators shape and integrate policy to suit their local environment.

CHAPTER 3

METHODOLOGY

The purpose of the current study was to understand the factors that influenced teachers' decisions about and practice of PE and how those factors were related to California PE policies. For this study, I focused on the following factors: support for and the value given PE, and PE teacher scholarship. Support included the allocation and availability of resources for hiring teachers of PE, professional development, and purchasing PE equipment and material. Within each decision regarding support for PE, the influence of values affects the decision making process and enables decision makers to prioritize competing interests. The value given the PE program included how teachers valued their own PE program and how they perceived fellow teachers, and school and district administrators to value the PE program. Physical education teacher (PET) scholarship included engagement in professional development workshops and collegial interactions, and professional organization membership.

Research Strategy

A qualitative multiple-case study design was employed. Individual teachers of PE were the unit of analysis, and the three types of teachers of PE, to be discussed below, were included. Qualitative research methods were used for several reasons. First, they provided rich and detailed data of the educational context of elementary PE programs and policies. Next, the methods allowed me to develop deep explanations of teachers' decisions and practice of PE which led to unexpected findings and uncovered new interactions. Finally, qualitative data

methods are most appropriate when one want to capture participants' experiences from their own story. Qualitative methods enabled me to understand elementary school PE programs from the view of the teachers of PE.

Sampling

Participant recruitment was limited to a single county to help minimize the political, educational, and financial variation across school settings. Desigual County (a pseudonym) was selected because of the regular offering of elementary PE professional development and the accessibility of teachers. I further limited recruitment by selecting only participants teaching at non-charter elementary schools with school enrollment greater than 100 students. Charter and small school were excluded because of their general uniqueness – charter schools are exempt from selected state or local rules and regulations and small schools have few teachers and limited facilities. Unless indicated otherwise, the term "elementary school" shall refer to non-charter elementary schools with enrollment greater than 100 students.

Participants were recruited from three categories of school personnel: physical education teachers who had teacher certificates (cert-PETs), physical education teachers who were classified staff, commonly referred to as paraprofessional, (para-PETs), and classroom teachers (CTs). The purposeful sampling (Patton, 2002) was guided by national data that showed elementary PE was primarily taught by cert-PETs, as well as instructional aides with teacher supervision, and CTs (Burgeson et al., 2001). The sampling also allowed for contrasting cases across PE training experiences. The assumption was that

cert-PETs would have a greater PE content knowledge and likelihood of implementing PE policies into their programs than para-PETs and CTs.

Physical Education Teacher Recruitment

During spring 2005 participant recruitment began. Seventy-four schools representing 33 districts were telephoned to inquire about the teacher of PE at the school. For those schools with a PET, a teacher hired for PE instruction at the school or district level, a brief message for the PET was left stating my contact information and the purpose of the contact, to recruit PETs for an elementary school PE study. Of the 44 messages left for PETs, 22 individuals called back and of those 22, 13 communicated they could commit to participating in the study after they learned about the study scope and purpose, and the time and energy demands of participation.

From the school and PET phone contacts, I was able to profile the landscape of elementary PE teachers and their schools in Desigual County (see Table 3.1). Of all the elementary schools in Desigual County, 38% had a Cert-PET, 28% had a Para-PET, and 34% had no PET (CT only). Although 57 schools had a PET at their school site, several school districts had PETs that taught at more than one school site. The 33 schools with cert-PETs had higher average enrollment, percentage of free and reduced meal (FRM) students, percentage of English language learner (EL) students, and percentage of Hispanics; and lower average API scores than schools with para-PETs, CTs only, and the Desigual County totals.

Table 3.1 Desigual County Elementary School Demographics by Type of Teacher of Physical Education

Characteristic	Cert-PET (n=23)	Para-PET (n=20)	*Cert-PET + Para-PET (n=43)*	CT only	**Desigual County Totals**
Number and Percentage of Schools	33 (38%)	24 (28%)	*57 (66%)*	30 (34%)	**87 (100%)**
Average Enrollment	402	378	*392*	365	**382**
% FRM Students*	49%	24%	*39%*	40%	**40%**
% EL Students*	36%	14%	*27%*	28%	**29%**
% White	46%	69%	*56%*	57%	**54%**
% Hispanic	43%	20%	*33%*	32%	**35%**
2004 Average API Base Score	721	814	*760*	747	**756**

Note. Data were derived from DataQuest (2004-2005; http://data1.cde.ca.gov/dataquest/) and Ed-Data (2004-2005; http://www.ed-data.k12.ca.us/welcome.asp).
* EL = English Learner; FRM = Free/Reduced-Price Meal Program;

Participant selection from the pool of 13 PETs was screened initially for participation in professional development in an attempt to equalize a minimum content knowledge base. All participants had to attend at least one elementary PE workshop within the previous three years. Subsequent selection was based on classification of employment (cert- or para-PET), teaching experience (< or ≥ 5 years), and educational background. Eight PETs were selected for the study, four cert-PETs and four para-PETs. Within each teacher category, participants were selected based on the number of years of teaching experience, then based on advanced educational certificates that were beyond the minimum requirements for the PET positions. For cert-PETs, teachers were selected based on their having a PE credential or not. That is, a certificated teacher could teach PE, a cert-PET, but not have a credential specific for PE such as a single subject or supplementary authorization credential in PE. For para-PETs,

teachers were selected based on the possession of a Bachelor's degree (independent of subject area) or not. I was unable to recruit a cert-PET with five or more years of experience who did not have a PE credential (see Table 3.2).

Table 3.2 Number of Physical Education Teacher Participants by Sampling Categories

Employment Classification	Teaching Experience			
Cert-PET	< 5 years		≥ 5 years	
	PE Cred	No PE Cred	PE Cred	No PE Cred
	1	1	2	0
Para-PET	< 5 years		≥ 5 years	
	Bachelor's	No Bachelor's	Bachelor's	No Bachelor's
	1	1	1	1

After a PET agreed to participate in the study, a site visit and interview were scheduled and a packet of information was mailed. The packet included a summary of the study, the informed consent form, the questionnaire, and a self-addressed postage-paid return envelope.

Classroom Teacher Recruitment

For those schools without a PET, I mailed a recruitment letter to CTs in one of two ways: a) I mailed several letters to the school and asked the secretary to distribute the letter to CT's mailboxes (151 letters to 16 different schools), or b) I mailed individually addressed letters to CTs whose names were on a school website (96 letters to 8 different schools). The letter explained the purpose and protocol of the study. Of the 247 letters sent out to 24 different schools, not a single CT responded. The study was dramatically changed in a continued effort to recruit CTs - the site visit was eliminated, the interview was pared down to six

questions, and the interview was changed from an in-person to a telephone interview.

To recruit CTs, two individuals were contacted, known by me, who worked in four school districts within Desigual County. Those individuals agreed to hand deliver a recruitment letter to CTs. The letter contained information about and how to participate in the study and the brevity of the time commitment, estimated five- to ten-minutes, for a telephone interview. All 15 CTs who responded to the request for participation were interviewed. The CTs represented seven schools within four districts.

Methods of Data Collection

Physical Education Teacher Questionnaire

All PET participants completed a 23 item questionnaire. The questionnaire contained questions addressing participants' professional training and experience, PE course characteristics, school facilities and equipment, instructional resource material, and professional development involvement (see Appendix C).

Site Visit

One observation was made at the PET's school site during PE class. The observation provided information about the context of the teachers' work environment – their school and students, and the teachers' practice. Field notes were written during and after the visit and included observations, teacher and student comments, ideas generated during the observation, as well as reflections and questions of the PET's behavior and that of their students. During the site

visit, documents such as curriculum, books, and assessment instruments were previewed with notes taken, or collected for later analysis.

Interviews

For both the PET and CT interviews the following protocol was used. Participants were reminded of the study's purpose and the use of data collected, and were informed that confidentiality of the conversation would be maintained and of his or her right to withdraw from the study at any time. Finally for the PET interview, permission was obtained to audiotape the discussion. All interviews were transcribed using either the audio-tape from the PET interviews or notes from the CT interviews.

Physical Education Teacher Interview

The in-person interview was audio-taped and took place in a private setting at the school site, the participant's home, or a coffee shop. The interview was semi-structured, with both open-ended and directed questions (see Appendix D). The open-ended questions enabled the participants to communicate an idea or set of ideas without imposed restrictions or directions. The opening question was, "What is it like for you to teach physical education?" Subsequent questions were conversational but directed to prompt participants to discuss the issues of support for and the value given PE, the structural components of their PE program, PE policies, and professional development. Some interview time was dedicated to clarification or further inquiry into responses given on the questionnaire. The closing question consisted of asking the participants if they had anything they would like to add that was not asked.

Some questions or points of clarification arose after observing the participant, analyzing the questionnaire and interview responses, and/or analyzing the PE documents. An informal follow-up phone interview was conducted to clarify understanding or confusion, or provide additional information of participants' practice or program.

Classroom Teacher Interview

The phone interview was conducted when interested CTs called me in response to reading the hand-delivered letter about the study. The interview was structured with three questions, each with sub-questions, addressing the CTs delivery of PE: the frequency and the type of activities provided; the influences regarding the CTs delivery of PE; and CTs familiarity with and the influence of California PE policies (see Appendix E). The closing question consisted of asking the participant if they had anything they would like to add that was not asked.

Data Analysis

Data analysis was a continuous process that involved moving back and forth between concrete bits of data and thematic ideas, inductive and deductive reasoning, and description and interpretation (Bogden & Biklen, 1998; Patton, 2002); throughout data analysis, cases were analyzed both within and across teacher type categories. The qualitative software package, QSR NVivo 2, was used to assist data analysis by storing, organizing through coding, managing, and contextualizing the data. The software allowed for data to be linked within and across documents and codes.

A major component to data analysis was the development of codes. Codes were generated from the questionnaire, interview, and observation data. Codes were labels that described a unit of data - words, phrases, sentences, or paragraphs that take their meaning from the context of the data (Miles & Huberman, 1994). The generation of codes was continuous and iterative and involved initial submersion in the data itself: listening to audio-tapes and reading the transcripts of the interviews, reading the questionnaire responses, and reading the documents several times each. Chunks of data were arranged and rearranged into categories and codes that made it possible to compare data within and between categories (Maxwell, 1996).

One example of coding was from the responses to the research question, What factors influenced teachers' decisions about and practice of physical education? The process of devising the factors was informed by previous policy research, guided by the meanings made explicit by participants, and intuitive in nature. Several factors were identified before hand, such as the level of teacher engagement in professional development. Responses that indicated professional development influenced the PE program were gathered from concrete bits of data, and were deductively analyzed and descriptive in nature. Those data were coded under the category of professional development with codes for subcategories of types of professional development.

However, some factors emerged that were not identified a priori. Those factors were identified through recurring patterns and themes that were prevalent across the data and were inductively analyzed (Maxwell, 1996; Patton, 2002).

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The coding scheme required constant checking between the codes that were generated and the raw data (Merriam, 1998). Obsolete codes were revised or discarded and new ones generated throughout the data analysis period (Maxwell, 1996). During code refinement, a structure developed of the data within a category such that it was consistent and belonged together, and among categories such that they were discrete and clearly different (Patton, 2002).

Validity Issues

Internal validation of data was achieved in two ways. First, the use of different data-collection techniques – interviews, direct observations, questionnaires, document analysis, participant responses – allowed comparison and cross-checking of the consistency or contradiction of the data across several points in time and several types of methods (Patton, 2002). Second, member checking occurred through discussing with participants points of clarification, errors, or questions that arose during and after data collection. Participants' spoken and written words were accepted as true, unless evidence was discovered to the contrary. However, participant feedback did not necessarily alter the findings or conclusions, as the results were my sole responsibility.

Two strategies were employed to enhance the possibility of external validity. First, the detailed description of the study was provided to allow readers to interpret the findings transferability, applicability, or typicality to other circumstances (Merriam, 1998). Second, using a design that involved multiple school sites and multiple categories of teachers provided a diversity of

representation of elementary school PE programs thereby allowing the results to be applied by readers to a greater range of other situations (Merriam, 1998).

Ethical Issues

All participants were provided with and required to complete an informed consent form (see Appendix F and G) prior to data collection. The PET written form and the CT oral explanation over the telephone provided information regarding the data collection procedures, the voluntary nature of study participation, the purpose of the study, use of the data collected, and confidentiality. All participants were informed of their right to withdraw from the study at any time.

All data collection forms were given a participant code to ensure confidentiality. All participant names and their associated codes were logged in an electronic password locked research journal. Because participants' names were linked to their codes and interviews were audio-taped, anonymity was not preserved. However, all professional forms of communication about the research will not link participants with specific responses or findings, such that individual participants will not be identified or associated with particular pieces of data.

CHAPTER 4

RESULTS

The primary purpose of this research was to understand the factors that shape the context of elementary physical education teacher's practice and how those factors were related to physical education policy implementation. A key problem exposed during data collection and analysis is that teachers have little control over their environment. The circumstances in which they work are often determined by decision-makers of the school system, not by the teachers, which create an environment that makes teaching and policy implementation challenging, at best.

The findings indicate a necessary shift from a focus on policy implementation to a focus on the circumstances of the teacher's environment, mostly determined by the irrational behavior of the school system and its decision-makers. The shift requires a new framework in which to analyze and discuss the data. A decision-making theory useful for these purposes is the garbage can theory (GCT) of choice within an organization (Cohen, March, & Olsen, 1972).

This chapter is divided into four parts. First, a broad description of teachers' school demographics and physical education programs is provided. Second, the GCT is presented and used to frame two critical decision-making junctures in elementary physical education. The third section includes a description of and evidence for several factors that co-mingle to create a challenging environment in which teacher's teach. Finally, the issue of policy

implementation is addressed with respect to the impracticality of implementing policies within a restraining environment.

The PETs' data are the primary focus of this chapter, as that is the most extensive and rich data available. The CT data are limited in depth but have been included when relevant.

Teachers' School and Physical Education Program

School Demographics

At the county level, in non-charter elementary schools with enrollments greater than 100 students, the percentage of schools with cert-PETs, para-PETs, and no PETs was 38%, 28%, and 34%, respectively. Within the cert-PET positions it was not known what percentage of those individuals had additional degrees and/or credentials in physical education. The structure of the PE program (i.e. the number of instructional minutes for and the grade levels that received PE) was not ascertained for all schools in the county.

The county schools with a cert-PET had higher percentages, 49%, 36%, and 43%, of free and reduced meals program (FRM), English learner (EL), and Hispanic students, respectively; a lower percentage of White students, 46%; and a lower academic performance index (API) score of 721 when compared to county para-PET and CT schools and the county as a whole. In contrast, the county schools with a para-PET, when compared to county CT schools and the averages for the county, had lower percentages, 24%, 14%, and 20%, of FRM, EL, and Hispanic students, respectively; a higher percentage of White students, 69%; and a higher API score of 814. The schools with CTs only had student

demographic percentages that were between the extremes of the cert-PET and para-PET percentages and were similar to the county wide student demographics. For brevity, only the White and Hispanic student populations were included in the school demographics because they constituted at least 80% of the students in all participant schools and at the county level (see Table 4.1).

Table 4.1 Demographic Profile of Non-Charter Elementary Schools

School Category	Schools per Category N (%)	% FRM*	% EL*	% White	% Hispanic	2004 API* Score[a]
County Cert-PET	33 (38%)	49 hi	36 hi	46 lo	43 hi	721
County Para-PET	24 (28%)	24 lo	14 lo	69 hi	20 lo	814
County CT (No PET)	30 (34%)	40	28	57	32	747
Participant Cert-PET	10	43 hi	33 hi	51 lo	38 hi	735 lo
Participant Para-PET	5	27 lo	9 lo	68 hi	20 lo	836 hi
Participant CT (No PET)	7	33	21	64	29	761
County	87 (100%)	40	29	54	35	
State	5251[b]	50	25	31	47	

Note. Data were derived from DataQuest (2004-2005; http://data1.cde.ca.gov/dataquest/) and Ed-Data (2004-2005; http://www.ed-data.k12.ca.us/welcome.asp).
* API = Academic Performance Index; EL = English Learner; FRM = Free/Reduced-Price Meal Program
[a]Value represents average across schools within each category.
[b]Value includes non-charter elementary schools with any level of enrollment.

The participant cert-PET schools, like those at the county level, had higher percentages of FRM, EL, and Hispanic students 43%, 33%, and 38% respectively; a lower percentage of White students, 51%; and a lower API score of 735 when compared to the participant para-PET and CT schools and the entire county. Also, the participant schools with a para-PET, compared to participant CT schools and the county, had lower percentages of FRM, EL, and Hispanic students 27%, 9%, and 20% respectively; a higher percentage of White students, 68%; and a higher API score of 836. The participant schools with CTs

only, had student demographic percentages that were between the extremes of the cert-PET and para-PET percentages but were not similar to the county wide student demographics (see Table 4.1).

The student demographics of the cert-PET, para-PET, and CT participant schools showed the same inter-relationship pattern that existed in the same category of schools for the entire county. That similarity indicates that the participant schools are an accurate representation of the same category of schools within the county. The pattern also indicates a potential relationship between the staffing of PETs and school demographics. That topic is discussed later in the chapter. For individual participant school and district demographics see Appendix H.

The Teachers of Physical Education

All four cert-PET participants were paid from district general funds. Three cert-PETs had Bachelor of Arts degrees in physical education with teacher certification in physical education. Maria and Nancy were full-time, tenured teachers and Ruth was three-quarter time. The fourth cert-PET, David, did not have a college degree, teaching credential, or supplementary authorization in physical education. David was tenured and 100% full-time equivalent (FTE) at his school site; however, that time was shared between physical education (40% FTE), art (20% FTE), and computer laboratory (40% FTE) (see Table 4.2).

All four para-PETs were funded through school improvement program (SIP) funds. None of the para-PETs had college degrees or teacher certification

specifically in physical education although Patti and Karen had Bachelor and Master's degrees, and Tim had an Associate degree (see Table 4.2).

Table 4.2 Demographic Profile of Physical Education Teachers

	Participant*	Years Teaching PE	College Degree(s)	Teaching Credential(s)**	% FTE	Funding Source for Position
Cert-PETs	Maria	27	B.A. PE	SS in PE	100%	General Fund
	Nancy	23	B.A. PE	SS in PE	100%	General Fund
	Ruth	3	B.A. PE	MS with SA in PE	77%	General Fund
	David	5	B.A. Fine Arts M.A. Education	SE	40%	General Fund
Para-PETs	John	16	None	None	50%	SIP Funds
	Patti	5	B.A. & M.A. Theatre Arts	None	30%	SIP Funds
	Karen	3	B.S. & M.S. Food & Nutritional Sciences	None	56%	SIP Funds
	Tim	1	A.A.	None	58%	SIP Funds

*All participant names are pseudonyms
** MS = Multiple Subject; PTA = Parent Teacher Association; SA = Supplementary Authorization; SE = Standard Elementary; SIP = School Improvement Programs; SS = Single Subject

Certificated Physical Education Teachers Programs

Maria. Above the set of doors of Maria's classroom was a large display entitled "Reach for the Stars: 25 Push-Up Chart" a voluntary activity that involved students getting their names on large paper stars placed on the wall when they completed 10, 15, 20, or 25 push-ups. By 8:45 the janitors had finished cleaning up the multi-purpose room (MPR) from the breakfast program; Maria had a clean classroom for her PE students. It was spring and according to the curriculum developed 15 years ago by Maria and a colleague, the unit was Track & Field. Her PE program was based on skill introduction and movement exploration with units related to sports, dance, and tumbling.

Maria wore a microphone to address the 17 third -grade students escorted to the gym by their classroom teacher, who then left to take her 30-minute preparatory period. Upon arrival, the students were tapped on their heads, given a number, and instructed to join their group. They counted out loud in English and Spanish as they performed their jumping jack, push-up, and stretching routine. The hurdle activity, "L" shaped plastic tubes inserted into the top of cones, was explained, and then the class went outside to the large grass field. Eleven-minutes after class began, the groups lined up behind the four rows of hurdles, and on Maria's command the first student ran and jumped the four hurdles followed far behind by the next student. While performing that activity, the children spontaneously jumped, erupted into laughter, and chanted the name of their classmate jumping the hurdles. At the end of class, they ran to a tree, about 300 yards away, and back. Maria escorted the children back to their CT who was waiting for them on the blacktop; "I wore them out for you, Ms. Garcia," Maria said. "Excellent, that's just the way I like them," replied Ms. Garcia.

Maria returned to the MPR and waited for her 28 fourth-grade students. During the stretching routine she explained why certain stretching exercises were safe and others harmful. A student asked, "Can you tell Ms. Smith not to have us stretch like that?" "Yes, good point, I'll be happy to talk with Ms. Smith, thanks," Maria said. The fourth-grade students repeated the same activity as the first-graders. In all, Maria taught five 30-minute physical education classes back-to-back that morning.

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Maria was hired 15 years ago when she applied for a full-time PET position (see Table 4.2). Maria taught at three schools and had over 1000 students. She taught PE for 30-minutes to Kindergarten through third-grade students once every two weeks and fifth- and sixth-grade students twice a week (see Table 4.3).

Table 4.3 Physical Education Teacher Workload

	Participant	Number of Schools	Number of Students	PE Class Time by Grade
Cert-PET	Maria	3	1097	K-3rd: 1x/2wk X 30 min 4th-5th: 2x/wk X 30 min
	Nancy	3	903	1st – 3rd: 1x/wk X 60 min 4th – 5th: 1x/wk X 30 min
	Ruth	3	834	1st – 3rd: 1x/wk X 60 min 4th – 5th: 1x/wk X 30 min
	David	1	368	K – 6th: 1x/wk X 40 min
Para-PET	John	2	242	4th – 6th: 2x/wk X 50 min
	Patti	1	172	4th – 6th: 2x/wk X 50 min
	Karen	1	437	4th – 6th: 1x/wk X 50 min
	Tim	1	297	1st: 1x/wk X 30 min 2nd - 3rd: 2x/wk X 30 min 4th – 6th: 2x/wk X 40 min

Nancy. Nancy has dedicated half of a wall of the MPR to her PE program: "Kids are on the Move" had pictures of her students during PE; "Focus on Fitness" had information about the FITNESSGRAM Healthy Zone; "Students Follow the Rules in Physical Education" had the class rules and consequences; and "You Can Have a Healthy Heart" had pictures and information about physical fitness. Nancy also had two tables stacked with her paperwork, stereo and CDs, and miscellaneous items. Nancy's PE program was skill- and fitness-oriented

and incorporated activities related to sports, dance, tumbling, rhythm, and sign language.

Two classroom teachers escorted their third-grade students to the MPR, and then left for their 60-minute preparatory period. Nancy showed her "Roadway" signs to the 41 students and called on them to identify the activities associated with the "Icy" sign (students swerve and turn); the "Speed Bump" sign (students walk and jump); and others. To talk above the noise of the cafeteria cooks, Nancy used a microphone to announce the roadway signs. The students moved accordingly along the perimeter of the MPR for four-minutes followed by stretches. Twenty-two-minutes after class began, students divided into two groups, group one (Gr1) followed the Teaching Assistant (TA) up to the stage area within the MPR and group two (Gr2) stayed with Nancy. The TA closed the metal dividers and Gr1 reviewed signing letters A to Z and signed to the song "Stand by Me" playing from a boom box. They then practiced scarf juggling. Nancy instructed Gr2 students to take a basketball and practice dribbling. She gave students cues on body position, "I want to see what color your eyes are." Then the students played a dragon game involving ball dribbling skills. After 18-minutes, the groups switched places and activities. When two-minutes of class time remained, each group was instructed to complete their personal self-assessment forms for both their ball dribbling and scarf juggling activities, "Remember, smiley face or sad face or half-and-half face for how you think you did today", said Nancy. The classroom teachers went to the MPR to get their students. The next class of 40 first-grade students had the same activities, but

only half of the MPR was available because janitorial and kitchen staff were preparing for lunch.

Nancy had already taught PE for seven years at the secondary level when she applied for the full-time contract employee PET position. During her 16 years at the district, the position switched to a permanent position (see Table 4.2). She had over 900 students across three schools and taught once a week to first through third-, and fourth- and fifth-grade students for 60- and 30-minutes, respectively (see Table 4.3).

Ruth. Ruth went to the CT's room to pick up and escort 25 fourth-grade students to the MPR. The walls of the MPR were grey and free of PE posters or other material. Ruth was without a curriculum but tried "to offer the opportunities for a lot of different things." She worked on manipulative and locomotor skills and introduced the students to yoga. But without a yearly plan, she found "it's the end of the year and I'm seeing what I haven't done, which upsets me...I have not done any striking objects, we haven't done ping-pong paddles, or tennis balls, or scoops."

After she took roll, Ruth explained the day's activities and created two student groups. Fourteen-minutes into the 30-minute class, students began the "Bridges and Stones" activity that involved one group of students to form body bridges (V-shape or crab shape) and another group of students to go under as many bridges as possible in one-minute. The students switched places after two-minutes. Students then did jumping jacks and leg scissors followed by the yoga pose sun salutation. After given instructions to walk or skip during "freeze

tag", all students ran and a few froze after being tagged. Three-minutes later, students were dismissed to music class which was on the stage of the MPR behind heavy curtains.

Ruth went again to pick up 20 fifth-grade students. She instructed them at the beginning of class to take their pulse. After jumping jacks, scissors, and leg kicks, they took their pulse again and Ruth talked about how the heart responded to physical activity. Just before the sun salutation pose, the band students began their practice, making it difficult for the students to hear Ruth's voice. She gathered students in closer, explaining the "Bridges and Stones" activity. Five students did not participate, stating that they "don't want to go on the dirty floor." Although half of the MPR was cleared of tables from lunch, the floor still had some food and trash remaining. At the end of class, Ruth asked all students to lay down on their backs with straight legs, again they took their pulse for 30 seconds. They were dismissed and walked themselves back to their classroom.

Ruth wanted to move from her previous job, when a three-quarter time PET position was open, she applied and was hired. Ruth has been at her current position for one year but had been two years in another district as an elementary PET (see Table 4.2). She had 834 students across three schools and taught PE once a week for 60-minutes and 30-minutes to first through third-, and fourth- and fifth-grade students, respectively (see Table 4.3).

David. Although the MPR was available to David, the school used the facility for storage and the breakfast and lunch program, often leaving David with the task of cleaning and rearranging. The walls were white and free of any PE

posters or bulletin boards. David had a need for the MPR only during inclement weather. His PE program was a "sequence of subjects that are taught throughout the year" that were based on "grade level and expectations; they're based on developmental and looking at what is age-appropriate."

It was a cloud free and hot day so David's class was outside. After he escorted the 18 first-grade students from their classroom to the blacktop area, he explained the daily activities. He led them through stretches, jumping jacks, arm circles, and push-ups but several students complained, "Ooh, ooh, too hot on my hands." David did not direct them to the adjacent grass area to complete the push-ups. Students jogged one lap (approximately a quarter-mile) and walked one lap around a grass and partly shady area. After the students got a drink, they waited outside the storage shed for David to gather softball equipment. "I'm going to be looking for feet shoulder width apart and pointing away from me [the pitcher]," David told the class. Teams were selected by David and play started on the blacktop 22-minutes into the 40-minute class. When students hit the ball, there were no bases to run to, so they returned to the batting line, "Next week we bring the bases out," David explained. When Joe was at bat David commented, "Come on Joe, Joe is the fastest runner, right Joe?" After each student had one turn to bat, the teams switched places. However, class was over before all students in the second group were able to bat. The activity was repeated with the other classes. As with the first-graders, David provided isolated encouragement to students ("Tom, give you and Jose a pat on the back") but not general statements to the entire class.

David had been teaching physical education for five years, all within his current district. Although David's professional training did not include PE, he has been in education for 31 years serving in various capacities ranging from elementary classroom teacher to special education and bilingual teacher. His physical education appointment was 40% of his full-time load and the remaining 60% was shared between art and computer technology (see Table 4.2). David was at one school and taught 368 Kindergarten through sixth-grade students one time a week for 40-minutes (see Table 4.3).

Paraprofessional Physical Education Teachers

John. For John, use of the MPR was primarily weather dependent: "If I know it's going to be raining, I'll plan for that kind of day and be inside." When he needed the space, he had the custodial support: "If I say, I want to use the cafeteria at 1:00, he [the custodian] has it ready." John referred to the PE equipment storage trailer as his classroom. It was adorned with a home-made sign, "Welcome to the Super Fort," a name provided by a first-grader years ago. Inside, John had posters related to physical education and sports, and photographs of the students during PE class. John's year long sequence was one month of team building activities and the remainder of the year was filled with sport and skill based activities and fitness and interactive oriented activities.

Students met John for PE class directly outside the Super Fort. "Scrunch down in front of me," John told the 31 fourth- and fifth-grade students who sat and listened to John explain the activities of the day, "The grass is too wet today, so we're bowling over here [the blacktop] with different balls, then with hockey

sticks and Frisbees." All the students did jumping jacks, stretches, and a run around the perimeter of the grass, one-eighth of a mile. John quickly set up six sets of three large plastic bowling pins about 10 feet from a painted line and the students self-designated their teams.

Sixteen-minutes after class began, students started bowling with a soccer-size rubber ball. Some balls rolled into nearby lanes, "Without names, I see some problems, how can we solve them?" John asked. Students raised hands, "If you roll the ball slower they won't go out of control so easy." The activity continued with a softball, hockey stick, tennis ball, and then Frisbee. During class two recess periods took place and although the blacktop was full of students, the physical education class zone was not intruded upon by the recess students.

Before John was a PET, he worked at the school as a classroom aide. During that time John began a weight loss reduction program ("I was obese") which included running. The school principal, seeing the changes in John's lifestyle, was looking to hire a PET, and offered John the position. John had been a part-time paraprofessional physical education teacher for 16 years (see Table 4.2). He taught at two schools and had over 240 fourth-, fifth-, and sixth-grade students that he saw two times a week for fifty-minutes (see Table 4.3).

Patti. For Patti, the MPR was essentially unavailable, "We compete with chorus, we compete with band...we compete with day care," and the custodial staff set up early and broke down late for lunch. On rain days she taught in any available classroom space, even hallways if necessary. The place she called her

own was a small equipment room, "all of the PE stuff was under the stage [in the MPR]...I went looking for a room, well I found a bathroom...I got the district to build shelves in that bathroom and then finally they took out the toilet and that became my little room."

Patti's program was a mix of pre-developed programs, sportsmanship-oriented activities and games, fitness types of activities, and some skill-based activities; the activities were primarily game and sport based. She administered the *Presidential Fitness Challenge*; the *Gatorade Punt, Pass, and Kick*; and *Jump Rope for Heart* programs to her students.

A large portion of the blacktop was under construction and the 26 fourth-grade students occupied the largest section. Patti divided the students into red and blue teams and explained the "Capture the Flag" activity; several questions ensued. After students' questions were addressed the activity began nine-minutes into class and without any warm-up, stretching, or calisthenics. The activity was a type of tag game that involved some students waiting as long as 15-minutes before they re-entered the game. During PE class, the early elementary students had recess and competition for the limited blacktop space resulted in balls rolling into the PE class zone. To retrieve their balls, the recess students ran through the PE students who were running back and forth across a rectangular area; no collisions or injuries occurred. The game was repeated with the 18 sixth-grade students but without recess student interruptions.

The part-time PET position Patti filled (see Table 4.2) five years prior was vacant when the school year began. At a Parent Teacher Association (PTA)

meeting, the principal approached Patti with a proposition, "She came up and she goes, 'I know that this [PE] is not your thing, but having worked with you,' I had been a past PTA president for two years, she said, 'I know that whatever you do you put in more than 110%...you will make it work, if you will do this you've got it.'" Patti taught at one school and had 172 fourth-, fifth-, and sixth-grade students; each grade had PE two times a week for 50-minutes (see Table 4.3).

Karen. Although the walls of the MPR were void of physical education posters or bulletin boards, Karen projected a sense of ownership of that space. When it rained, she reported, "I always have access to the multipurpose room." She insisted on that schedule with the administration, "I said, this is my curriculum if I have a space I can teach it, if I don't have a space I'm just babysitting." Her curriculum was structured around major sports, her students' interests, the weather ("The weather is what determines my sequence completely", and practical issues ("because of physical manpower limitations I pretty much run the same unit with the fourth-, fifth-, and sixth-graders").

The 29 fourth-grade students met Karen on the blacktop. They appeared to know the routine and grabbed jump ropes and began jumping to the song "Jump" blaring from the boom box. After a water break the class began their stretching routine and answered poignant questions from Karen such as, "Who can tell me an important part of the trunk twist?" During that time they received instructions on the hurdle activity. Some students complained that they could not hear Karen's instructions over the noise of recess. Twelve hurdles, plastic "L" shaped tubes inserted in the top of cones, were placed on the blacktop in a "U"

shape. Twenty-seven-minutes into the 50-minute class, students began the hurdle activity; some hit the hurdles and fell. Each student completed the course about four times. After hurdles, the students stretched again and Karen offered Jolly Rancher candy to them, a curious behavior for a registered dietician and PE instructor.

The next class, 26 fifth-graders, began while recess was in session. During their jumping rope routine, several students sat or socialized with their classmates. Karen frequently talked to the students while they were engaged in the hurdle activity, "Use a lot of common sense and good judgment because someone rushed and hurt their knee," "Sarah, great job on getting over all those hurdles." Prior to the end of class, a group of 16 students got permission to race the hurdles, leaving 10 classmates as spectators.

As a registered dietician Karen believed "the physical activity is right up there with the eating habits" and volunteered for five years in her children's classroom to teach physical education. She campaigned for six years for the school to hire a PET based on her perception that CTs were not providing PE. Eventually Karen was hired and had been employed for three years as a part-time paraprofessional to teach physical education (see Table 4.2). She taught at one school and had over 400 fourth- through sixth-grade students once a week for 50-minutes (see Table 4.3).

Tim. Tim had no time in his first teaching year to define space for himself beyond the equipment storage room. The MPR was undergoing construction that made teaching space limited, "if it rains, I don't have any indoor [space]. So

I'm under an awning and whatever." The principal said that Tim would have access to the MPR next year, a prospect he looked forward to: "It would be nice to have some type of room like the multi where you could have an entire class in their place doing what they ought to be doing."

Tim felt his PE program was crammed with activities he was required to do and that were expected of him, "when to do the Presidential Fitness Challenge, the FITNESSGRAM testing...preparing for [district] relays... Jump for Heart too, it seemed so crammed." Tim created his program from personal experiences, "because I'm a personal trainer I don't think in a year. I know where I'm going and whatever it takes to get there I'm doing kind of daily," and professional development experiences.

The 16 first-grade students started with one lap (1/5 of a mile) of jump rope running down the length of the blacktop and within nine-minutes of the 30-minute class they played "Midnight", a fast-paced tag game that involved locomotor skills and processing and reacting to verbal signals from Tim. Ten-minutes later, the students practiced tossing, catching, and kicking a football. At the end of PE, the classroom teacher picked up her students.

"You guys, you're wasting our PE time," Tim told the next class of 26 fourth- and fifth-grade students engaged in socializing. After the jump rope activities, Tim explained the football tag game. Students found a partner, got equipment, and took positions out in the grass field. Twenty-two-minutes from the beginning of class, students started the activity which involved partners passing, receiving, and running with a football. They played for 11-minutes, then

returned the equipment and walked to their classrooms. For the next two classes Tim offered different activities, football toss at large bowling pins for the second- and third-graders, and soccer with large rubber balls for the fifth-graders.

Tim was the personal fitness trainer of the principal who encouraged him to apply for the part-time paraprofessional PET position at her school, "She said, 'I think you'd be great with the kids', I was honest I said, 'Look I've never done this before.' They just liked what I had to offer I guess." He taught at one school and had 300 first- through sixth-grade students. He taught the first-grade students once a week for 30-minutes; and the second and third-, and fourth- through sixth-grade students twice a week for 30- and 40-minutes, respectively (see Table 4.3).

Classroom Teachers

Fifteen elementary school CTs were included in the study. They were from six schools, representing four districts, and taught at grade levels ranging from first through sixth. All but one of the fifteen CTs provided some time for PE about one time a week. The range in weekly PE minutes provided by CTs was as low as 0 to as high as 120-minutes, with a common frequency of about 50-minutes of PE a week. However, the frequency was not always known as some CTs did not always know how much time they spent of PE: "not on a regular basis" (CT 1A), "at best" (CT 2B) or "every once in a while" (CT 12D) (see Table 4.4).

Table 4.4 Classroom Teachers' Physical Education Program

District	School	School Grade Span	CT ID	CT Grade Level	Frequency of PE
I	A	K-1	1A	1st	2x/wk x 30-45 min "not on a regular basis"
	B	2-3	2B	2nd	1x/wk x 30 min "at best"
			3B	3rd	5x/wk x 10 min
II	C	K-6	4C	1st	2x/wk x 20 min
			5C	2nd	1x/wk x 15 min
			6C	4th	1x/wk x 60 min
			7C	6th	1x/wk x 45 min
	D	K-8	8D	1st	3x/wk x 15 min
			9D	2nd	No PE
			10D	4th	4x/wk x 15-30 min
			11D	5th	1x/wk x 30-45 min
			12D	6th	1x/wk x 30-45 min "every once in awhile"
			13D	6th	3x/wk x 30min
III	E	K-5	14E	2nd	3x/wk x 30min
IV	F	3-6	15F	4th/5th	3x/wk x 20 min

Critical School System Decisions

Data from teacher interviews reveal a domino decision-making process whose outcomes impact the structure and path of elementary physical education programs. To best understand the decision processes, an organizational theory of choice, the GCT, is selected as a useful theoretical base to analyze a portion of the data obtained in the study. The GCT uses the term "organizations" to describe decision-making behaviors observed in a university system. For this study, I use the term "school system" to describe the decision-making behaviors of stake holders within an elementary school system, such as school and district administrators and school teachers.

Garbage Can Theory

The GCT provides a description of how organizations, such as school systems, make decisions under conditions of ambiguity, what Cohen et al. (1972) call "organized anarchies". As described by Cohen et al. (1972), Cohen and March (1974), and March and Olsen (1976), an organized anarchy has three key characteristics: (a) goals are broad and imprecise and lead to unclear or inconsistent notions about what it is they are trying to do (problematic preferences); (b) processes are not understood by the organizations members and the processes operate by trial-and-error, learning from past accidents, and creations of necessity (unclear technology); and (c) organizational members vary in the amount of time and effort they devote to different decisions and level of decision-making participation changes erratically (fluid participation). March and Olsen (1976) argue that under such conditions, rational-analytical models are inadequate representations of the decision-making process.

In educational organizations, participants randomly dump problems and solutions into a decision making situation (the "garbage can") (March and Olsen, 1976). Cohen et al. (1972) contend that decisions are based more from the accidental mixture of solutions and problems than from a rational process. Thus, they conceptualize four streams that randomly co-mingle in the garbage can to produce decisions: (a) choice opportunities - the decision points in organizations, such as teacher contract approval, teacher hiring and promotion, and budget approvals; (b) problems - the concerns people bring with them to choice opportunities; (c) solutions – actions taken by the organization; and (d)

participants – the active people in a choice situation with level of activity dependent upon other demands on the participant's time.

Finally, Cohen et al. (1972) modeled three modes of decisions within the GCT: resolution, oversight, and flight. By resolution they mean that some choices resolve problems after a period when the decision-maker energy exceeds the energy demanded by the problem. Oversight means that a choice will be made without regard to existing problems and with a minimum of time and energy from decision makers. Finally, flight means that a choice is made but no problems are resolved. That is, in some cases a decision is not made for some time because of an unsuccessful match between the choices and problems. But then the problems move to another choice (flight), so the original choice is decided upon but no problems are resolved since the problems became attached to other choices.

Critical Decision-Making Points

The GCT is useful in framing three critical decision-making points made by participants of the school system regarding physical education. The decisions highly impact the structure and path of elementary physical education programs. The first critical juncture is a set of decisions that determine the time allotment for physical education and the subsequent teacher of physical education. The choice to provide classroom teachers with preparatory time, followed by the choice of subjects with which to fill the classroom teacher's preparatory time are access points for the subject of physical education to enter the elementary school system. Lastly, the choice regarding the type of physical education teacher,

certificated or paraprofessional, impacts, to some degree, the type of physical education program provided.

Classroom Teacher Preparatory Time

The first decision making juncture that controlled if a physical education teacher would exist in a particular school setting was whether or not classroom teachers had a preparatory period (CT-prep). When CT-prep time was established, an opportunity existed for a school or district to fill the time with PE or other subjects such as music, art, computer technology, or library time. Thus, the presence of an elementary PET position was dependent upon: (a) CTs having a preparatory period, and (b) PE being selected as the subject in which to fill the preparatory period. In schools without CT-prep time, there were no PETs which meant that CTs taught PE.

At the county level, 66% of the schools that had a teacher of PE had either a formal contract of CT-prep time or an informal practice of teachers working with small groups or individual students. Within the participant schools, the school system members who participated in the decision-making process of both the CT-prep time and the prep filler subjects varied across schools and districts and demonstrated the ambiguous nature of the school system decisions. In some schools the decision for creating a preparatory period was made by the principal in an effort to both provide PE to students and provide CT-prep time. In other schools, the teachers demanded and unions fought for providing CT-prep time independent of incorporating a PE program into the school. And, in one school

the CT-prep time was essentially decided upon by a parent who successfully created a pull-out PE program, thereby supplying CTs with a prep time:

> Since 1981, a specialist position was created and that was based on a strike in which teachers wanted preparation time. Based on that strike, it was resolved that there would be two hours of prep for the classroom teacher and through that came art, music, and PE. (David)

> By creating this position, the principal wanted to take that load off the teachers to free them up. There's no prep period for the K through 3 teachers. The 4 through 6 get prep periods and that's when I take the kids for PE. (John)

> So I campaigned [for a PET] on the Site Council, I talked to other parents, I went to the school board members, and I campaigned. And, I worked it from every direction that I could...I would also attend all the Association of Parents and Teacher meetings; I would talk to the Superintendent about our funding sources...So I probably campaigned for six years. Probably five or six years before this [a PET position] came about. Five years of volunteer teaching and then I got the grant. (Karen)

The inter-relationship between the CT-prep time and PE instruction had the potential to create a vulnerable relationship between the CTs and the PETs. The original decision to solve one problem created a new and different problem, representing an oversight type of decision of GCT. Tim believed that the CTs appreciated his PE instruction, but he also understood the functional role he served: "Well they consider me just a PE teacher but everybody is very thankful to have me because it gives them their break time". Karen too understood the functional role she provided the CTs, "The teachers get prep time when they send their students to me; they're not out there with me."

Physical Education Teacher Type

When decisions were made about providing CT-prep time and providing physical education instruction during the preparatory time, a subsequent decision

point emerged, that of who would teach PE. The decisions made by administrators to hire a cert-PET or para-PET to provide the PE instruction were often a function of financial resources available, staffing history, support given PE, and circumstances unique to a school, such as knowing a particular individual or the availability of an individual (see Tables 4.5 and 4.6). Administrators also had the option to not hire a PET thereby leaving CTs to provide PE.

Certificated physical education teachers. The four cert-PETs (see Table 4.5) were all hired at the district level and were paid with district general funds. All of the Cert-PETs went through a formal hiring process, but David was recruited through an informal search. The principal sought out David based on her perception that he was capable of fulfilling the school's needs of an art, technology and PE teacher, despite his lack of education and training in PE.

Table 4.5 Certificated Physical Education Teacher Staffing

	History of PE Position	Filling the PE Position
Maria	District Cert-PET Position: History of 2-3 district level certificated PET positions to cover 5 schools for 20+ years.	Formal Search: Maria replaced one to two PET positions, "They [the district] were interviewing for an elementary specialist…I interviewed and was hired 15 years ago."
Nancy	District Cert-PET Position: Originally 1 PET per school; declining enrollment resulted in 2 2/3 PET positions for 8 schools. District had cert-PETs for 20+ years.	Formal Search: Filled a full-time PE position that was SIP funded, then later position funded through general funds.
Ruth	District Cert-PET Position: Opening created when someone retired. District had cert-PETs for 20+ years.	Formal Search: Ruth responded to an advertisement for the position.
David	District Cert-Specialist Position: Specialists fill CT-prep time with PE, art, music, and computer technology. District had cert-PETs for 20+ years.	Informal Search: Principal asked David, already a school Specialist, to teach PE. "…she felt that I could teach all three subjects [art, technology and PE] and have one person here for continuity."

** PTA = Parent Teacher Association; SIP = School Improvement Programs

The financial cost to pay certificated teachers through general funds had an impact on the number of PETs within districts. Maria, Nancy, and Ruth had three schools and over 800 students (see Table 4.3), a circumstance that had a critical impact on the PE program provided and is discussed later in the chapter under time for PE.

Paraprofessional physical education teachers. The four para-PETs were all hired at the school level, hired through an informal process, and paid with SIP funds (see Table 4.6).

Table 4.6 Paraprofessional Physical Education Teacher Staffing

	History of PE Position	Filling the PE Position
John	School Para-PET Position: John was the first PET in the district. Now every school has had a PET for past 15+ years.	Informal Search: John's self-initiated weight loss program spurred the principal to offer PE position to him.
Patti	School Para-PET Position: Patti perceived the sporadic hours and limited facilities resulted in high PET turnover, "I think I'm the longest [PET] that they've had." District had PETs for 15+ years.	Informal Search: Principal perceived Patti capable of taking on PET position and making it work.
Karen	School Para-PET Position: Karen was the first PET at the school. "There was no physical education program for the students in this district."	Informal Search: Karen campaigned for 6 years to create a PET position.
Tim	School Para-PET Position: Had existed for at least past 3 years.	Informal Search: Tim was personal trainer of principal, and principal thought Tim would be good with the kids.

** PTA = Parent Teacher Association; SIP = School Improvement Programs

Karen, as described earlier, created the PET position she was hired to fill. John, Patti, and Tim were directly recruited by the principals at their schools, a decision that appeared quick, convenient, and with minimal thought to the experience and training for teaching PE:

> At that time the principal saw this [John's jogging program to lose weight] going on. So he came to me and said: "How would you like to

do a physical education program." I said: "Sure."...And that's basically where it started. (John)

I was at a PTA meeting and my principal knew that I was wanting to work at the school. They had gone through three people [PETs] that they had hired that didn't even start...So at a PTA meeting, she came up and she goes: "I know that this is not your background but also knowing you and having worked with you", and at that time I had been a past PTA president for two years. She said: "I know that whatever you do, you put in more than 110% and I know that you will find how to and you will make it work, if you will do this you've got it." (Patti)

I was training the principal [Tim was the principal's fitness trainer]. She started telling me that the position [PET] was open and if I was interested. I said, "Look I worked with kids...I think I'm done with that."...About a month later she said: "Well, the position was filled by a credentialed teacher."...Then right before school started she came in and said, "Well that teacher is going...so the position is open again." So I mean literally right, a week before school started, I said "All right." (Tim)

The participants expressed concerns related to the non-secure nature of paraprofessional positions and sources of funding for the positions. Karen's road to becoming a PET illustrated well the uncertainty and the impact of that uncertainty on the PE program:

The foundation decided that their mission was curriculum enrichment, the arts. So they said, "We're going to pay for the art teacher and the music teacher." That freed up the [PTA] and they backed me with a grant for one year...what happened in that year was we had a fiscal crisis in the State, school district funding got cut...She [the Superintendent] had hesitations about not indebting an organization to a recurring expense [PET position]...that fund raising organizations should not be paying a salary. And so she forced a rethinking of all of our school financing...what she said was, "You know for the money that we're spending on all these individual aides", each teacher had an instructional aide, "you could have the PE teacher come once a week, and a copy clerk come once a week and do some stuff for you"...the teachers voted that they would rather have a copy clerk and a PE teacher, to take their kids off their hands...So I was funded from the [SIP] funds not by the [PTA]. But, it took a long course to come there...I'm hoping to hold out and do this long enough that that's cast

> in concrete, that they [school administrators] just know that now they have a specialist, they fund that program every year. That's my hope.

These upfront decisions of CT-prep time, filling the preparatory time with physical education, and staffing for PE, arose from school system processes that are complex, highly contextual, and unpredictable. The decisions were driven more by timing and necessity than fulfillment of school system physical education program goals. These school system behaviors demonstrate well the utility of the GCT in analyzing physical education decision-making processes.

Factors that Shape Physical Education Programs

The three critical decision making points stated above had outcomes that impacted the environment that shaped the physical education program, specifically time for and teacher qualifications to teach PE. Those factors along with others fall into one of two categories: internal teacher factors and external school system factors. The internal teacher factors included the qualifications and leadership traits of the teacher of physical education. The external factors included time for PE, financial and administrative support for the PE program, and access to facilities to teach PE. The complex inter-relationship of all of the factors shaped what was the physical education program and thus impacted the ability of teachers to teach and implement California physical education policies.

Internal Teacher Factors

The internal factors were those qualities held by the teachers that were used to build and create their PE program. Among and between the three categories of teachers of physical education (cert-PET, para-PET, and CT) was variation in: (a) the qualifications of the teachers, such as educational

background, knowledge of physical education, and personal experiences; and (b) leadership traits the teachers held. Thus, the strength of the PE program was in part dependent upon the strength of the qualifications and the leadership characteristics of the teacher.

Teacher Qualifications

Certificated physical education teachers. Maria, Nancy, and Ruth had credentials and degrees in physical education. Their physical education knowledge and skills, and pedagogical knowledge provided the base to build their PE programs:

> We built a scope and sequence, we built lesson plans that match, we have a yearly plan that outlines the areas and we do a lot of things...With our 4th- and 5th-graders we have a homework, they're tied to our units...we try to include a lot of activities that include family...I'm passionate about children and I've seen what a difference it makes when you set up a program where children are learning skills at all levels, because I've got all levels. (Maria)

David stated his special education background as an asset, but his physical education knowledge and skills were limited. For his physical education assignment he had relied on both professional development and undergraduate physical education courses:

> I have a background [special education] to look and say whether there's some motor problems...I tend to be the one that notices the motor skills and things like that...But it's a stretch [teaching PE]...there's an adjustment from being a classroom teacher to suddenly being a specialist teaching physical education...I have a lot more to learn...I've drawn on my coursework...either through the Junior College or through the university system.

In addition to their education training, all of the cert-PETs engaged in some form of professional development inclusive of workshops, collegial

interactions, and professional organization membership. Several teachers indicated professional development enhanced their content knowledge and served as a form of motivation. Ruth found some value in the regional professional development workshops (see Table 4.7) but did not find help with curriculum building: "the workshop was very helpful and they gave me ideas. They weren't helpful in terms of, this is the framework and this is what you should be doing at the beginning of the school year."

David attended two Cal Poly Elementary Physical Education Workshops, an annual week long summer resident program at California State University San Luis Obispo: "I chose that particular workshop because I felt it was the most valuable I'd ever had with the availability for application and a great deal of information at hand for me to use...I enjoyed it, I got to be the kid again."

Maria and Nancy were both active members of the California Association of Health, Physical Education, Recreation and Dance (CAHPERD). They attended the conferences when financially possible and scheduling allowed. For Nancy that conference, as well as other professional development experiences, injected enthusiasm about her job, even within a climate in which she sometimes felt unsupported:

> So staying up and current in the workshops and the conferences is just key. You just get so excited and inspired to do a better job and not the same old, same old. That's what I find that's kept me going all these years, regardless of what they do up at the district office. I want to make my kids excited.

Table 4.7 Certificated Physical Education Teacher Professional Development Activity

Type of Professional Development	Maria	Nancy	Ruth	David
Workshop	Regional Elementary PE Annual Workshop	Regional Elementary PE Annual Workshop	Regional Elementary PE Annual Workshop	Regional Elementary PE Annual Workshop
	CAHPERD District Sponsored PE Workshop		SPARK Workshop (previous employer)	Cal Poly Elementary PE Workshop
	Cliff Carnes Workshop	Cliff Carnes Workshop	County Sponsored Classroom Management Class	Statistical Analysis Workshop
Conference	CAHPERD	CAHPERD		
Collegial Interaction	Informal – District PET meetings	Formal - District PET meetings	Formal - District PET meetings (current and former employer)	Formal - District PET meetings voluntarily supervised by a principal
	Informal – Meetings with school and district personnel	Informal – Meetings with PET at district middle school	Informal – Meetings with PET at district middle school	Informal – Meeting with ex-Junior College Athletic Trainer
		Informal – Meetings with out-of-district elementary PETs	Informal – Meetings with out-of-district elementary PETs	
Other	CAHPERD Membership	CAHPERD Membership		
		Golf Clinic		Golf Clinic
		American Sign Language Course		

CAHPERD = California Association of Health Physical Education Recreation and Dance

Paraprofessional physical education teachers. Schools had a financial incentive to hire para-PETs; they cost less than certificated teachers, could be paid through a variety of funds, and were disposable positions. But the low cost was often times a trade-off for proper training. Even though the para-PETs all participated in professional development, none of them went into the position with physical education or general education backgrounds that guided the development of their programs. Patti, like Karen and John, did not enter into the position with sufficient knowledge or training and for Patti the type of position had a disincentive to continually develop professionally:

> The very first year, I was like, "Oh my gosh." Because nothing is provided as far lesson plans and curriculum...I think the biggest thing for me was to realize that certain things for kids aren't natural. You don't know how to jump a rope naturally. It's not one of those things that we're just born with. It was one of those things I never really thought about...
>
> Pretty much they [professional development activities] were not going to be paid for and it's not a full-time gig [the PET position], so when you look at that and time away. And quite honestly there isn't going to, I would get ideas but I certainly wouldn't get any further in the position. I wasn't going to make any more money, what was the incentive. I mean what I'm doing works. That's the part that sounds horrible but it's the truth.

Some of the para-PETs relied on their personal experiences to build their PE programs. John had become an avid fitness participant during the time he was on a weight reduction program and Tim was an adult fitness trainer:

> As far as knowledge of motor skills and stuff, it's gotten better. When I first started there was none and I didn't have a background. As far as working with kids I was teaching them to run as I knew as an adult but finally I said, "You guys want to play." And they said, "Yeah." And I said, "Okay we can play." And it grew from there. (John)

> It's definitely challenging thinking what am I going to do with 20 1st-graders compared to 30 6th-graders. So it's challenging thinking of the curriculum for them. Again, this is my first year doing this...I guess because I'm a personal trainer I don't think in a year. I know where I'm going and whatever it takes to get there I'm doing kind of daily. That's not entirely true, my week is planned out to a point but that gets changed. (Tim)

The para-PETs, like the cert-PETs, participated in professional development activities that could enhance their PE content and pedagogy knowledge (see Table 4.8). Tim attended a "Creative Spirit, Healthy Play" in-service, a character education and classroom management program that provided techniques that help foster positive student behavior, and expressed tremendous enthusiasm about the experience:

> These guys were the best. They took everything in all these books here that I've learned, or different conferences that I've been to and they just put it into functional, usable stuff...Why should the athletes be the only ones that have a good time in a baseball game or a kickball game or something like that? Why not make them run the bases backwards, add bases and have two balls kicked at the same time?...I realized that I'm teaching them all kinds of things that I didn't realize I was, how to work things out...how much we do with the social interaction.

Karen had taken the initiative on two unique and influential professional development experiences. One was a course she enrolled in at a university during the summer prior to her first year as a PET, and the other was interaction with instructors of summer sport camps for children:

> I took one class called "Elementary School Physical Education." That's the only training that I have...I'm not a teacher, I'm a classified person, I'm a mom who started doing this as a volunteer...I didn't come in with a PE background. I've had to try to do a lot to beef up my knowledge in order to feel confident being out there in front of the kids telling them how to do stuff.

Table 4.8 Paraprofessional Physical Education Teacher Professional Development Activity

Type of Professional Development	John	Patti	Karen	Tim
Workshop	Regional Elementary PE Annual Workshop	Regional Elementary PE Annual Workshop	Regional Elementary PE Annual Workshop	Regional Elementary PE Annual Workshop
			"How to Teach the Hard to Teach Students" Workshop	"Ideas, Activities, and Games" Workshop by Bureau of Education and Research
			Cliff Carnes Workshop	"Creative Spirit, Healthy Play" Workshop
Collegial Interaction	Formal - District PET meetings supervised by a principal	Formal - District PET meetings supervised by a principal	Informal – School organization member meetings (site council, PTO)	Informal – Interaction with teacher friend
	Informal – Additional district PET meetings	Informal – Additional district PET meetings	Informal – Meetings with university PE faculty member	
	Informal – Meetings with out-of-district elementary PETs.	Informal – Meetings with out-of-district elementary PETs.	Informal – Meetings with out-of-district elementary PETs.	Informal – Meetings with out-of-district elementary PETs.
		Informal – Meetings with PET at district middle school.	Informal – Meetings with and observations of Summer sport camp instructors.	
Other		Tennis Clinic	University Course "Elementary School Physical Education"	

> One summer I contacted one of the groups around here that does a lot of sports camps. And I said, 'can I come watch some of your teachers teach sports camps so I could pick up on some of their coaching tips and techniques?' So I get as many different books as I can, I read the rules, I read the strategy, and then I go on to watch other coaches.

For John and Patti, formal and informal collegial interactions were valuable experiences:

> We [district PETs] keep in the know of what we're all doing. And we all put together ourselves...our own list of: This is when we have a class so if one of us needed to go to another school to help out. (Patti)

> I got to have a mentor who was built in [referring to a parent cert-PET from another district]...she was coming in and volunteering with her kid's class in primary...I was watching her with the kids and I was thinking: Okay, that's the kind of teacher I want to be. I got to work with her...In meeting her we kind of networked a little bit...that's where my education has come from through workshops...[and] that networking. (John)

Classroom teachers as teachers of physical education. Several of the CTs (n=9) indicated that their PE knowledge was influential in the physical education they provided to their students. Three CTs (1A, 10D, and 14E) stated that they had sufficient or strong understanding of PE and used that knowledge in their PE program:

> My undergraduate degree in physical education influences what I do with the kids. I was going to be a PET but decided that wasn't what I wanted so I got a multiple subject credential...I do a lot of skills, dribbling, kicking, throwing; games like bombardment games, Frisbee golf; fitness stuff; and juggling, and hacky sack. (CT 10D, 4th-grade)

> I have attended the [regional elementary PE workshop]. I use that and other physical education books. [She provides a program with skill building with basketball, soccer; throwing; eye-hand and locomotor activities.] (CT 14E, 2nd-grade)

Oddly, CT 1A (1st-grade teacher) stated she had some understanding of PE but her choice in some of the PE activities, dodge ball and duck-duck-goose, indicated a flaw in her understanding:

> Another school that I was at, we had a curriculum, a book of different skills to teach the kids. Memory of those activities is what influences what I do with the kids...learning ball skills, running, skipping, hopping, parachute games, dodge ball, duck-duck-goose.

Six CTs (2B, 4C, 5C, 6C, 9D, and 13D) had limited PE knowledge which influenced what they offered their students (or didn't offer, as was the case with CT 9D):

> Not skill-based. Everything was pretty much group activities with some running...as far as 10-year-olds at this stage we are not doing whatever skills a 10-year-old should know and be doing. We didn't do research to find out what 10-year-olds should know. (CT 6C, 4th-grade)

> Children need to get out and have fun and relax. Physical education should not be for physical fitness. [Examples of activities her students did during PE were dodge ball, 4 corners, and duck-duck-goose]. (CT 4C, 1st-grade)

> We have had training, even last year had training through a district sponsored in-service. But I lack the confidence without intense ongoing professional development and coaching. The environment is difficult to manage with all the kids moving. (CT 9D, 2nd-grade)

Due to the limited time for the interview, I was not able to ascertain if the CTs with limited PE knowledge and skill would engage in PE professional development given the opportunity.

Leadership Traits

Several of the PETs exhibited behaviors that exemplified their commitment to the profession through their ability to navigate and advocate for PE in an environment that was commonly unsupportive. For example, several

PETs attended workshops and enrolled in courses to support and enhance their teaching of PE without financial support from the school or district (presented in more detail in the "financial support" section of this chapter). Making such choices attest in part to the leadership traits those PETs had, although financial limitations may have inhibited others from making similar choices. Karen stated well that the out-of-pocket expenses had limits:

> Most of what I did was those self-motivated things at first. Like I thought of taking that class [elementary school PE], going to watch those sports camps that was all of my own initiative...The first couple of years I paid for [regional elementary PE workshop] myself, I just went. It never dawned on me to ask the district if they would pay for it, it just didn't register...But then, that's a lot of money out the door for me and I'm just classified, I'm not even getting paid a teacher's salary. At some point I say, this doesn't pay.

Campaigning for PE was viewed by two PETs as a necessary action. The school board of Maria's district had talked of eliminating the PE program three separate times over the past eight years. Maria recognized that to receive school level support in an adversarial district environment she had to "sell the program", rally support from the CTs, and attended the board meetings to advocate for the program:

> You have to sell the program to your staff, you have to sell the program to the parents, and it has to be a positive thing. It has to be where these children are going home and saying to Mom and Dad: "Guess what we did in PE today? Oh my gosh we had so much fun we did this today". Because without that, it's not valued.
>
> There has been discussion about whether or not they [district] could put the PE back on the classroom teacher and for prep coverage hire a science specialist. Fortunately that has not been supported by the teachers or parents...When things come up I can say, "Well I've talked to my 4th- and 5th-grade teachers and yes, they want more prep but not at the expense of the PE program, that is not what they're asking for." That can be very powerful when you're sitting in a district

> meeting and you can say, "You're trying to tell me that this is what the teachers want, I know it's not what they want, I polled them."

Karen experienced support from the principal and district superintendent after her six year effort to create a PE program were complete. One might say that Karen fostered an environment that allowed support and respect to develop:

> My principal here is great: super supportive, super helpful...The district superintendent, I worked on her for years to get this program started. She was very resistant at first. And she is totally turned around and on the bandwagon. She thinks this is a great thing for the kids...So now she gets to feel cool saying, "We did put in a P.E. program, we have a person who's doing, you know, physical fitness." Which they didn't have before. I think she feels better about the fact that our district is providing that for students.

These internal teacher factors, the qualifications and the leadership characteristics of the teacher, were those things that teachers used to create and build their PE program. But, the teacher existed within the context of a school system that sometimes supported but often hindered the development of the PE program. The external forces were outside of the teacher's control and often pushed against the teacher's efforts to teach PE and implement PE policies.

External School System Factors

The external school system factors identified were: (a) time to teach PE, (b) financial support for the PE program, (c) administrative support for the PE program, and (d) access to facilities to teach PE.

Time for Physical Education

Time was a commodity. The amount of time available for the PET to teach PE was a function of CT-prep time, competition with other CT-prep filler subjects such as music and art, and the PET to school ratio (see Table 4.9).

Table 4.9 Physical Education Teachers' Physical Education Program

Participant	PET/School Ratio	Grade Level	Weekly PE Minutes	Competing Subjects
Maria	1/3	K-3rd 4th -5th	15 60	Music
Nancy	1/3	1st–3rd 4th–5th	60 30	Music
Ruth	1/3	1st–3rd 4th–5th	60 30	Music
David	1/1	K–6th	40	Music & Art
John	1/2	4th–6th	100	
Patti	1/1	4th–6th	100	
Karen	1/1	4th–6th	50	Music
Tim	1/1	1st 2nd-3rd 4th–6th	30 60 80	Music

Time for PE within the CT environment was influenced by the teacher's accountability environment. Often PE time was out-competed by other subjects such as language arts and math as a result of the demands of high stakes testing.

Physical education teachers and time for physical education. Only two PETs, John and Patti, were able to teach PE for the mandated 100-minutes a week. Several PETs provided less than half of the mandated minutes to at least a portion of their students.

For most PETs the CT-prep time was filled with PE and music but not always equally. Nancy's schools had a disproportionate amount of music relative to PE time for some grade levels, "they (fourth- and fifth-grades) get an hour of music and 30-minutes of PE."

In Maria's district, all the kindergarten through fifth-grade CTs had a preparatory period that was filled equally with PE and music. Maria expressed

concerns regarding the curricular sacrifices due to the limited time available for PE, but she also noted an interesting advantage of student enthusiasm:

> One week they [K-3 students] get 30-minutes of PE with me and then the next week they get 30-minutes of music. So I only see my K through three once every other week. And then the 4th- and 5th-grade teachers get four 30-minute preps a week, so two for PE and two for music...most of these classes [early primary] probably get 15 thirty-minute classes in a year. You can't really address Standards when you only see the kids 15 times in a year...We don't see the kids often enough to assess them so we work on the skills and we try to address as many as we can but there's not a lot of time to use progressions...But the one thing we don't have a problem with is we don't have kids that are apathetic because they don't see us often enough to get bored with PE or to not be jazzed about it.

Nancy highlighted another constraint on time for PE, PET to school ratio. Her district had a staff reduction from eight to two and three-fourths PETs for eight schools due to declining enrollment and budgetary constraints. The final outcome for Nancy was positive in terms of salary and security and negative in terms of low teacher:school and teacher:student ratios and a concomitant sacrifice in curriculum. Still she held on to her zeal for the program:

> Originally we [PETs] were SIP [School Improvement] funded...paid $18 an hour as independent contractors. I had one school and it was 100 percent. I saw the kids [K through 6] twice a week for 30-minutes...But the SIP budgets every year were decreased...At that same time, the school district was giving the teachers prep time. And when that happened...the union fought for us [PETs] and said, they [PETs] should be paid out of the general fund; they are teachers in our district. So that was great but then we cost more and that's another reason we were reduced because we went from being an $18 an hour independent contractor to teachers with salaries and beney's [benefits]. Yeah, the schools couldn't support that cost. It was a benefit to us, and then not a benefit...now that I'm so transient, I don't even have the conversations to coordinate with them [CTs]. That's something that I'm sorely missing...So when I *can* tie into classroom content, it excites me and it really excites the kids, whether it be dance, or math facts when they're doing things, or literature themes, I love to do that.

Classroom teachers and time for physical education. Although 14 CTs devoted some time for PE, all but one provided less than the mandated 100 weekly minutes and just over half (n=8) provided less than 50-minutes. Most of the CTs (n=12) acknowledged the challenge of providing time for PE and meeting state and national expectations regarding high stake testing and specific subject demands (see Table 4.10). Those pressures often resulted in teachers choosing to limit the time for or simply forgo PE on a regular basis:

> The curriculum is designed to perform well on tests. (CT 7C, 6th-grade)
>
> Language arts and math are so demanding of time and there's no accountability for PE with the district or state. (CT 9D, 2nd-grade)
>
> Lack of time to fit curriculum and assemblies, PE is lower priority. (CT 2BD, 5th-grade)

Interestingly, although physical education minutes are mandated, CTs gave higher priority to the art and math time recommendations stated in state framework documents (CDOE 1999, 2000). The emphasis placed on other subjects over physical education reflects the importance allotted high stakes testing by all levels in education.

The time recommendations for grades one to three for reading/language arts and mathematics was 2 hrs 30 min, and 50-60 min a day, respectively, totaling approximately 3 hrs 25 min. When compared to the total instructional time available for those grades (4 hrs 40 min), the CT had less than 75 min remaining in the school day for social sciences, science, visual and performing arts, health, and physical education (see Table 4.11).

Table 4.10 Classroom Teacher's Designated Time for Physical Education

Participant	Grade Level	Frequency of PE	Weekly Minutes	Impact of Competing Subjects
1A	1st	2x/wk x 30-45 min "not on a regular basis"	60-90	
2B	2nd	1x/wk x 30 min "at best"	30	Our curriculum is so heavily academic now and with reading and math it's really hard to get students going for PE.
3B	3rd	5x/wk x 10 min	50	
4C	1st	2x/wk x 20 min	40	Basically lack of time…They put so many programs on us this year with writing added, all of us realize that there's just no time.
5C	2nd	1x/wk x 15 min	15	I'd love to do it everyday but so many other requirements.
6C	4th	1x/wk x 60 min	60	
7C	6th	1x/wk x 45 min	45	The curriculum is designed to perform well on tests.
8D	1st	3x/wk x 15 min	45	We don't have a whole lot of time for PE because of what we have to teach curriculum wise, 150 minutes of language arts, 60 minutes of math, then science and social studies.
9D	2nd		0	Language arts and math are so demanding of time and there's no accountability for PE with the district or state.
10D	4th	4x/wk x 15-30 min	60-120	I juggle the reality of standards and taking PE time…I give myself permission for it [PE] to be really short.
11D	5th	1x/wk x 30-45 min	30-45	Lack of time to fit curriculum and assemblies, PE is lower priority.
12D	6th	1x/wk x 30-45 min "every once in awhile"	30-45	All based on time…I'm focused on classroom teaching.
13D	6th	3x/wk x 30min	90	Subject area demands are ridiculous…With mathematics and reading it's impossible to fulfill the obligations so one has to give and take somewhere.
14E	2nd	3x/wk x 30min	90	The state supports all these other requirements but not support for PE. It's hard for teachers to do PE because of other academic requirements.
15F	4th/5th	3x/wk x 20 min	60	The curriculum is fairly long.

Table 4.11 Elementary School Daily Time Demands (excluding recess and lunch)

Grade Levels	Instructional Time Available (CA EC 46201)	Reading/Language Arts Time Recommendation	Mathematics Time Recommendation	Physical Education Mandated Minutes (CA EC 51210)
K	3 hrs 20 min to 4 hrs (max)	2 hrs 30 min	50-60 min + homework	20 min
1-3	4 hrs 40 min	2 hrs 30 min	50-60 min + homework	20 min
4-6	5 hrs	2 hrs	50-60 min + homework	20 min

EC = California Education Code

Such demands give credibility to the CT's claim of limited time but do not exclude the option of providing some PE. Some CTs managed, despite the accountability pressures, to provide PE time:

> Subject area demands are ridiculous. My kids have a high homework load...so one has to give and take somewhere...I just carve that portion out of my day. (CT 13D, 6th-grade)

> I juggle the reality of standards and taking PE time and give myself permission for it [PE] to be really short...They do better when they've had some activity. (CT 10D, 4th-grade)

Financial Support

Financial support for professional development and equipment were fundamental budgetary decisions that influenced physical education programs. To determine the influence of funding on teachers' decisions regarding their physical education program, PETs were asked about the availability and adequacy of funds for professional development, equipment, and teaching materials. The CTs were not asked about funding for PE.

Funding for professional development. Professional development was influential in enhancing teachers' knowledge base and practice of PE. But the extent of their engagement depended in part on the financial resources available

and the allocation of those resources. All of the PETs received some financial support for professional development either indirectly through in-service workshops, or directly through payment of fees of, mileage to, or substitute teachers while attending the workshop. The amount and source of funding however differed among the PETs (see Table 4.12).

Table 4.12 Sources of Funding for Professional Development

	Maria	Nancy	Ruth	David	John	Patti	Karen	Tim
Workshops								
Regional Elementary PE	↻	↻	↻	↻	↻	↻	↻↻	↻
Cliff Carnes	↻	↻					↻	
CAHPERD District	↻							
SPARK			↻					
Classroom Management			↻					
Cal Poly Elementary PE				↻⇨				
Statistical Analysis				⇨				
"How to Teach the Hard to Teach"							↻	
"Ideas, Activities, and Games"								↻
"Creative Spirit, Healthy Play"								↻
Conferences								
CAHPERD	↻	↻↻						
Clinics/Courses								
Golf Clinic		↻		↳				
American Sign Language Course		↻						
Tennis Clinic						↻		
Elementary School PE Course							↻	

↻ = Expense Paid by School or District ↳ = Expense Paid by Private Donation
⇨ = Expense Paid by Grant ↻ = Out-of-Pocket Expense paid by Participant

Maria and Tim received funding for every workshop and conference attended although the funding was neither guaranteed nor always known. Maria, like Nancy, had funding for the CAHPERD conference but only every other year when it was held in northern California and even then, the funding was not a

guarantee. Tim's district provided several in-service opportunities for him and CTs within the district:

> They [district] used to pay for us to go every year [to the CAHPERD conference] but now we can only afford to go when it's in northern California so we go every other year to that. This year we actually didn't have funding, our budget cuts have gotten pretty extreme now...we kind of went to the district and said, 'You know it's northern California we're thinking about paying for it ourselves is there any way you could pick up some of it'. And they said no. Somehow one of the principals heard about it and said, we've got money on site why don't the five principals, the five schools chip in for the two of you to go. So this year for the very first time the five school sites paid for us to go to the state conference [CAHPERD]. (Maria)

> Everything that I've paid to go to, which has only been two or three of them [workshops], they've [school] paid back or they paid for me. Because I'd say, look I want to go. And the principal was like, yeah no problem we'll cover it. And they gave me the hours, I think that was the principal's doing but they paid me for the hours that I was at the school [for the in-service workshops] so that was great. (Tim)

Although the PETs did receive some funding for workshops and courses, some PETs missed workshops they wanted to attend due to lack of funds. John and Patti had not been to workshops or conferences for over two years for personal and financial reasons. Their district had just instituted a policy in which substitutes would be hired to cover their PE classes should John or Patti be ill or desirous of engaging in professional development:

> We have not been able to go to the workshops [regional elementary PE] for the last two years. One of the things that we're struggling with in this district is if we miss a class what happens. No prep period happens so the teachers [CT] were not happy...The issue of subs has just come up this year...The district came up with a policy that said it's the principals' responsibility to find a sub...if worse comes to worse they call a sub in from the teachers sub list. (John)

Ruth did not receive district support for a substitute when she expressed her interest in visiting a well-regarded out-of-district elementary PET:

> I asked if I could take a day off and get paid for it and go observe [a PET]...But I couldn't, they [district] said, "No we don't have the money for it so you can go on your own time." We have vacation days and sick days, or personal days and stuff but it's like geez, that didn't work out the way I would have liked it.

For three PETs, choosing to participate in professional development was not always dictated by external funds (see Table 4.12). Nancy paid for the CAHPERD conference one year, as well as a golf clinic and sign language course. After David received the PEP grant money to attend the Cal Poly elementary PE workshop one year, he decided to pay out-of-pocket to attend the following year. Karen not only gave of her time to attend summer sport camps, she also paid two years for the regional elementary PE workshop and the university elementary PE course. These choices made by Nancy, David, and Karen indicated a level of professional commitment beyond contractual obligations but do not exclusively define leadership characteristics as those decisions may not have been financially feasible or even available for some teachers.

Equipment. As in access to facilities, teachers' access to equipment was an essential component that influenced their physical education programs. All of the PETs had financial resources available for equipment but some were limited. The range in funding for provisions was as low as $200 to $1000 a year (see Table 4.13).

The known budgets of the para-PETs were all larger than the cert-PETs. Karen, John, and Patti had relatively generous budgets that afforded them not

only equipment, but also evoked a generosity in sharing the PE equipment with the CTs. Karen had the largest budget of $1000 per year, "I'm blessed with a

Table 4.13 Funding Source and Amount for Equipment/Instructional Materials

	District	School	Site Council	PTA	PEP Grant
Maria	$360 ($1800 for 5 schools)				
Nancy	$250		Grant funds available.		
Ruth	Unaware of budget.				
David	$200	Funds available.			Unknown amount.
John	$500 ($1000 for 2 schools)				
Patti	$500		Grant funds available.	$200	
Karen				$1000	
Tim				Unaware of budget.	

Note: Budget value was per year for one school.

really good equipment budget." When she first took on the PET position, there was limited equipment primarily due to the fragmentation of equipment across every CT's room. After Karen purchased equipment, the CTs had access to more equipment, but this did have drawbacks, especially in terms of lost items. John had a $500 dollar annual budget that allowed him to have some spare equipment and to offer the PE equipment to CTs for use:

> I said [to CTs], check out anything you want except the scooters but anything else I say you're welcome to use it as long as you put it back...If you lose a ball or a ball pops we'll just buy another one, I've actually got spares in there...I thought it would make it easier for the teachers if they wanted to do PE.

Patti had the same district budget as John, but within her school site she had access to additional funds, "There are certain times that either a site council or parent organization give money...but my parents group [PTA] also gives me

$200 each year and that's without me even going to them and asking them for something specific."

All of the cert-PETs had district budgets of less than $400 a year, which created a tension between spending money for equipment versus other needs such as professional development. Nancy also had a small budget of $250 a year, as well as the potential for other sources of funding through school parent organizations:

> I still find myself this year moving my equipment with me, getting the best of the group...But I know for what I want to do I want to have 20...I want every kid to have a ball and not to have to worry they'll share...If I've bought volleyball trainers one year and I got five, then I'll buy jump ropes the next year because they've broken...the education grants [school foundation] are key, they want to give you the money. You just have to know how to ask and the grants are very simple.

David had the smallest budget of $200 a year that was to be used for PE, art, and computer technology. The challenge of such limited resources may have been what led him to seek out external funds:

> There was $200 given to each specialist for the year...teachers were told they had to spend $130 of their $200 for their substitute teacher for [FITNESS GRAM testing]. So they had $70 to teach P.E. for an entire year...an organization [school foundation] over the years has raised money...I have been saving money [from the foundation] and raising money and I was able to buy a great deal of equipment this year...I received a $500 donation from a friend which allowed for me to pay for the sub for someone to come in and introduce golf...Through the grant that we received, the Carol White grant, we were able to purchase tennis racquets, Frisbees, golf clubs, pedometers became available...I was able to get scooter boards, I'm the only one with scooter boards in the entire district...Those things are not [usually] available to a teacher because of the limitation on funding.

Tim was unaware of an equipment budget but was satisfied with the available funds, "I'm amazed at how free I am through the PTA to order things."

Administrative Support

School and district administrators represented a critical source of support or opposition for physical education programs. Administrative support for the PET and the program was sometimes an overt, but often subtle and powerful message to the teachers by way of professional recognition, mentoring assistance, respect and support.

The PETs were asked questions about administrator's perspective of the PE program and the manner in which their school/district facilitated and impeded the PE program. However, at various moments during the interview, participants spoke of less tangible forms of support or resistance. Those behaviors and attitudes were the focus of this administrative support factor. Classroom teachers were not directly asked about administrative support for PE, but some insight was gained through CT's response to questions about what influenced their decision to provide PE.

Professional recognition. Three PETs, Maria, David, and John, referred to overt actions taken by the school or district that served to recognize their professional contribution to the education community and provide votes of support for the PE program provided by the PETs. Maria received the "Rotary Teacher of the Year" and the "District Exemplar Teacher" awards. David, too, received the "District Exemplar Teacher" award, but he considered the award as a form of recognition for the diversity of teaching he provided the school, not as support for PE. David was aware of the context in which support for PE was provided:

> It's [PE] important and she's [principal] been involved with supervising the physical education teachers in the elementary district. But it's one component and the support is there but there's only so much support that can actually be provided. There's limits by way of budgets, etcetera...and district requirements which cut down the minutes and things of that nature...[At the district level] they are focused on reading and math, they are not focused on physical education. They're filling a slot so that the teacher has a prep, that's all they're concerned about.

John received the "Employee of the Year" and "Employee of the Month" awards. In addition, John was asked to provide a workshop on PE at the district and university level. He viewed all those actions as indicators of support for him as a PET and the PE program:

> I think I'm pretty well respected. I was "Employee of the Year" so that was kind of a shock because you don't do work with children for those kinds of reasons but it was kind of a show that they were acknowledging PE para-educators...I teach a class every summer at [a university]. This happened a couple of years ago...I think it's a credential program. My name came up because the lady that ran it is friends with the teacher who I worked with...So again, there's that support from the staff that made me like, "Wow."

Mentoring issues. Both David and John mentioned the need for regular and guided support from another PET. Each, with differing educational backgrounds and years of teaching experience, acknowledged the benefit that could be gained with a mentor:

> I'm left out there on my own. What I would love to see is a mentor position...with 31 years of teaching I still have the need to learn and to be evaluated and to be looked at by someone within my department who understands what I'm teaching, has the knowledge base and is able to put an expectation out there...and that doesn't exist. (David)

> Classroom teachers get mentors and they just threw me out there. There was no curriculum, none...It would have been nice to have somebody to go to and say, "Hey, I had a horrible day today because of this, this, and this." And to have somebody say, "Oh, that's just normal, don't worry about it." To try and deal with it on your own is

> overwhelming...I don't get evaluated, where somebody comes out and watches you so it's hard to get feedback on how you're doing...I've had one principal come out and sit for 15-minutes. (John)

Ruth received mentoring at her previous district employer and acknowledged the lack of support at her new position:

> I went over that [PE curriculum] with my mentor teacher, the second year in [previous district]. She and I worked with the standards and the framework. But here I haven't been mentored. No one has said, no you can't have it, I haven't asked, it just, in PE it just doesn't seem...you know you don't sit around and have curriculum meetings about PE, you just don't. It's you and with the kids, "Your equipment is over there and the yard is there, and see ya. Here's your walkie-talkie", or whatever.

Respect and support. All of the PETs talked about the respect and support, or lack thereof, coming from school and/or district administrators. The push and pull of this factor was less quantifiable as say minutes available for PE instruction or funding for the PE program but the impact was apparent in the PET's words and actions.

Maria experienced powerful forms of support at the school level ("Rotary Teacher of the Year" and "District Exemplar Teacher" awards) but overt lack of support at the district level. She was acknowledged as a member of the teaching staff and included at school and board meetings and more simply, included on a large colorful sign in the MPR entitled "All Star Teachers." As a faculty member, Maria advocated strongly for the maintenance of the PE program when talk of elimination at the board level was in the wind (already discussed in the "leadership traits" section of this chapter).

Nancy and Ruth did not receive professional recognition and felt a general lack of support. For Nancy, working in an environment without district support,

which was tightly related to CT-prep time, translated into a feeling of not being respected, which impacted her PE program. Ruth also felt a lack of support but less intensely at the school level:

> So I think that getting the teachers an hour break [preparatory period] is what the district wants us to do and kind of made the teaching a little watered down or something. I don't feel respected, so that kind of puts your guard up. Like, they don't care what I do then. I try hard to get the content covered, but I don't feel I'm being helped in any way...the people [administrators] don't care who is conducting the program. And getting told that by the district office, It's not what you do it's getting the teachers their break. Then hire yard duty, I'm an expensive person...As far as the district honoring what I do, it doesn't matter to them. And yet they're honoring educator of the year...it reflects that the content area, the subject area is not a priority to them. (Nancy)

> With the principals at all the schools, the communication is pretty minimal. They are busy doing many other things; I don't think they want to know anything about what I'm doing. I think they want me to show up and be there and that's pretty much it...I think they want a good job but we don't have a lot of interaction. (Ruth)

Patti and John were in the same district, but Patti did not experience the same level of respect and support as John. Her feelings were complex in that she perceived the lack of support coming from several areas including the status of PE, her position as a paraprofessional, and the school accountability environment:

> In the beginning, for some teachers it [PE program] was nearly a baby sitter. Then for some [CTs], God forbid you don't take their kids so that they can have their prep time...we would just get attacked sometimes. Like, How dare you take a day off...and the classified didn't even come into the teachers lounge. I'd heard vicious stories about how they [CTs] treated us [paraprofessionals] ...[In reference to the role of PE in the school] The concept is certainly supported. But if they don't have the time or the energies because they're busy ...granted, the schools are being asked to do an amazing amount of things right now, it's hard.

Facilities

The facilities available for physical education instruction were a top issue for PETs and framed the curriculum opportunities they provided. Access to facilities mattered in what PETs taught. The PETs were questioned about the availability and adequacy of indoor and outdoor faculties. The CT participants were not queried about facilities due to the limited time available for their interviews.

The real limitation for instruction of PE was access to the multi-purpose room. Access to and use of the MPR was significant for the PETs. The availability of the MPR determined the ability of the PETs to offer a year-round comprehensive physical education program. Limited or unavailable MPR space often had a detrimental impact on the curriculum.

Although all but one of the PETs indicated they had access to the MPR, they spoke intensely of their strategies to secure, battles to acquire, and frustrations with lack of MPR access. The MPR availability was a matter of competing with preparatory filler subjects, like time for PE, and other claims to MPR facility use, particularly breakfast and lunch requirements.

Some PETs indicated they had MPR access but spoke of tremendous limitations on the practical use of the facility:

> I'm all for music and all that but they can have band with eight people on the stage and I have a class of thirty-two, can't you [band] go somewhere else. We compete with chorus, we compete with band and lunch...Our custodial staff because of when he took his lunch break had to set up the cafeteria at 10:30 which means put all the tables down. Well hello, I could have a whole class before lunch starts, but I couldn't get into the cafeteria because of that. Then even though lunch is over...it's going to take almost another hour for him to

> get them all pulled back up and to clean the floor. So my class right after lunch can't get in there if it's any kind of day where you really need to be inside. (Patti)

> On rainy days I have access to it [MPR]...often times the multi ends up being a storage facility so there's safety issues regarding playing a game...I end up cleaning the multi-purpose room and moving things in order for the students to have at least half if not all of the multi-purpose room. We tend to have half for about half of the day because of the fact that the hot lunch program or breakfast program is there. (David)

Access to the MPR was, for some, more manageable due to proactive steps in securing the space:

> When I first came here there would be many, many times, and sometimes unexpectedly, when I would arrive on campus and there was a coffee [social] in my multi-purpose room when I was supposed to have it as my classroom or there was a book fair or there was practice for the Christmas play, or this or that. I finally had to make a stand...[and present] at the faculty meeting about what it's like to be a teacher and to unexpectedly lose your classroom...[Now] it is our classroom...Our custodial staff is really good about having everything cleaned up and ready to go...everything has been cleaned, moped, dried ready to go. (Maria)

Even those actions did not always eliminate all MPR demands, as was true for Karen who took the initiative to secure use of the MPR but still had glitches:

> I feel that it's important for me to have access to the multipurpose room if I can't teach outside. If I go into a classroom, yeah there are things that I can do, but those students are missing out on what their curriculum is supposed to be. So, we have a dance and music program for our kids for half of the school year that needs to use the multipurpose room. So, we're scheduled so that the dance program works on opposing days from me...I'll have occasional weird events, where I'll say, why did you schedule a cookie dough delivery here today, you know I'm here today?...Year by year, we're working through those kinks. It's getting better where we don't have as many of those conflicts with the room and I've got the space.

California Physical Education Policies

The context in which teachers of physical education worked created challenges for teachers to build and create a functioning, healthy PE program. At times, PE was invisible. No PE was provided or what was provided would qualify more for recreation than PE. When PE had a presence, in Desigual County that was a direct result of CT-prep time and PE chosen as the prep filler subject, the circumstances in which the PETs worked was precarious. For PE programs to have a position in Desigual County elementary schools, teachers had to push against and resist the external and often inhibiting forces of the school system. In all, teachers of physical education often had little control over their work environments thereby making the teaching of physical education and the implementation of physical education policy difficult, impractical, or at times impossible.

Standards and Framework

The PETs familiarity with the PE framework and standards varied. Seven of the PETs stated they were at least mostly familiar with the framework, five PETs were at least mostly familiar with the challenge standards, and two PETs were at least mostly familiar with the new model content standards (see Table 4.14). Conferences, workshops, collegial interactions, and courses were often identified by the PETs as the means in which they learned of the framework or standards.

Although almost all of the PETs were familiar with the framework and at least one of the standards documents, implementing the standards was

Table 4.14 Level of Familiarity with California Physical Education Policy

Participant	CA PE Framework	CA PE Challenge Standards	CA PE Model Content Standards
Maria	Very Familiar	Not at all Familiar	Very Familiar
Nancy	Mostly Familiar	Mostly Familiar	Mostly Familiar
Ruth	Mostly Familiar	Mostly Familiar	Not at all Familiar
David	Unknown	Mostly Unfamiliar	Not at all Familiar
John	Very Familiar	Not at all Familiar	Unknown
Patti	Very Familiar	Very Familiar	Not at all Familiar
Karen	Very Familiar	Very Familiar	Not at all Familiar
Tim	Very Familiar	Not at all Familiar	Not at all Familiar

problematic. An environment of limited PE instructional time, access to an indoor facility, financial resources, and support for the PE program inhibited some of the teacher's ability to implement the standards. Administrators influenced what resources teachers had access to by making decisions about professional development, and purchasing instructional materials and equipment. By choosing to allocate resources in those ways, school and district leaders exercised their level of support for the PE program and influenced the types of connections teachers had to standards and the framework. As a result, teachers in different schools and districts potentially had different messages about PE policy. David identified his school's lack of support as the source for his ignorance of the standards:

> Funding needs to be improved if we're going to look at teaching skill level and following standards and we need to have the standards. The standards need to be purchased, state framework needs to be purchased, and handed to each teacher and an in-service given to each teacher.

As was presented earlier, Maria shared her ability to create a skill based exploratory program but her inability to create a skills progression and assessment program due to the limited time she had with the lower elementary students. Karen also spoke of similar challenges:

> Ours is really more of an exploratory program where we introduce activities that are fun to the kids so they're exercising they're having a good time, we're trying to put some of the Standards in but I don't know that we're really, because we don't assess the kids I can't say what percentages of students that are actually reaching any of those Standards at the end of each grade level. (Maria)

> There're things that the standards would tell me about, you know what a fourth-, fifth-, and sixth-grader is supposed to be working on. But, when you come right down to it I got one body, this is what I can do. I got time to set up one set of equipment and we're all going to do this. I try to make it a little more challenging for the sixth-graders than the fourth-graders, but am I really changing things enough so that it's following those standards, no. I realistically can't design a different curriculum for every grade level. (Karen)

Access to the MPR, especially under inclement weather conditions, was a barrier for some PETs to provide time or a safe place for PE. Without a place to teach PE the issue of policy implementation becomes inconsequential. Patti spoke of her limited access to the MPR that sometimes led to her canceling PE. Tim had a temporary lack of MPR access due to construction, which sometimes created an unsafe environment:

> Even when it's pouring and there are no facilities for us, because either music or band or whatever, is occupying every place there is, it's like, "Well you're still supposed to take these kids." And it's like, "And do what and where?" (Patti)

> On a Thursday, for instance if it rains, I don't have any indoor, nothing. So I'm under an awning and whatever, and you're getting creative. They're throwing a ball off the wall, they're playing hockey on the smooth wet cement, something. Not running, but hitting. (Tim)

Not all teachers were aware of their exposure to the standards. Some of the professional development experiences incorporated the standards into the workshops but the PETs were unaware of that infusion. For example, the regional PE workshops were developed in part around the standards, a structure that may not have been directly known by the attendees. The purpose of the workshop, attended by all PETs and CT 14E, was to improve teachers' PE knowledge and skills and introduce assessment tools through classes that were structured around the California PE standards. That orientation around may have been masked by the activity-oriented classes. Unless explicit reference was made to the standards, participants may have been unaware of the role standards played in the development of the workshop. The only overt reference to PE policy was a copy of the NASPE standards in the take-home material.

For the CTs, three (CTs 7C, 8D, 14E) of the 15 indicated they were aware of the PE challenge standards and only two indicated the standards influenced their PE program. Classroom teacher 8D stated the standards were part of her program, but was indefinite in her description of how standards framed the PE program she provided: "I was familiar with the old ones [standards], but not the new ones...They want you to teach cooperative games. Games like dodge ball and duck-duck don't fit with standards" (CT 8D, 1st-grade).

Only CT 14E, (a 2nd-grade teacher), who had attended the regional elementary PE workshop, said she was both familiar with the standards and was able to incorporate that understanding into her PE program: "I have used the material from the [regional elementary PE] workshop and used physical

education textbooks...We work on skill building with basketball, soccer, and baseball. We do a lot of eye-hand coordination games and locomotor activities."

FITNESSGRAM

All the PETs were required to administer the FITNESSGRAM to their fifth-grade students and were informed of those duties by school administrators. The FITNESSGRAM requirement meant that every PET had a FITNESSGRAM manual and several PETs structured part of their PE program around that assessment tool, making the FITNESSGRAM a very powerful policy instrument. Some teachers included specific test items into their PE units, and including fourth- and six-grade students in the assessment:

> Three years ago, our kids were having a real hard time with the push-ups; they just weren't getting upper body strength...So we made a concerted effort that we would get it into our instruction program. It was amazing, we have very few students now that cannot do push-ups. They're not all in the Healthy Fitness Zone but the fact that they can all do them. We have probably 80% in the Healthy Fitness Zone for upper body strength. (Maria)

> Then I do the FITNESSGRAM in September or October. I'll do the FITNESSGRAM with all my grade levels...because the fourth-graders are going to do it in fifth-grade, the fifth-graders have to do it, and the sixth-graders have to do it in seventh. I do it twice a year, September and March. (John)

Mandated Minutes

Despite the fact that in California PE is the only subject that has mandated instructional minutes, PE was often out-competed by other subjects. Such as other prep filler subjects such as music and art, and high stakes test subjects like math and language arts. For both PETs and CTs, the outcome of that

environment was the same, insufficient time to meet the mandated minutes for PE.

For PETs, the role of CTs' prep time was vital in the determination of time for PE. The range in weekly PE minutes provided by PETs was between 15- and 100-minutes for Kindergarten through sixth-grade students (see Table 4.9). Only two PETs, John and Patti, provided the mandated 100 PE minutes a week to their fourth- through sixth-grade students. Most PETs provided less than 50-minutes a week to a portion of their students; an important factor in teaching time was that Maria, Nancy, Ruth, and John taught at more than one school.

Classroom teachers also had the issue of competing subjects but for them reading and math were the competitors. High stakes testing and accountability created pressure for high demand subjects to consume most, if not all, of the limited school day time available.

Summary

The first subcategory question of the study was: What is the educational context in which physical education policies reside? In Desigual County, the elementary education school system created an environment that greatly inhibited PETs ability to teach PE and implement PE policies. Teachers of PE had limited control over decisions made about and decisions that impacted the PE program, often hindering the teacher's ability to teach PE.

The process of making critical decisions that would have a direct impact on PE programs were made in an ambiguous environment, sometimes led to new problems, and had outcomes that helped shape the challenging

environment in which teachers worked. The initial access point for PETs to enter elementary schools was the existence of a CT-prep time. The preparatory period was not a guarantee for inclusion of a PET in the school, but opened the door for PE. To ensure a PET, the subsequent decision of filling the preparatory time, in part or whole, with PE was necessary. In Desigual County, all schools with a PET had CT-prep periods, either formal or informal. When a decision to fill CT-prep time with PE was made, the final critical decision was to hire a PET.

The outcomes of those three critical decisions along with other factors created an environment in which two sources of power existed, the teacher and the school system. The internal teacher factors of teacher qualifications and leadership traits were the source of power teachers used to build and create their PE programs. The external school system factors of time for PE instruction, financial and administrative support for PE programs, and access to facilities to teach PE were the source of power school systems used to sometimes support but often hinder the PE programs and the ability of teachers to implement PE policies.

The decision to fill CT-prep time with PE was the most influential and far reaching decision. The prep time defined the PE time along with competition from other prep filler subjects such as music and art. The limited available time and the competition for time resulted in few PETs providing the mandated PE minutes. CTs were also challenged to provide sufficient PE minutes but due to pressure for high demand subjects within an accountability environment. The tension between prep filler subjects, specifically PE and music, resulted in

competition for not only time but also facility access. The MPR was important for PETs to provide a necessary and safe place for PE during inclement weather. Although all but one PET indicated they had use of the MPR, the actual practice was sometimes less favorable. Other MPR demands such as music class, the food program, and storage space often conflicted with a PETs actual ability to use the space.

The qualification of the PE position was an influential teacher factor. The cert-PETs were costly to the district, were qualified educators and mostly well trained as physical educators, and most had high teaching loads. The para-PETs were a low-cost to the school, were unqualified educators and not trained as physical educators, and most had low teaching loads. However, the quality of the PE program was not dictated by the type of teacher, as teacher leadership characteristics also influenced the PE program.

Beyond the issue of available instructional time for PE was the factor of financial support for professional development and equipment. Most of the PETs had funding to attend workshops or participated in in-service workshops. However, the funding was not consistent, made reliance on financial support for professional growth precarious, and sometimes led to missed opportunities. A few PETs paid out-of-pocket for some professional development activities. All of the PETs had an equipment budget that ranged from $200 to $1000 per year for one school. The conservative budgets of the cert-PETS created restrictions related to purchasing choices. The generous budgets of the para-PETs led to liberties related to sharing equipment and easily replacing damaged equipment.

Another external force was the support and lack of support from school and district administrators in the form of professional recognition, meeting mentoring needs, and general respect and support for the PET position and PE program. Only three PETs received professional recognition for their contributions to the education of students. Those actions at the school and district level positively impacted the PETs and enhanced their sense of community. However, three PETs spoke of their unmet needs for mentoring. That deficit had a negative impact on their confidence, at differing points in their careers, and desire to grow professionally. Also, several PETs spoke of the impact of respect and support generally, and the lack thereof, on their PE programs. Some cert-PETs had support at the school level but not at the district level. Most para-PETs perceived their school as supportive but were mostly unaware of the level of support at the district level.

CHAPTER 5

DISCUSSION

Introduction

The main purpose of this study was to examine the factors that shape the California elementary school teachers' practice of PE and how those factors were related to California PE policy implementation. To address that purpose three subcategories of questions were developed: (a) In what educational context did PE policies exist? (b) What factors shaped teachers' practice of PE? and (c) How were the factors related to PE policy implementation? The initial proposed framework in which to analyze the data was that of Darling-Hammond (1990), an appropriate framework for a policy practice and implementation analysis. However, what I found during data analysis was that the circumstances in which teachers teach PE is extensively influenced by factors outside of their control and thus severely inhibits the teacher's ability to teach and implement PE policies.

The shift in focus away from policy practice and implementation to a focus on the impact of school system decision-making choices on teacher practice calls for a new framework. I make use of the garbage can theory of organizational decision making (Cohen et al., 1972) to analyze the school system decisions that impact the teaching of PE. The reframing also alters the manner in which the research questions are addressed. To understand the educational context PE policies exists, the first research question, three critical decision-making junctures are discussed. The discussion focuses on the impact of the decisions on the structure and path of the PE program and not on PE policies directly. The

second question, identifying factors that shape teachers' practice of PE, remains the same and is related to the outcomes of the three critical decisions and other factors. The final question of relating the factors that shape PE practice to PE policy implementation is discussed with respect to the near impossibility of implementing policies in an environment in which teachers have limited support and control.

There are three major findings of the current study. First, the structure and path of elementary school physical education programs is determined by three critical decision-making points (choice opportunities): (a) providing CTs with preparatory time, (b) filling the prep time in part or whole with PE, and (c) hiring a PET (see Figure 5.1). These decisions are made under conditions of ambiguity and are frequently choices of convenience and necessity, rather than solutions consistent with defined PE program goals. The outcomes of some choices often create new problems and contribute in part to the challenging PE teaching environment.

Second, there are two sets of influences, usually in opposition, that shape the elementary PE program, the internal teacher factors and the external school system factors. The internal teacher factors consist of teacher qualifications and teacher leadership traits and are factors used by the teacher to build and create the PE program. The external school system factors are composed of time for PE instruction, financial resources for the PE program, administrative support for the PE program, and access to facilities to teach PE. These factors impact the PE program and the teacher's practice in ways that are usually hindering.

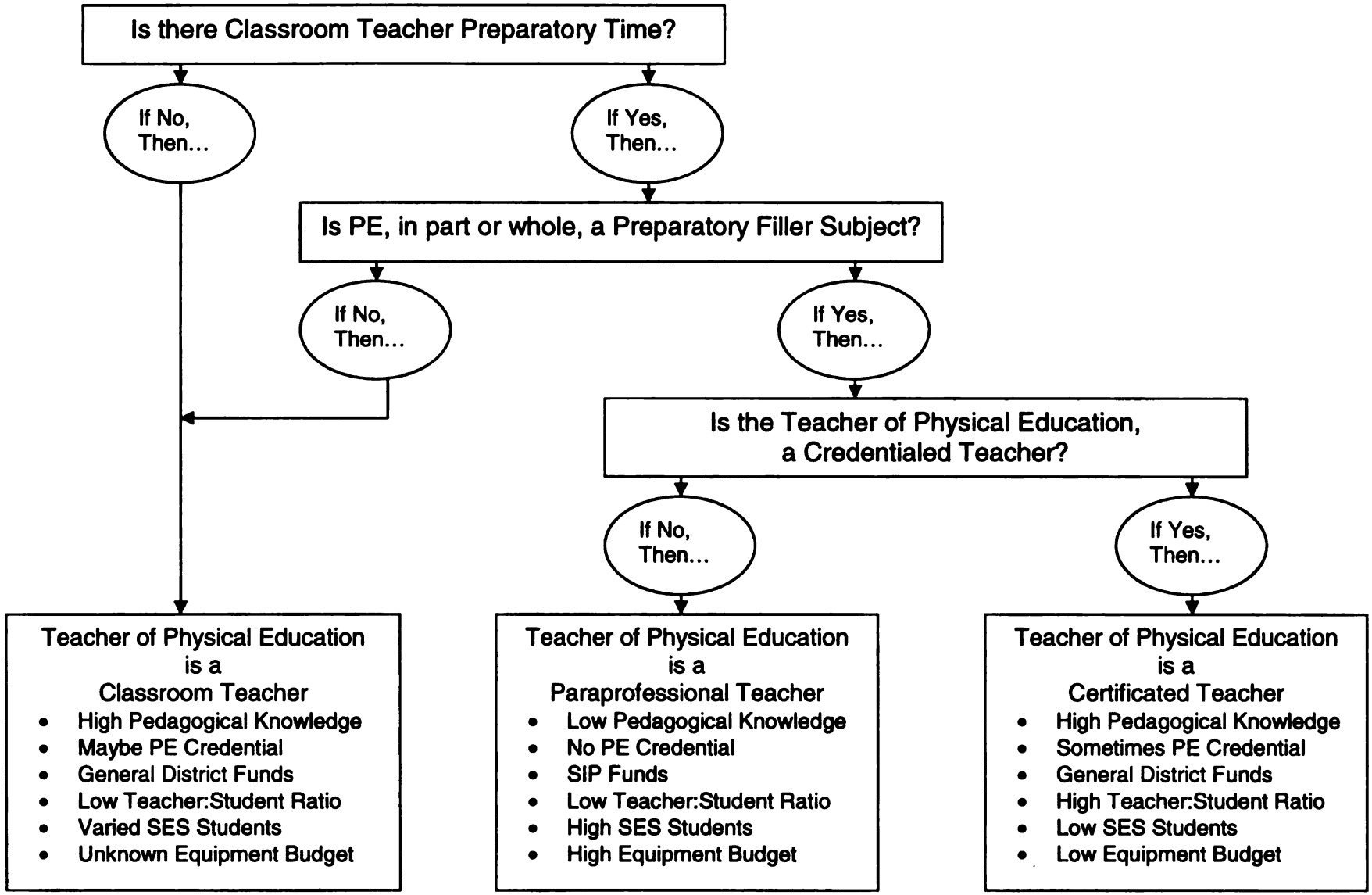
Third, the context in which PETs practice, resulting from the outcomes of the critical decisions along with other internal teacher and external school system factors, is highly influenced by forces beyond their control thereby making PE policy implementation nearly impractical.

This chapter is divided into four sections. First, the major findings of the study are presented and discussed. Next, the implications of the study are presented followed by recommendations for future research. Finally, the conclusions are discussed.

Choice Opportunities

The decision-making process for each of the three critical decision points (see Figure 5.1) can be viewed as a series of choice opportunities (organizational decision points) to which a variety of school system participants, problems, and solutions co-mingle to produce decisions. The critical decision point, what Cohen et al. (1972) call "choice opportunities", of providing CT-prep time involved a variety of school system participants each with differing outcome goals, and energy and time for decision-making. This decision point was driven by classroom teachers demanding a preparatory period or wanting small group or individual classroom time, or principals wanting to reduce the classroom teacher load by providing a PET (a decision that tied a specific solution to the problem). Each participant has different goals in mind, often independent of any PE program goals. The choices made by the participants represent oversight

Figure 5.1. Decision-Making Paths for Desigual County Elementary Physical Education



decisions, that is, the solution becomes the problem immediately after the decision is made. The immediate decision of providing CT-prep time served the needs of the classroom teachers, but addressing the new problem of, with what to fill the preparatory time is a new problem looking for a new solution.

The next critical decision point is determining if PE would be a subject with which to fill the preparatory time. Similar decision-making characteristics are exhibited at this choice opportunity but the level of solution complexity increases, often to the ignorance of the decision-making participants (classroom teachers, or school or district administrators). For example, a common solution for filling the preparatory time is a combination of PE and music. Such a decision carries subsequent problems of competition for a finite amount of instructional time, facility use, and funds to hire teachers and maintain the programs. When decision-makers fail to notice that one solution leads to additional problems, a decision made by oversight, the new problems become "issues looking for decision situations in which they might be aired" (Cohen et al., 1972, p. 2). That is, the problems of competition for space, time, and financial resources are not addressed in the decision-making process of with what subjects to fill the preparatory periods. The new problems must be addressed in another choice opportunity, a choice opportunity that is created when the "combinations of problems, solutions, and decision-makers happen to make action possible" (Cohen et al., 1972, p. 16).

The latter problem, hiring a PET, is attended to by school and district administrators through the teacher hiring process, the third critical decision point.

Unlike the previous two choice opportunities, this choice is limited to participants eligible to make hiring decisions, thereby limiting the type of decision-makers to school and district administrators. Cohen et al. (1972) refer to this arrangement of participants as a hierarchical decision structure – important decision-makers make important choices and can participate in many choices. The hiring of a PET is important due to the financial nature and educational impact of the decision.

Increasingly, the question for many schools and districts is whether or not they can afford the financial cost of a PET position. At the elementary level a range of hiring options exists: (a) cert-PETs with PE credentials, (b) cert-PETs without PE credentials, (c) para-PETs with fitness experience, (d) para-PETs without fitness experience, and (e) no PET, leaving the CT to teach PE. Filling the PET position with classified personnel (paraprofessionals) or avoiding the assignment altogether represents savings for schools and districts. Some administrators may see the 'savings' as necessary for their schools (Evans & Penney, 1999) when making hiring decisions with limited financial resources. Such a context of limited resources carries additional constraints of increased demands on the administrators, as the number of solutions to problems decreases under conditions of reduced financial resources in which to function (Cohen et al., 1972).

The PET hiring decision is made by administrators when choices are made available and decision-makers are able to take action. Certificated PET hires are made through a formal process and choices are contained by an

applicant pool. However, exceptions exist when school needs are unique and require a school level decision which in turn limits solutions. The PET hiring choice made then provides only a partial solution, as the school needs (the problem) are greater than the capacity a single solution can meet.

The hiring of paraprofessional PETs is an informal process with choices contained by those individuals known by the school principal. Principals recruit individuals they know personally and perceive as capable of occupying a PET position. In circumstances when an initial solution fails (i.e., a hired PET leaves a position at the beginning of the school year) a choice surfaces that was not identified originally as a solution – as was the case when a principal's personal fitness trainer was recruited after the original hired PET left the position. Filling the PET position with a paraprofessional is an informal process and a choice of convenience and necessity rather than a choice based on coherent objectives.

The three critical choice opportunities for PE exist within a context of nonexistent, vague and inconsistent goals for elementary PE; are associated with unclear decision processes that are based on convenience, necessity and trial-and-error; and involve participants with varying energy levels available for the decision-making process. These observations are consistent with an "organized anarchy" and the garbage can theory of decision-making (Cohen et al., 1972; Cohen and March, 1974; March and Olsen, 1976). Problems directly or indirectly associated with physical education are worked on in a context of choice, but choices are made only when problems, solutions, and participants intermix in a specific combination to make action possible. The decisions made, the time for

making the decision, and the problem solved by that decision depend upon the mix of choices and solutions available to and problems associated with the school and district. As well, the demands experienced by and decisions available to the participants at the time of decision-making impact the decision-making process.

Opposing Factors that Shape Physical Education

Talking to teachers and observing their practice reveals several factors that shape the elementary school PE program, internal teacher factors and external school system factors. The factors are directly and indirectly related to the outcomes of the three choice opportunity decisions. The sets of factors apply opposing influence on the structure and path of what is the physical education program. The internal factors of teacher qualifications and leadership traits not only serve to assist the teacher in defining the PE program but also in limiting the restrictive influence of the external factors. The external factors act primarily to constrain and limit what are the PE program and the teachers' practice of PE. The external factors are composed of instructional time, financial resources, administrative support, and access to facilities.

Internal Teacher Factors

The capabilities individuals carry into the PET positions are related to their level of professional training in pedagogy and subject matter content, personal experiences, and level of leadership qualities. Taken individually or in combination these teacher factors impact the type of PE program offered. The qualifications of the PET are directly related to the hiring decision, a decision

influenced by available financial resources. A cert-PET is costly but has more pedagogical knowledge and often content knowledge than a para-PET, or a CT.

Certificated PETs with PE credentials have the greatest potential to effectively and efficiently use their knowledge base to frame the PE program, student learning, and teaching strategies related to PE. They also experience professional development through a lens of trained PETs which allowed them to incorporate the information presented at a depth consistent with their training and knowledge. Those PETs take the experiences to enhance their programs, inserting or substituting activities into their developed curriculum, or checking their program against the framework and standards.

Consistent with previous work (McKenzie et al., 1993; McKenzie et al., 1995; Davis et al., 2005), the qualified PETs in this study provide a quality PE program and a program that is consistent with the state framework. Such staff are associated with PE programs that have a curriculum that includes skill development and content areas beyond fitness and sports, a weather-independent scope and sequence, out-of-class activities that involve family, a family newsletter, other subject areas integrated in PE, and a non-competitive environment that fosters fairness and good sportsmanship.

Noticeably different PE programs are associated with PETs who have no teacher training and/or limited to no PE content knowledge. Although such a hiring decision, which includes a reduced cost for para-PETS, may be attractive to school administrators in terms of filling the PET position in a climate of reduced funds, the lack of qualifications can negatively impact the quality of the

PE program. Some of the unqualified PETs offer a PE program that lacks a curriculum, structure, and opportunities for students to fully be active and participatory during class time. Those PETs professional development experiences help provide them with new material and activities to do with their students but the activities are not housed in any structure or plan, instead they are housed in a bag of activities from which to pull out when weather, time, or energy permit. Without some level of PE subject matter competence their ability to develop expertise is impeded (Siedentop & Eldar, 1989).

However, several unqualified teachers are perceived by school administrators as competent in getting the job done as those PETs enter into their positions with a personal drive and initiative that got them the job. That is, lack of training does not, in and of itself, determine the future quality of a PE program. Some of the PETs with no pedagogical and/or content knowledge exhibit a desire to create a PE program that addresses what they thought the program should be. Those teachers had the motivation and willingness to seek additional assistance from other professionals in the field, and professional development experiences to enhance their content knowledge and PE programs. That leadership behavior may arise from a positive view of PE given their personal engagement in fitness. Although that initiative alone does not result in a high quality PE program, the combination of some base content knowledge, the positive view of PE, and the motivation to enhance their knowledge may result in a PE program that includes skill development, positive non-competitive activities

that fostered fairness and good sportsmanship, and a program that is moderately adherent to the framework.

Aside from the PETs, the CTs are often able to provide time for PE but the opportunities offered are mostly limited to group and cooperative games and/or fitness activities such as running and calisthenics. Without sufficient PE content knowledge, CTs are not able to provide the type of PE program called for in the framework or that would address the standards. But with such limited time and content knowledge available to most CTs, it may be unrealistic to expect them to do more than games and fitness without the substantial training commensurate with that of cert-PET with PE credentials.

These data support the notion that PETs who have professional teacher and content training in combination with leadership traits can provide a quality PE program. More importantly though, the PETs without adequate professional training but the leadership behaviors to seek the guidance and education they lack, can begin to develop the knowledge and skill necessary to move toward development of a quality PE program. The issue of combined training and leadership traits is significant in that the number of unqualified PETs hired to fill PET positions is increasing, especially para-PETs (Piletic, Davis & Aschemeier, 2005), but the support and training for such teachers is often limited to non-existent. This study demonstrates that a key factor to creating a healthy and functional PE program within a non-supportive environment requires both the training and leadership to combat the negative external forces.

External School Factors

The outcomes of the three critical choice opportunities discussed earlier, as well as other factors, have a direct impact on the PE program a teacher can provide. The external factors are indicators of the capacity and willingness a school and/or district have to assist the PET in providing a quality PE program. The factors include, the time available for instruction of PE; the financial resources available for professional development, equipment, and material; administrative support for the PE program; and access to facilities to teach PE. These interrelated factors are discussed jointly when appropriate and are illustrative of the restrictive environment created by schools and/or districts for elementary PE.

At the decision-making points of providing CTs with prep time and what subjects would fill the prep time, structural limitations take hold of the PE program that highly impact the program. It is at those decision points that the key factor of available PE instructional time is realized and implications regarding the ability of teachers, independent of training and credentials, to provide a quality PE program surface.

The unique position of PE as a preparatory filler subject means that there are potentially two arenas where PE instructional time can be compromised, among other preparatory filler subjects such as music and art, and among subjects categorized as core academic, such as mathematics and language arts. When schools chose music in addition to PE as the prep filler subjects, inherent tensions emerge. Music and PE compete for the same space and time available

for instruction, although facility use for most PETs is often only an issue during inclement weather. But, the competition creates a scheduling puzzle that carries the potential to pit subjects and teachers against one another.

Both limited time and limited facility access force the PET to make the difficult decisions of deciphering what is most important to teach, decisions that are not always compatible with PE policies. That reality has a bearing on the range of activities that can be incorporated into the curriculum and/or the depth to which activities can be practiced (Penney & Evans, 1999). Consistent with the findings of Curtner-Smith (1999), some PETs pointed out that the lack of time and facility access led to the curriculum being 'watered down' to the extent that they can not teach the quality program they desire.

The challenge CTs face is with respect to PE competing with the high pressure subjects of math and language arts. Almost all CTs comment in one way or another on how the pressure for content coverage directs their time and energy on the subjects of the standardized tests, tests used for important decisions about students, school, and most importantly funding. Within the accountability environment CTs may opt to skip, or provide sporadic, inconsistent, unstructured or inappropriate activities for PE. Although California mandates PE instructional minutes, and encourages adherence to the PE framework and standards, those policies are not part of the accountability environment in public schools. That fact may explain why CTs frequently decide to curtail or eliminate time for PE.

Another significant external factor is the amount of financial resources available to support the PE program. In all schools with cert-PETs the budget for professional development and equipment and material is limited. The inadequate budget schools and districts provide forces teachers to purchase only necessary equipment and material and to move some equipment across schools. Professional development opportunities beyond one or two workshops a year are paid out-of-pocket when a teacher seeks out training beyond the minimum.

In schools with para-PETs, the parent-school organization provides funds that supplement district equipment budgets or serve as the sole provider of the equipment budget. The para-PET budgets are dramatically higher than the cert-PET budgets enabling a teacher to share equipment with CTs, a practice not available to cert-PETs. Parent-based funds provide a financial cushion that decreases the pressure of dwindling regional, state, and federal monies available to schools, funds that are available only in limited amounts at the cert-PET schools.

Without sufficient funds PETs are limited in their ability to enhance their knowledge base through professional development activities or expand their program to include activities that require new equipment and material. These limitations negatively impact PETs ability to provide quality PE programs and also contribute to the teacher's impression that administrators do not support the PE program, a relevant issue for some PETs. Although many PETs have or earn school level support and respect, some teachers state that at the district level many administrators express a view of the PE program serving to only meet the

need of providing the CTs their prep time. That view takes an emotional toll on some PETs. One teacher, for a time, lost her passion and motivation to teach; another set his aims toward retirement and simply chose to maintain 'what worked' in his PE class; and another spent time and energy to fend off talk of PE program elimination.

In spite of meaningful PE programs being offered by some PETs, lack of support by administrators was a perspective that ran contrary to those in PE who propose that simply delivering a quality PE program with a qualified instructor will mean "others will begin to see PE in a positive academic light" (Stevens, 1998). In fact in unsupportive environments, PETs must give additional time and emotional energy to combat the negative environment and advocate for PE. It is not simply a matter of PETs being "the source of our image problem" (Stevens, 1998).

Another form of insufficient support from school level administrators is the lack of guaranteed classroom space for the teaching of PE. Access to a multi-purpose room (MPR) is a necessary and essential component to the ability of PETs to provide both time, and a safe, clean, and dry space to teach. The need of PETs for a classroom, independent of weather conditions, appears to be overlooked by CTs, custodial staff, and school administrators, as well as other prep filler subject teachers. When access is limited or denied, the PE program provided to the students is compromised both in time and quality. Differences in the availability and conditions of the MPR framed the opportunities PETs provide. Others researchers have found that access to safe and clean facilities increases

the variation in PE activities provided (Penny & Evans, 1999) and improves teachers' efforts to implement national policies (Curtner-Smith, 1999). In the current study, most of the PETs' use of and need for the MPR was weather driven but when access is limited the program is dramatically altered and reduced, often resulting in teaching in the hallways or canceling classes.

Policy Implementation

What happens in elementary PE programs is less related to PE policy than to the circumstances in which teachers find themselves. The structure and path of the PE program is impacted by three critical choice opportunities, decisions not in the control of the PETs. The outcomes of those decisions, and other factors, have an effect on the PE program. In all, two sets of factors actively work, sometimes in unison but mostly in discord, to shape the educational context of elementary PE. The teacher factors of qualifications and leadership behaviors are continually working against the external school system factors that primarily inhibit the teachers' ability to teach to a framework or a set of standards. Given that uncontrollable events and limitations determine the teaching context, PETs' skill in managing and creating inroads to altering the environment is essential. Policies could serve as discouraging messages when teachers view them as difficult to achieve in an inhibitive educational and teaching context.

The competition for time and facility access impacts the implementation of mandated minutes. Most PETs have teaching loads that prohibit their ability to meet the policy, they teach at several schools which limit the amount of time for

PE instruction. In essence, there is insufficient time and space to meet the 100 weekly PE instructional minutes. In addition to a heavy teaching load, teachers compete for time and/or space with music, drama, art, school assemblies, classroom field trips, and school breakfast and lunch programs. Also, the ability of a PET to utilize the limited time available for focused teaching is in part related to their professional pedagogical and PE content knowledge. Qualified teachers provide a PE program that maximizes the time by providing developmentally appropriate activities from start to finish. Those teachers less qualified provide less instructional and activity time for the students and have students in passive activities. Those circumstances essentially eliminate the possibility to meet the mandated minutes and provide a challenging environment for teachers to teach to the standards and framework.

Time is a key factor in general and even more important when PETs are asked to cover 40 or more PE standard objectives within a single grade level (see Tables 2.2 and 2.3). If PETs attempt to teach to the objectives and the framework goals, little time can be spent on any one objective and few, if any, will be achieved over the course of a year (Kelly, 1989). The "too little time too much content" (Porter, 1994) problem may inadvertently discourage any effort to teach to the standards.

For some PETs, the standards are a concept that guides their instruction but is not the focus of the program. Their heavy workloads, limited time, and available competency level forces them to alter, modify, or disregard the standards, a behavior found in other teachers attempting to implement policies

(Elmore & Sykes, 1992). For other PETs, their ignorance of the standards preceded any potential impact. Several teachers are unaware of the standards and are thus disconnected from them, even though some PE workshops are structured around the standards. However, since the standards themselves are not the focus of the workshop, the attendees remain uninformed.

Another difficulty in implementation of the standards is the impracticality of changing the teaching units across grade levels during a teaching day given the "manpower" required for equipment and time to set-up. The PETs make the pragmatic decision to teach the same units to each grade level, with some variation for differing grade levels. The teacher is then able to gather and transport the necessary equipment for a unit to the lesson location and use the same equipment for each subsequent class and grade level. Those PET choices have an impact on the programs and further diminish the possibility of attaining grade-specific PE standards.

Although the standards are not a form of accountability for PETs, PETs do demonstrate a sense of accountability for the physical fitness test, the FITNESSGRAM. The FITNESSGRAM influences what and to whom teachers teach. Several of the PETs incorporate fitness testing items into their curriculum to help improve student scores, extend the test to grade levels above and below the required fifth-grade, and administer the test more times than the required once in the spring. That impact of the FITNESSGRAM makes the test a powerful policy tool in elementary PE programs, even though recent research has indicated that California teachers of PE do not believe the tool useful (Ferguson

et al., 2005). The PETs may perceive the test results to measure the success of their PE program. However, the test only measures physical fitness, a test not wholly representative of the comprehensive and sequential program goals of the framework. The assessment tool may lead PETs to omit some content coverage to prepare students for test items, a costly choice in an environment of extremely limited time. Allocating instructional time to test preparation, may lead to deemphasizing other untested curriculum (Rothstein, 2004) that are part of the framework goals such as social development, balance and coordination, skill areas, and tumbling and rhythm content areas.

Interestingly, most CTs do not refer to the FITNESSGRAM as a source of pressure that influences their PE time allocation. In part that may be due to a perceived lack of importance given the test since the results have no direct impact on their role as educators, nor their school's funding; or CTs may have perceive the FITNESSGRAM as a sole responsibility of the grade level teachers in which the test is administered, fifth-grade.

The educational context of elementary PE programs creates a conundrum for advocates of PE: without an adequate supply of qualified teachers, time, and resources that support PE, the opportunities to create a high quality PE program consistent with PE policies are compromised. In turn, that may lead to a diminished attraction of the program and ability to rally for quality teachers and increased time and support.

Implications

The focus of the study is on the educational context in which elementary PETs teach. The circumstances of their work environment mean that they have little to no control over the decisions that impact their teaching environment and that the environment necessitates that they minimize the inhibiting factors that impinge on their ability to provide a functional, healthy, quality PE program. The unique circumstances uncovered in this study provide a platform in which insights and suggestions are made for practitioners, administrators, and policymakers on how to support the attainment of quality elementary PE programs.

First, the gateway to obtaining a PET in elementary schools is through providing CT-prep time. However, supporting a preparatory period for CTs does not guarantee time for PE instruction, but it is the first choice opportunity that creates the potential for a PET. The nature of several decisions that may lead to the hiring of a qualified PET is ambiguous and often reflects a decision of necessity and oversight rather than a defined PE program goal. Thus, administrators would do well to further define the needs of their CTs and students with respect to PE.

Second, school and district administrators face trade-offs in their decision about staffing PET positions. On the one hand, cert-PETs with PE credentials have the pedagogical and PE content knowledge necessary to facilitate the achievement of a quality PE program aligned with the PE framework and standards; and the collegial kinship to help navigate the potential structural

limitations of facility use and time, and garner school level support for their professional development and PE program. On the other hand, cert-PETs are financially more costly, teach at more schools, and have low equipment budgets. In all, cert-PETs are a powerful yet not necessarily financially palatable means for schools and districts to provide quality PE instruction. But school and district level administrators must rethink their staffing decisions beyond the financial implications and consider the competency level required to create a quality PE program. This study did provide evidence for alternative options that may exist for some schools. One is for school and districts to explore creative ways to transfer school or district level costs to parent-school organizations thereby reducing some of the financial burden of hiring a qualified cert-PET. Another option would be to contract, at an hourly rate, with qualified cert-PETs rather than hire para-PETs.

Third, instructional time for elementary school PE is very limited for all teachers. Schools are hard pressed to provide the recommended number of PE minutes children are to receive. Indeed schools can schedule longer or more PE lessons per week (McKenzie et al., 1995) but the current study shows such an undertaking to be unrealistic. One avenue through which schools can support more time for PE is to shift from viewing PE as provided by a single teacher, to viewing all teachers as providers of PE. Several PETs' stated that the CTs seldom took their children out for PE and several CTs, although they provided some PE time, stated they would like a PET at their school.

Schools in conjunction with or lead by PETs can advocate for, support, develop, and foster a curriculum design involving shared responsibility for the teaching of PE, a design currently being explored in art education (Byo, 2000). The PETs would be held accountable for the components of the PE program requiring specialized knowledge and training such as motor skills, and movement and fitness concepts. The CTs would be mostly responsible for addressing the fitness components such as aerobic and muscular strength and endurance activities. This design may relieve the PET from spending valuable PE instructional time on activities that are low skill and relieve the CT from the pressure of developing and designing age and developmentally appropriate PE activities. Through an in-service workshop the PET could provide CTs with guidelines on how to appropriately perform the fitness activities relevant to each grade level.

Finally, all teachers of PE need introduction to and experience with the standards. Most teachers are unaware of the PE standards and as such, implementation of policy is meaningless. As well as exposure, teachers need guidance on how to adopt and refine the standards to meet their unique school environment and students needs. This study shows that the impact of policy is less than the impact of the context in which teachers teach.

The new content standards and objectives within the standards, of which there are many, enter into the educational context of limited instructional time and for some teachers, limited content knowledge which constrains teachers' ability to meet all the grade level standards. Professional development needs to

include guiding teachers on how to narrow the standards to meet their unique educational context and students needs. It is unrealistic to expect elementary PE programs to attain all the standards asked for; instead, what needs to be considered is what is necessary and essential for any given school or district – especially in relation to the time allocated - and provide support to attain those standards.

Recommendations for Future Research

This study highlights some critical decision-making points and factors in elementary school PET practice and policy implementation. However, some limitations exist and many questions are raised that require further study. First, the study focuses on eight PET and fifteen CTs from one district in northern California. Therefore, results and the implications cannot be generalized to other elementary school teachers of PE. Future research needs to include districts, schools, or teachers that can dispute current findings, which are teachers, schools, and community populations different from the current study. Only then will we begin to understand more deeply how elementary school PE teacher practice and policy implementation looks.

Second, the data are mostly combined across teacher training, experience, age, and gender which guided the coding process and analysis. Although the sample size of the current study is too small for demographic grouping, future research with larger sample sizes needs to include analyzing data within relevant demographic categories. Such analyses might highlight factors not brought forth in the analysis method used in the current study.

Next, the current study is only able to recruit CTs to participate in a brief telephone interview and neither observations nor interviews were conducted with CTs. Such a limitation may have misled the findings of the current study that relate to CTs and PE. Efforts must be made to understand the CTs' resistance to participate in the study and changes made to accommodate their participation in future research. Participation by CTs is critical, since they are likely the primary providers of elementary PE in California; outdated data indicate that CTs are responsible for 97% of elementary PE instruction (Petray et al., 1984).

Fourth, a study of school and district administrator PE hiring policies and practices and perspectives of PE would shed light on staffing decisions. Several teachers believe that finances drive PET staffing decisions. When funds 'weren't available' administrators resolved themselves to not affording a PET. However, the data in the current study indicate that districts with low SES students afforded cert-PETs, a costly option. It is possible that low SES schools have access to state funds that supplement such appointments; that financial explanation may be plausible but at least one additional explanation may exist. The decision makers at schools with low-SES students may view school as a means of providing equal access to knowledge and experiences. If so, then administrators may have acted in a supportive way to provide access to a structured PE program that provided opportunities to activity that might not happen otherwise. That is those schools may have perceived a social obligation to address perceived deficiencies of their students by equaling the playing field.

Fifth, additional studies should return to the same district of the current study and collect another set of data with the same teachers on a bi-annual basis to measure the process of teaching in a restrictive environment and policy implementation. California is currently supporting the implementation of the newly adopted content standards by providing tiered workshops on the standards and California has adopted a budget that allocates funds for K-12 PE programs. The current study could serve as a pre-implementation data set and subsequent data sets could serve as post-implementation. Given the limited policy analysis research currently taking place in PE, such a longitudinal study could provide valuable data about tangible state level efforts to support standards adoption and infusion of financial resources and the impact of those efforts.

Finally, investigators need to measure the effects of high-stake testing on elementary PE programs. Teachers, principals, and boards of education face increasing pressure to have their students perform well on high-stake tests. The current study provides evidence that some teachers and schools have opted to discontinue or limit PE instructional time. While those decisions may have appeared necessary, the evidence of their effectiveness is limited. A study of the relationship between the amount of time allocated to PE and scores on the California high stakes tests would increase our understanding of real versus perceived gains in high stakes testing scores at the cost of PE.

Conclusions

The development of the PE framework and standards, and the forward motion that has emerged in PE as a result are very positive; this study does not

intend to undermine those efforts in any way. Instead this study means to support educators in their efforts to effectively provide quality PE programs and implement policies in meaningful ways when little assistance is provided. This report, from one county in Northern California, was an initial attempt to understand the interaction of school and community factors with PE programs and policy. The insights offered are limited by the methodology, the number of participants, and the region of data collection and thus are made cautiously. The results do, however, point out the structural, staffing, and support limitations that the education system brings to bear on PE program development and policy implementation

Clearly many of the factors found to influence teachers' PE program lie outside the control of the teacher: instructional time and facilities available to PE, funds available for professional development and equipment purchasing, and administrative respect and support. How teachers worked within those constraints is predominantly in the control of the teacher. A qualified PET with pedagogical and PE content knowledge and leadership traits has the greatest potential for defending against inhibitive factors. Those PETs develop a meaningful PE program, enhance the program through continued professional development, garner support for PE through their delivery of the program, and connect with PE policy through their vested interest in the profession.

The ideas and circumstances at the local level will always vary. Thus school and district administrators would do well to examine their decision-making process and anticipate the conditions under which a PET hiring decision may

arise. Development of PE program goals would serve as a step towards reducing the ambiguity of hiring decisions and help reduce the inhibitive environment PE programs currently exist.

APPENDICES

APPENDIX A

NASPE Physical Education Content Standards

Moving into the Future. National Physical Education Standards: A Guide to Content and Assessment (NASPE, 1995)	Moving into the Future. National Standards for Physical Education, second edition (NASPE, 2004)
A physically educated person:	
Demonstrates competency in many movement forms and proficiency in a few movement forms.	Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities
Applies movement concepts and principles to the learning and development of motor skills.	Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.
Exhibits a physically active lifestyle.	Participates regularly in physical activity
Achieves and maintains a health-enhancing level of physical fitness.	Achieves and maintains a health-enhancing level of physical fitness
Demonstrates responsible personal and social behavior in physical activity settings.	Exhibits responsible personal and social behavior that respects self and others in physical activity settings
Demonstrates understanding and respect for differences among people in physical activity settings.	Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction
Understands that physical activity provides opportunities for enjoyment, challenge, self-expression, and social interaction.	

APPENDIX B

California *Physical Education Challenge Standards for Student Success*
and
California *Physical Education Model Content Standards*

Challenge Standards (K-12)	Content Standards (K-8)
Standard 1 The student will be competent in many movement activities.	Standard 1 Demonstrate motor skills and movement patterns needed to perform a variety of physical activities
Standard 2 The student will understand how and why one moves in a variety of situations and will use this information to enhance his or her skills.	Standard 2 Demonstrate knowledge of movement concepts, principles, and strategies as they apply to learning and performance of physical activities.
Standard 3 The student will achieve and maintain a health-enhancing level of physical fitness.	Standard 3 Assess and maintain a level of physical fitness to improve health and performance.
Standard 4 The student will exhibit a physically active lifestyle and will understand that physical activity provides opportunities for enjoyment, challenge, and self-expression.	Standard 4 Demonstrate knowledge of physical fitness concepts, principles, and strategies to improve health and performance.
Standard 5 The student will demonstrate responsible personal behavior while participating in movement activities.	
Standard 6 The student will demonstrate responsible social behavior while participating in movement activities. The student will understand the importance of respect for all others.	Standard 5 Demonstrate and utilize knowledge of psychological and sociological concepts, principles, and strategies as applied to learning and performance of physical activity.
Standard 7 The student will understand the interrelationship between history and culture and games, sports, play, and dance.	

APPENDIX C

Elementary School Physical Education Program Study
Teacher Questionnaire

Code: _____

This questionnaire is designed to gather information about your teaching experience, physical education program, and professional development experiences. Your participation in completing this questionnaire is voluntary and you may choose to not answer questions and/or discontinue completing this questionnaire at any point. This questionnaire is strictly confidential and will be viewed and used by me, the investigator, for purposes of dissertation research and future publications (e.g., conference papers or article publications). Please do not write your name on this form, a code has been used to help ensure confidentiality. Your privacy will be protected to the maximum extent allowable by law.

You indicate your voluntary agreement to participate by completing and returning this questionnaire.

Teacher Experience

1. Counting this year as a full year, how many years of experience do you have teaching physical education?

   _____Years

2. Counting this year as a full year, how many years have you been teaching physical education at your current school(s), district(s), county?

   _____Years _____Years _____Years
   School District County

3. Counting this year as a full year, how long (in years) have you been teaching at your current grade level(s)?

Current Grade Level	Years Experience

4. a. From what funding source are you paid in your current position as a physical education teacher?

   b. What is your level of employment? _____ (%Full-Time Equivalent)

5. Please list degree(s) you have and the major associated with the degree(s).

6. Please list education credential(s), certificate(s), and/or license(s) you hold.

7. Please circle the number in the box that best indicates your level of agreement with the following statements.

Statement	Strongly Agree	Tend to Agree	Hard to Decide	Tend to Disagree	Strongly Disagree
I am familiar with the California Physical Education Framework	5	4	3	2	1
I am familiar with the California Physical Education Challenge Standards	5	4	3	2	1
I am familiar with the new California Physical Education Content Standards	5	4	3	2	1

Physical Education Class

8. Please indicate facilities your school(s) has available for physical education. (If you teach at multiple schools use one table for each school. There are additional tables attached.)

School _____

Facilities	Yes	No
Outdoor playground equipment		
Track for Walking, jogging, running		
Soccer or Football Field		
Softball/Baseball Field		
General Use field		
Parking lot or black top areas		
Gymnasium		
Auditorium		
Multi-Purpose Room		
Cafeteria		
Trailers or Mobile Buildings		
Regular Classrooms		

9. Please complete one row of information for each unique physical education class you teach. (If you teach at multiple schools use one table for each school. There are additional tables attached.)

School _____

Grade level	Class size	Number of days per week you teach this class	Number of minutes per session you teach this class	If you are not the FT PE teacher for this class, are students offered PE on the days you are not the PE teacher? (Yes or No)	If yes, who teaches the students PE on those days?

10. Please complete one row of information for each unique physical education class you teach. (If you teach at multiple schools use one table for each school. There are additional tables attached.)

School _____

Grade level	Do you assess students PE knowledge? (Yes or No)	Do you assess students' skill performance? (Yes or No)	Do you assess students' psycho-social development? (Yes or No)	What forms of assessment do you use?	How often do you assess your students?	Is assessment required by your school or district?

11. Do you participate in the process of allocating funds and purchasing material for your physical education class(es)?

12. Please indicate if your school and/or district has provided you with the following resources for teaching physical education. (If you teach at multiple schools use one table for each school. There are additional tables attached.)

School _____

	Provided by School			Provided by District		
Resources	**Yes**	**No**	**Unknown**	**Yes**	**No**	**Unknown**
Standards or Guidelines for physical education						
A physical education curriculum						
The scope and sequence of physical education instruction						
Lesson plans or learning activities for physical education						
Plans for how to assess or evaluate students in physical education						

13. If your school(s) or district(s) has...
    a. physical education standards or guidelines, when were the standards or guidelines developed?

    b. a physical education curriculum, when was that curriculum developed?

		Yes	**No**	**Don't Know**	**Not Applicable**
13c.	Are all teachers of physical education required to use the school or district curriculum?				
13d.	Are all teachers of physical education required to use the school or district standards or guidelines?				
13e.	Are the standards or guidelines based on the California Physical Education Framework?				
13f.	Are the standards or guidelines based on the California Physical Education Challenge Standards?				

14. What resources do you use when planning your physical education curriculum, units, and lesson plans? (Including textbooks, lesson plan packages, internet sites, CD-ROMs, school resources...)

Support and Professional Development

15. Approximately how many minutes per day are you provided for planning?

16. a. During the past 12 months, have you had opportunities to interact with fellow teachers (physical education or classroom teachers) on issues related to physical education?

_____Yes _____No

b. If yes, do those interactions occur because of school or district support or something else? Please explain.

17. a. During the past 12 months, have you had opportunities to interact with mentor teachers, district or school personnel, or peer coaches on issues related to physical education?

_____Yes _____No

b. If yes, do those interactions occur because of school or district support or something else? Please explain.

18. a. Are you a member of any professional organizations related to physical education?

_____Yes _____No

b. If so, please state the name of each organization(s) and for approximately how long you have been a member?

c. Do you attend conferences associated with these organizations? What and when was the last conference you attended?

19. a. Do you subscribe to or purchase any professional organization publications or state sponsored publications relevant to physical education?

_____Yes _____No

b. If so, please list the name(s) of the publication(s).

20. a. Have you received any awards or other forms of professional recognition?

_____Yes _____No

b. If so, please explain.

21. During the past 12 months, have you had opportunities to interact with other professionals on issues related to physical education?

Professionals	Yes	No
Local college or university faculty		
Health education staff from the school or district		
Health services staff from the school or district		
Local health department staff		
Health organization (i.e., American Heart Association or the American Cancer Society) staff		
Local parks or recreation department staff		
Local youth organization staff, such as the Y, Boys/Girls Clubs, or the Boy/Girl Scouts		
Local health or fitness club staff		
Food service staff from the school or district		

22. Please indicate if you have attended, during the past 3 years, and if your school or district provided support for professional development events that have covered the topic areas listed below. Also, please indicate if the event was a workshop, institute, seminar, conference, continuing education, college course, or other type of professional development. Finally, indicate at what level the event was sponsored, such as: school, district, county, state, national, or professional organization level.

Topic Area	Attended Professional Development (Yes or No)	Received School or District Support (Yes or No)	Type of Professional Development	Level of Professional Development
Methods to enhance instructional strategies in physical education				
Methods to integrate physical education with other subject areas				
Methods to increase the amount of class time students are physically active				
Teaching different activities or sports				
Teaching movement skills and concepts				
Using technology such as computers, video cameras, or heart rate monitors for physical education				

22 (Continued)

Topic Area	Attended Professional Development (Yes or No)	Received School or District Support (Yes or No)	Type of Professional Development	Level of Professional Development
Administering or using fitness tests				
Assessing or evaluation of student performance in physical education				
Encouraging family involvement in physical activity				
Finding and applying for grant money for physical education				
Learning about the California Physical Education Challenge Standards				
Learning about the California Physical Education Framework				

23. a. During the past 3 years, have you participated in any other professional development related to physical education? This might include workshops, institutes, seminars, conferences, continuing education, college courses, or other type of professional development.

_____Yes _____No

b. If so, please indicate the type and focus of the event, who sponsored it, and who paid for your attending the event.

If you would like to provide any additional comments, please use this space.

Thank you for taking the time to complete this questionnaire. If you would like more information about this study or would like clarification of any questions in this questionnaire, please contact Dorina Espinoza at (Cell) 707-498-5006, (Home) 707-825-8567, or (Email) espinoz2@msu.edu.

Please return this questionnaire in the prepaid envelope provided or I will pick it up prior to my visit to your school.

APPENDIX D

Elementary School Physical Education Program Study
Physical Education Teacher Interview

Participant Code: _____

The following instructions will be read aloud by me, the investigator, to the participant prior to the interview.

This interview is part of my dissertation research on elementary school physical education programs. Although I will be taking notes during the interview, it is being audio-recorded for purposes of capturing all your comments. Your participation in this interview is voluntary and you may choose to not answer some questions and/or discontinue the interview at any time. The audiotape and my notes are strictly confidential and will be listened to and viewed, respectively, only by me, the investigator. The data (audio-tapes and notes) are being gathered for purposes of dissertation research and future publications (e.g., conference presentations and article publications). Your privacy will be protected to the maximum extent allowable by law.

You indicate your voluntary agreement to participate by beginning this interview.

I will read questions aloud, take notes on your responses to the questions, and I may ask follow-up questions.

Neutral Probes:

Repeat Question	*Could you tell me more about your thinking on that?*
Anything else?	*Would you tell me what you have in mind?*
Any other reason?	*What do you mean?*
What do you think?	*Why do you feel that way?*

Let me make sure I understand you, (repeat answer). What did you mean?

Teaching

1) What is it like for you to teach physical education?
   Probe:
   - How do you feel about yourself as a teacher of physical education?
   - How do you feel about your knowledge of physical education?
   - How do you feel about your ability to perform the movement skills?
   - What needs do you have as a teacher of physical education?
   - What is your status as a physical education teacher?

2) What do you think influenced having a physical education teacher at your school(s)?
   Probe:
   - Refer to questionnaire response for Q #4.
   - How did you come to teach physical education at your school(s)

Role of Physical Education in Elementary Schools
("Physical education program" here means the physical education class; structure of the class, such as curriculum and lesson plans; teacher; and facilities and equipment.

3) What do you think is the value or purpose of elementary school physical education program?
4) What are the most serious problems facing elementary students in your school?

   a) How do you see your physical education program in relation to the problems you cited?

5) What are the most serious health and fitness needs of elementary students in your school?

   a) What responsibility do elementary schools have in meeting the needs you cited?

Your Physical Education Program

6) How do you think the following people view the physical education program:
   - Your fellow teachers?
   - Your school principal?
   - The school board?

   a) What do you think are some factors that explain those perspectives?

   b) How do those views influence/impact your physical education program? (support/obstruct)

7) What do you think are your students' views of the school's physical education program? How about the families?

   a) How do those views influence the physical education program?

Structural Components of Your Physical Education Program

8) Are the facilities and equipment at your school(s) adequate and sufficient for teaching your physical education class?
   Probe:
   - Refer to questionnaire response for Q #8 and Q #11.

   a) Tell me what changes could be made such that the facilities and equipment are adequate and sufficient.

9) Tell me about how you decide what types of physical education assessment to use with your students.
   Probe:
   - Refer to questionnaire response for Q #10.

10) Given the amount of time you dedicate to physical education, would you prefer the time to increase, decrease, or stay the same?
   Probe:
   - Refer to questionnaire response for Q #9.

11) Tell me about how you decide what resources to use for planning your physical education program.
   Probe:
   - Refer to questionnaire response for Q #12-14.

   a) What factors have influenced your decision to use those resources?

12) How does the school or district physical education curriculum, standards, and/or guidelines influence your physical education program?
   Probe:
   - Refer to questionnaire response for Q #12 and #13.

   a) In what capacity, if any, have you participated in the development of the school or district curriculum, standards, and/or guidelines?

Physical Education Policy

13) What is your opinion of the California Education Code 51223 stating that "...instruction in physical education in an elementary school...shall be for a total period to time of not less than 200 minutes each 10 schooldays, exclusive of recesses and the lunch period."?
   Probe:
   - How has the Ed Code influenced your physical education program?

14) What is your opinion of the California Physical Education Framework and Challenge Standards?
Probe:
- Refer to questionnaire response for Q #7 and Q#21.

15) In what capacity have the California Physical Education Challenge Standards and Framework aided in:

a) Helping you enhance your physical education content knowledge?

b) Guiding your teaching methods/practices?
Probe:
- Refer to questionnaire response for Q#21.

c) Helping you develop your physical education curriculum and/or lesson plans?
Probe:
- Refer to questionnaire response for Q#21.

d) Developing your physical education student assessment strategies?
Probe:
- Refer to questionnaire response for Q#10 and Q#21.

e) Guiding your students to lead active, healthy lifestyles?

Support and Professional Development

16) Tell me how your involvement in professional development has influenced your physical education program?
Probe:
- Refer to questionnaire response for Q#21 to Q#24.

17) How have interactions with your colleagues influenced your physical education program?
Probe:
- Refer to questionnaire response for Q#18.
- What are some of the topics of discussion and outcomes of such interactions?

18) In what ways do you stay current in the field of teaching physical education?

19) What does your school(s) or district do to facilitate creating a physical education program that is the best it can be?

Probe:

- Refer to questionnaire response to Q#17 regarding planning time.
- Refer to questionnaire response to Q#18 regarding collegial interactions.
- Refer to questionnaire response to Q#19 - 20 regarding interactions with others.
- Refer to questionnaire response to Q#21-24 regarding professional development.

20) What could your school(s) or district do differently to facilitate creating a physical education program that is the best it can be?

Last Question

We have talked a great deal about elementary school physical education

21) What do you think is the future of physical education in California elementary schools?

The purpose of our discussion was to talk about your physical education program. Before we end, have we missed anything that you would like to talk about?

Thank you for taking the time to complete this interview.

APPENDIX E

Elementary School Physical Education Program Study
Classroom Teacher Phone Interview

Code: _____

The following instructions will be read aloud by me, the investigator, to the participant prior to the interview.

This interview is part of my dissertation research on elementary school physical education programs. Your participation in this interview is voluntary and you may choose to not answer some questions and/or discontinue the interview at any time. My notes taken during the interview are strictly confidential and will be viewed only by me, the investigator. The data (notes) are being gathered for purposes of dissertation research and future publications (e.g., conference presentations and article publications). Your privacy will be protected to the maximum extent allowable by law. You indicate your voluntary agreement to participate by beginning this interview.

I will read questions aloud, take notes on your responses, and ask follow-up questions when necessary.

1. Questions about the structure and general content of the physical education program.

    a. Do you provide physical education to your students?

        i. If yes, how often and for how long?

        ii. If no, what are the barriers you face in providing physical education?

    b. What types of activities do you provide your students?

2. Questions about factors that influence the classroom teachers' physical education program.

    a. What has influenced your decision to provide or omit physical education?

    b. Why do you not provide more time for physical education?

3. Questions about California physical education policies.

    a. Are you familiar with the California:

        i. Education Code that mandates 200 minutes of physical education every 10 days?

        ii. Physical Education Standards?

        iii. Physical Education Framework?

    b. In what capacity do the education code and physical education policies influence your teaching of physical education?

Before we end, have we missed anything that you would like to talk about?

Thank you for taking the time to complete this interview.

APPENDIX F

Physical Education Teacher Informed Consent

Standards and Standard Practice of Elementary Physical Education Teachers in Northern California

This research is part of my doctoral program at Michigan State University. The purpose of the research is to investigate factors that influence elementary school teachers' decisions about and practice of physical education and to what extent those factors are related to physical education policy.

The study population will be elementary school teachers and physical education teachers at the kindergarten through grade 5 level in one county in northern California. I will use the following methods to gather information about teachers' decisions and practice of physical education: a questionnaire, school observations, an audio-taped interview, and gathering of teacher documents, such as lesson plans and curricula.

You are being asked to participate in this study because you are an elementary school teacher or a physical education teacher in the county where I am conducting my research and you have a minimum of two years teaching experience at the elementary school level. The activities and time commitment requested of you to participate in this study are as follows:

1. Participate in an initial contact meeting with me at your school site. I will use this time to help you understand the study and answer your questions. Should you decide to voluntarily participate in the study, I will ask you to complete this informed consent form, distribute the questionnaire to you, and schedule the first observation with you. Estimated time for this meeting is 30 minutes.

2. Complete a questionnaire. Question categories include your teaching experience and professional training, information about your physical education class, and professional development experiences. The questionnaire will be distributed during the initial contact meeting. Estimated time to complete the questionnaire is 30 minutes.

3. Passive participation in two observations I will make of your teaching physical education at your school site. During these observations I will take hand-written notes for the purpose of understanding the context of your practice (e.g., facilities, student body make-up, student activities). The first observation will occur approximately one week after an initial in-

person contact. The second observation will occur after an interview. Estimated time for each observation is up to 2 hours.

4. Take part in at least one audio-taped interview. The interview questions will be about your teaching of physical education, physical education class, professional development experiences, and views and opinions of elementary school physical education. If after the observations and one interview, I have follow-up questions of clarification and/or questions about your practice not yet discussed, I will request a subsequent interview. Estimated time for the first interview is 1 to 2 hours, and for a subsequent interview is less than 1 hour.

5. Sharing of written physical education documents, such as school policy, lesson plans, textbook, and curricula. These documents will help me further understand your practice and the context of your practice. Estimated time to gather and share such material is 30 minutes.

Your participation in this study is voluntary. You may choose not to participate at all, refuse to participate in some of the activities, refuse to answer some of the question in the questionnaire and/or interview, or discontinue your participation in this study at any time.

The questionnaire, my notes and research journal, and the interview audio-tapes are strictly confidential and will be stored by me in a locked cabinet. Your name will not be written on the questionnaire; instead a numeric code will be used on the questionnaire. The audio-taped interviews will be not allow for anonymity to be preserved, however all professional forms of communication about this research will not link participants with specific responses or findings, such that individual participants will not be identified or associated with particular pieces of data. Your privacy will be protected to the maximum extent allowable by law.

The data will only be viewed, listened to, and used by me, the primary investigator, for purposes of dissertation research and potential publications (e.g., conference presentation, article publications). You may request your results from this study at any time. The raw data: a) completed questionnaire, b) audio-tapes of the interviews, c) observation notes, and d) my research notes will be kept by me, the investigator, for a duration of ten years. Upon termination of the ten year period, all raw data files will be destroyed in such a manner that the any form of identification of the participant will not be possible.

If you have any questions about this study, please contact me, the primary investigator, by phone: (707) 825-8567, e-mail: espinoz2@msu.edu, or regular mail: P.O. Box 1125, Arcata, CA 95518-1125. You may also contact Dr. Crystal Branta, my doctoral advisor, by phone: (517) 353-9467, e-mail: cbranta@msu.edu, or regular mail: Department of Kinesiology, 140 IM SPORTS CIR, East Lansing, MI 48824-1049. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish – Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Your signature below indicates your voluntary agreement to participate in this study.

_____ _____

(Your Signature) (Date)

_____ _____

(Investigator Signature) (Date)

Your signature below indicates your voluntary agreement to be audio-taped during the interview.

_____ _____

(Your Signature) (Date)

_____ _____

(Investigator Signature) (Date)

APPENDIX G

Classroom Teacher Informed Consent

The following will be read to the participant over the phone prior to the interview.

This research is part of my doctoral program at Michigan State University. The purpose of the research is to investigate factors that influence elementary school teachers' decisions about and practice of physical education and to what extent those factors are related to physical education policy.

You are being asked to participate in this study because you are an elementary school teacher in the county where I am conducting my research and you have a minimum of two years teaching experience at the elementary school level.

This interview is completely anonymous. I will ask you two to three questions, depending on your responses, and the interview will take less than five minutes to complete. Your participation in this interview is voluntary and you may choose to not answer some questions and/or discontinue the interview at any time. The notes I take during this interview are strictly confidential and will be stored by me in a locked cabinet.

The data are being gathered for purposes of dissertation research and potential publications (e.g., conference presentation, article publications). You may request your results from this study at any time. The interview notes will be kept by me, the investigator, for a duration of ten years and thereafter will be destroyed in such a manner that the any form of identification of the participant will not be possible. Your privacy will be protected to the maximum extent allowable by law.

If you have any questions about this study, please contact me, the primary investigator, by phone: (707) 825-8567, e-mail: espinoz2@msu.edu, or regular mail: P.O. Box 1125, Arcata, CA 95518-1125. You may also contact Dr. Crystal Branta, my doctoral advisor, by phone: (517) 353-9467, e-mail: cbranta@msu.edu, or regular mail: Department of Kinesiology, 140 IM SPORTS CIR, East Lansing, MI 48824-1049. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish – Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

You indicate your voluntary agreement to participate by beginning this interview.

APPENDIX H

Participant School and District Demographics

Physcial Education Teacher School and District Demographics

		PET Schools (S)	Number of Students	FRM*	EL*	White	Hispanic	2004 API* Score and Ranking (Statewide/ Similar School)[a]
Cert-PETs	Maria	S1	426	69%	62%	25%	70%	657 (3/3)
		S2	479	26%	20%	70%	24%	798 (8/4)
		S3	405	58%	52%	42%	52%	733 (6/5)
		District	5000	36%	29%	56%	38%	687
	Nancy	S1	399	15%	8%	73%	12%	794 (8/2)
		S2	440	12%	16%	65%	16%	829 (9/3)
		S3	243	33%	24%	65%	27%	718 (5/1)
		District	7260	22%	15%	64%	23%	718
	Ruth	S1	338	45%	28%	52%	34%	695 (4/1)
		S2	430	57%	41%	39%	50%	696 (4/3)
		S3	376	44%	38%	43%	46%	716 (5/3)
		District	7260	22%	15%	64%	23%	718
	David	S1	368	71%	44%	38%	52%	710 (5/5)
		District	4634	56%	42%	36%	48%	705
Para-PETs	John	S1	296	38%	6%	64%	21%	826 (9/9)
		S2	310	40%	12%	62%	24%	823 (9/7)
		District	2788	25%	6%	70%	17%	849
	Patti	S1	412	29%	9%	61%	26%	854 (9/8)
		District	2788	25%	6%	70%	17%	849
	Karen	S1	437	15%	6%	75%	13%	856 (9/5)
		District	956	16%	7%	71%	13%	848
	Tim	S1	355	17%	15%	76%	18%	819 (8/2)
		District	2097	29%	26%	65%	29%	729

Note. Data were derived from DataQuest (2004-2005; http://data1.cde.ca.gov/dataquest/) and Ed-Data (2004-2005; http://www.ed-data.k12.ca.us/welcome.asp).

* API = Academic Performance Index; EL = English Learner; FRM = Free/Reduced-Price Meal Program

[a]Out of a possible 10.

Classroom Teacher School Demographics

School	CT	Number of Students	FRM*	EL*	% White	% Hispanic	2004 API* Score and Ranking (Statewide/ Similar School) [c]
A	1A	482	31%	22%	64%	27%	
B	2B & 3B	447	33%	20%	65%	26%	777 (7/3)
C	4C - 7C	488	21%	8%	80%	13%	827 (9/6)
D	8D – 13D	440	24%	13%	67%	23%	804 (8/6)
E	14E	359	24%	12%	74%	18%	762 (7/1)
F	15F	499	66%	52%	29%	69%	662 (3/2)
Average			33%	21%	64%	29%	
County[a]		382[b]	40%	29%	54%	35%	

Note. Data were derived from DataQuest (2004-2005; http://data1.cde.ca.gov/dataquest/) and Ed-Data (2004-2005; http://www.ed-data.k12.ca.us/welcome.asp).

* API = Academic Performance Index; EL = English Learner; FRM = Free/Reduced-Price Meal Program

[a]County data includes only non-charter elementary schools with enrollment greater than 100 students.

[b]Value represents county average.

[c]Out of a possible 10.

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