CASE STUDY OF HISPANIC STUDENTS’ PHYSICAL EDUCATION EXPERIENCE

BY

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DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Kinesiology in the Graduate College of the University of Illinois at Urbana-Champaign, 2014

Urbana, Illinois

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Abstract

Hispanic children and youth have higher rates of obesity and are less physically active than their Caucasian peers. Although there is an evident need to promote physically active lifestyle among this population and school physical education has been identified as one of the venues to do so, little is known about Hispanic students’ experiences in this context. Utilizing Social Cognitive Theory (Bandura, 1986) and Critical Race Theory in Education (Ladson-Billings & Tate, 1995) as a grounding framework, this investigation sought to explore the experiences of Hispanic students regarding the cultural competence of their PE teacher and the school environment. After obtaining IRB approval, adult participant consents and student participants and their parents consent, direct observations of fourth and fifth grade physical education classes were conducted in one Midwestern intermediate level school, documenting teacher and student behaviors and interactions. Student physical activity data were collected using accelerometry. Hispanic children participated in a focus group and an opinionnaire and filled out an acculturation survey. The PE teacher and principal were interviewed individually and filled out surveys. Interview transcripts, observation notes and surveys were analyzed inductively. Triangulation, prolonged engagement, persistent observation, peer debriefing, and negative case searches were employed. Quantitative physical activity data were analyzed using descriptive statistics. The results indicate that experiences of Hispanic students in PE are unique and need to be considered in provision of quality programming. Further it was found that PE teachers traditionally considered highly effective may not be culturally competent in the delivery of quality instruction to
ethnically diverse learners in today’s schools. Further research that explores effective teaching in physical education of Hispanic children especially girls is warranted.
Acknowledgements

First, I would like to thank the One who gives me every breath, who is always with me and who constantly reminds me that my life has a purpose beyond what I can see now. It has been a long race and I felt weak from the very beginning, but here I am almost at the finish line. Thank you God for every day you give me strength to go on.

Second, I would like to thank my committee members: Dr. Darla Castelli, my first advisor, for encouraging me to find and pursue my interest within the field of physical education and staying committed to see me through even after she moved to Texas; Dr. Amelia Woods, my second advisor and committee chair, not only for believing that I can finish this, but also for providing strategies how to approach this overwhelming task and how to “eat the elephant one bite at a time”; Dr. Kim Graber and Dr. Monika Stodolska for providing their scholarly insight and considering my time constraints in scheduling the final exam. I would like to also thank other scholars within the field of physical education for inspiring me with their work focusing on issues of race and diversity.

Third, I would like to acknowledge the study participants. Both the school principal and the PE teacher were open to host this research study and to share many details about their work including their accomplishments and struggles. It was an honor to work with the PE teacher, because he was always willing to accommodate my research tasks and made me feel comfortable. His enthusiasm for his work made the numerous trips to the school enjoyable. The student participants were kind and it was my pleasure to interact with them.

Next, I would like to thank all the friends that each played a unique role in helping me achieve this accomplishment. To name just a few of them, I would like to
acknowledge Harry and Suzanne Tressel who claimed me as their daughter here in US and provided much needed support; Kerry Pimblott who provided advice how to function in the US university environment and helped me realize that this could be done despite my physical limitations; Lyn and Keith Cler who provided care for my daughter so that I could feel free to work while she was in good hands; Pauline Mbuvi who always had open heart and home for our family and Asha-Dee Celestine with whom I could chat often about the progress I made and get a clear rational view of where I was at.

Finally, I would have never been able to get this far without the support of my family. My sister Petra has always believed in me and my intellectual abilities I did not even realize I had. My oldest brother Martin instigated all this when he asked me to contact The Department of Kinesiology and arrange a visit for him in Urbana. My brothers David and Jaroslav have always been an encouragement to me. My mother Marta Zvonářová made multiple trips overseas to care for my daughters while I was working on my degree. My father Jaroslav Zvonář made plans to come for my graduation and similarly as in other times in my life provided the final motivation to get something done.

However, the person who played the most important role in supporting me was my husband Osee. He not only walked beside me day by day, but when the journey got tough he was the one who carried me. I would like to also thank my daughters. Esther was able to bear with me for many years while I was busy with school and she still calls me the best mom in the world. Eliana, although she is just a baby, played an important role too, since expecting her arrival served as a motivator to get at least within the reach of the finish line.
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Chapter One: Introduction

Diversity has been recognized as one of the greatest assets of the American society contributing to its economy and culture. Currently, the United States’ (U.S.) population is becoming increasingly diverse with more than one third claiming minority racial or ethnic heritage (Minckler, 2008). The two fastest growing minorities are Hispanics and Asians. Among foreign-born individuals, who account for almost 13% of the U. S. population in 2006, half are from Latin America, and more than one fourth is from Asia.

According to the United States Census Bureau (U.S. Census Bureau, 2013), the Hispanic population totals 53 million and represents 17% of the total U.S. population of 314 million, which slightly surpasses the African American population of 45 million (15%). It is estimated that by 2060 the percentage of Hispanics in the U.S. will increase to 31%, as they have accounted for one-half of the nation’s growth in the last decade. Specifically, the growth rate among Hispanics was four times that of the total population. Additionally, the proportion of Hispanic children in the U.S. schools has increased from 16% in 1999 to 20% in 2007 to 23% in 2012, with two thirds living with at least one foreign-born parent.

Hispanics or Latinos are persons of Mexican (65%), Puerto Rican (9%), Salvadoran (4%), Cuban (4%), Dominican (3%), Central American , South American or other Spanish culture or origin, regardless of race. California has the largest population of Hispanics (14.5 million), followed by Texas, Florida, New York and Illinois.

According to US Census Bureau (2013) Hispanic adults usually have fewer years of education (63% with a high school diploma and only 13% securing an advanced
degree) and earn less on average ($25,000 annual salary) than the general population (85% with a high school diploma, 26% with an advanced degree, and $35,000 average annual salary). An individual’s health and quality of life are related to household income, level of education, ethnicity, and level of acculturation, thus producing disparity in both prevention and treatment. According to a health survey sampling Latinos, both level of education and size of the community influence health status (Berdahl, Kirby, & Torres Stone, 2007). Specifically, those Latinos with a college degree were more likely to self-report excellent health, while those without a high school diploma were likely to report a lower health status. Additionally, Latinos who lived in metro/urban areas had greater access to medical services and were more likely to regularly see a physician. Given the rapid growth of the Latino population in nonmetropolitan areas, these findings suggest that Latinos face large barriers to receiving the health care that they need.

Further compounding the health disparities are differences in physical activity (PA) engagement and health status between Hispanics and mainstream Americans. Hispanics lead more sedentary lives than Whites. There is also higher prevalence of obesity and diabetes among Hispanics compared with non-Hispanic Whites (Morales, Lara, Kington, Valdez, & Escarce, 2002). Many common diseases including obesity, cardiovascular disease, high blood pressure, high cholesterol, type 2 diabetes, asthma, arthritis, osteoporosis, certain cancers such as colon cancer, or anxiety and depression may be preventable with regular engagement in PA (Strong et al., 2005).

Newly arrived immigrants are generally healthier than the U.S. born population. This distinction tends to diminish as they adapt to the new sociocultural environment and become part of the established American ethnics (Williams & Selina, 2008). For instance,
obesity prevalence has a tendency to increase with the amount of time spent in the U.S. (Popkin & Udry, 1998; Goel, McCarthy, Phillips, & Wee, 2004; Akresh, 2008; Kaplan, Huguet, Newsom, & McFarland, 2004), thus presenting a health paradox that draws attention to the processes of adaptation among immigrant families.

The prevalence of overweight and obesity rates in children of all races and ethnicities have increased dramatically over the past 20 years (Pate, Davis, Robinson, Stone, McKenzie & Young, 2006), with approximately 16% of U.S. children identified as obese and 32% identified as overweight; however, these rates significantly differed by racial/ethnic group evidencing health disparities. Among Hispanic children, 38% were overweight compared to 31% of White children, with 6 to 11-year-old Hispanic children exhibiting the highest prevalence of 43% (Ogden, Carroll, & Flegal, 2008).

Nationally, less than one third of children engage in any vigorous PA daily (Trust for America’s Health & Robert Wood Johnson Foundation, 2009). Hispanic children have lower levels of PA participation and spend more time in sedentary behaviors compared to Whites (Springer et al., 2009; Johnston, Delva, & O’Malley, 2007; Gordon-Larsen, McMurray, & Popkin, 2000). Both low level of PA participation and high amount of time spent in sedentary pursuits are contributory to increased risk for diseases such as type 2 diabetes, hypertension, heart disease, or obesity (Strong et al., 2005). Since two thirds of Hispanic schoolchildren come from immigrant families, it is important to understand what contributes to the health decline in the second generation. One area affecting the health outcomes is the rate of PA engagement.

Approximately one third of all children entering kindergarten are overweight or obese (Ogden et al., 2008), therefore schools have been called to assume a leadership role
in promoting behaviors that will prevent the development of overweight and obesity. Nearly every major health organization has identified physical education (PE) programs and their teachers as valuable partners in the comprehensive effort to increase children’s PA (Pate et al., 2006; National Association for Sport and Physical Education & American Heart Association, 2006). However, many schools have been eliminating PE to focus on core academic subjects and preparation for mandated state achievement testing. According to CDC’s 2006 School Health Policies and Programs Study (SHPPS), less than 4% of elementary schools provide daily PE or its equivalent of 150 minutes per week for the entire school year for students in all grades in the school. On the secondary level, a time when PA engagement tends to drop off, only 8% of middle schools, and 2% of high schools report having daily PE or its equivalent of 225 minutes per week (U.S. Centers for Disease Control, 2006).

Given the known health issues associated with Hispanics, it is timely to review literature related to PA behaviors of Hispanic children and describe their experiences during PE. Prevention during early developmental stages can prolong life, help children perform better in schools, and minimize overall health care costs. Understanding how effective teachers attempt to meet the needs of their Hispanic students is both timely and important.

**Purpose**

Guided by the underlying assumptions of the Critical Race and Social Cognitive theories, the purpose of this case study is to describe the physical education experiences of Hispanic students in relation to the teaching cultural competence of their physical education teacher and the school environment at one rural elementary school.
Additionally, it is the goal of the researcher to identify how students can influence their own PA engagement during PE and what factors are associated with that engagement. Through prolonged and persistent observation and discussion with the participants, the researcher will identify culturally relevant practices that could be recommended to other physical education teachers. Given the health disparities that exist among ethnicities, this study may help to discover characteristics that enhance the PE experience and in-school PA engagement as a means of disease prevention.

**Rationale**

The Hispanic population in the U.S. is rising and Hispanic children comprise more than one fifth of children in public schools, nationally, and even as high as 99% in some regions of the country. It has been reported that Hispanic children are less physically active and have higher incidence of obesity than their white counterparts (Gordon-Larsen et al., 2000; Johnston et al., 2007; Springer et al., 2009). This leads to higher risk for other diseases such as diabetes or hypertension among Hispanics. Recently, PE programs have been identified as one of the main avenues for promoting fitness and physically active lifestyle among children (National Association for Sport and Physical Education & American Heart Association, 2006; Pate et al., 2006).

Since little is known about the experiences of Hispanic students within PE, advanced study of the dynamics of Hispanic students’ engagement in PE considering both their PE teacher’s and their own perspectives is justified. This study can contribute to a larger body of knowledge about culturally appropriate and effective methods for teaching PE to Hispanic students, with specific regard to PA engagement within a structured experience. This may help provide relevant and practical information for
professional development of PE teachers about ways how to positively impact Hispanic students and differentiate instruction to meet their specific needs, given the health disparities that they face in this rural community. Application of these findings could lead to enriched, positive PE experiences and enhanced in-school PA engagement, better health, improved attitudes towards learning, and higher achievement and increased overall school success among Hispanic students, which constitute a vulnerable population with higher school attrition rates and higher risk for certain diseases such as obesity, hypertension or diabetes.

In summary, Hispanic children constitute one fifth of the public school student body, yet they are less physically active and more at risk for obesity related disease and low achievement. Therefore, it is timely and valuable to examine the PE experiences of Hispanic children and the role of the PE teacher and student in physical activity engagement.

**Research Questions**

1. What are the experiences of Hispanic students during physical education?
   a. What is the level of physical activity engagement among Hispanic children during physical education?
   b. How do Hispanic students perceive and affect their own physical activity engagement and experiences during physical education?
   c. How are Hispanic students’ physical education experiences influenced by factors such as the school environment?
2. How does the teacher contribute to the Hispanic students’ physical education experiences?
   a. How does the PE teacher’s cultural competency influence the learning environment in PE?
   b. How does the physical education teacher attempt to increase the Hispanic students’ physical activity engagement?
   c. How does the physical education teacher provide Hispanic students with culturally relevant learning experiences during physical education?
Chapter Two: Review of Literature

The Critical Race and Social Cognitive theories were used to guide the design of this research study and therefore their strengths and limitations will be described in this section first. Supplemental and relevant literature regarding physical activity (PA) and physical education (PE) among Hispanics will be overviewed second.

Conceptual Framework

During the twentieth century, the expansion of social science research gave rise to different theories that try to explain how diverse groups of people live together and relate to each other within the contemporary society. Of particular importance is the Critical Race Theory (CRT), which focuses on the experiences of people of color and challenges the dominant discourses in various fields including education. Critical Race Theory (CRT) offers a unique framework that provides a strong rational for drawing on the experiences of Hispanic students in PE.

Additionally, the Social Cognitive Theory (SCT) will be referenced as a way to understand the reciprocal factors of personal characteristics, PA behaviors and the structured environment, as these have specific relevance to the proposed study. Social Cognitive Theory (SCT) represents a commonly used framework, which emphasizes the fact that learning occurs in a social context and it explains human functioning as a product of a continuous interaction between cognitive, behavioral, and contextual factors.

Critical Race Theory. CRT is a dynamic analytical framework that facilitates theorizing, examining, and challenging race and racism (Yosso, 2006a). It is based on the proposition that race continues to be a significant factor in determining inequity in the U.S. and that various forms, shapes, and permutations of racism are a reality in
contemporary American society (Ladson-Billings & Tate, 1995). Much of the CRT literature in education focuses on “voice scholarship,” since the stories and experiences of students of color provide a tool for challenging the majoritarian stories of racial privilege (Dixson & Rousseau, 2006).

The origin of CRT dates back to mid-1970s and can be described as an outgrowth of an earlier legal movement called Critical Legal Studies (CLS), which critiqued mainstream legal ideology but failed to include issues of race and racism in their conceptions. Derrick Bell and Alan Freeman were among the first legal scholars who asserted that without analyzing race and racism, CLS could not offer adequate strategies for social transformation (Delgado, 1995).

CRT initially focused its critique on the slow pace of civil rights legislation and the unfulfilled promises of transforming Black and White communities divided along the racial line (Yosso, 2006b). Many scholars and activists pointed out the limitations of achieving racial justice using the dominant conceptions of race, racism, and social equality, and therefore began to move beyond the paradigmatic boundaries within their fields to provide a new approach to analyzing the African American experience.

Committed to racial justice, several professors of law began to engage in political action in an effort to resist institutional structures that facilitated racism (Tate, 1997).

Legal scholar Derrick Bell has been one of the most influential figures in forming CRT by providing a unique contribution to discussions about race in American society. Specifically, Bell pointed out the communicative power of narrative and its potential to serve as a transformative device for the disempowered (Bell, 1985, 1987), and promotes activism to achieve racial justice (Bell, 1994). Further, his research represented an effort
to dismantle traditional civil rights language (e.g., colorblindness or equal opportunity) and employ an alternative method of legal analysis of race in U.S. society (Bell, 1992).

The constitutional contradiction, the interest-convergence principle, and the price of racial remedies represent the three major arguments in Bell’s analysis of racial patterns in American law. First, the constitutional contradiction argument is based on analysis of property in American society and the role of government in protecting this property suggesting that American society is based on property rights rather than civil rights. Second, the interest-convergence principle emphasizes the history of African Americans struggle for advancement of U.S. race relations and points out that significant progress is achieved only when the goals of Blacks are consistent with the needs of Whites. The final argument, price of racial remedies, states that many Whites will not support civil rights policies that appear to threaten their superior social status (Tate, 1997).

Bell’s insights have important relevance for educational equity matters, as it is closely linked to analysis of educational policy issues such as school desegregation, admissions and financial aid, school choice, school finance, curriculum and facilities. Bell’s writing represents a growing genre of narrative research, characterized by texts that combine lively narrative and rigorous analysis of legal constructs. Although narrative research and legal storytelling have their critics, they are recognized as powerful tools for illuminating issues of equity in education and important persuasive tools that can serve as catalysts for legal and social change (Winter, 1989). A great example of a narrative with a powerful story about education inequity is Jonathan Kozol’s (1991) book called *Savage Inequalities*. 
Richard Delgado is another scholar whose research represents the historical and conceptual origins of CRT. Delgado explains and clarifies the role of story, counter-story, and “naming one’s own reality,” and offers four reasons why stories and voice, chronicling the experiences of people of color, need to be incorporated in legal analysis and scholarship: “(a) reality is socially constructed, (b) stories are a powerful means for destroying and changing mind-sets, (c) stories have a community-building function, and (d) stories provide members of out-groups mental self-preservation” (Tate, 1997, p.219).

Critical race theorists view reality as historical, contextual and specific rather than transcendent, acontextual, and universal (Ladson-Billings, 1998). They believe it is constructed through conversations and living together. In these conversations, both the listener and the teller become richer as they share new angles of viewing the world. Therefore, diverse stories and counter stories represent a crucial element in the creation of a rich tapestry representing the reality of our communal lives. However, racial, ethnic or class-based isolation often prevents the sharing of diverse stories and this diminished conversation leads to suspicion and impoverished understanding of the world around.

Second reason for the voice theme in CRT highlights the power that stories by people of color can have in challenging the majoritarian stories that legitimize oppression. Most oppression does not seem like oppression to the oppressor. The dominant group in the society justifies its position of power by providing stories that legitimize this position. Stories by people of color can counter the dominant discourses and thus serve a destructive function by dismantling false believes. This exchange of stories can help overcome narrow-mindedness, ethnocentrism, and show a way out of unjustified exclusion.
Third, stories can help build consensus, common culture of shared understanding and ethics. Nevertheless, Delgado (1989) warns that counter stories may also be rejected, because they may reveal the listener’s hypocrisy and increase discomfort, particularly if a listener hears a very unfamiliar story for the first time. The listener reinterprets the new story by placing its content within his or her own belief system and thus often muting or reversing its meaning. However, when more counter stories are shared, it provides greater opportunity to expand the listener’s frame of understanding these stories and their real meaning.

Finally, the voice theme in CRT helps ensure the psychic preservation of people of color who may otherwise become demoralized as they internalize the majoritarian stories, which leads to self-condemnation. Storytelling by people of color thus can help heal the wounds caused by racial discrimination and allow the oppressed to stop inflicting mental violence on themselves, as they gain better understanding how they came to be oppressed in the first place.

Many other legal scholars were instrumental in the development of CRT in the 1980s, namely Charles Lawrence, Mari Matsuda and Kimberlé Crenshaw (Lawrence, 1987; Matsuda, 1989; Crenshaw, 1988); however, it was Crenshaw (1988) who identified the two visions of equality present in antidiscrimination law: (a) expansive and (b) restrictive. The expansive view stresses equality as an outcome, and it interprets the objective of antidiscrimination law as eradicating the effects of racial oppression. The restrictive view treats equality as a process, and according to this view, the objective of anti-discrimination law is to prevent future “wrongdoing” rather than correct present
forms of past injustice. The contrast and tensions between these two visions of equality can serve as an important framework for analyzing the nature of (in)equity in education.

CRT in legal studies laid the foundation by providing the main framework to examine issues of race and racism in education. In summary, the foundation of CRT in legal studies rests on the following six themes (Matsuda, Lawrence, Delgado, & Crenshaw, 1993, p.6):

1) CRT recognizes that racism is endemic to American life.
2) CRT expresses skepticism toward dominant legal claims of neutrality, objectivity, colorblindness, and meritocracy.
3) CRT challenges ahistoricism and insists on a contextual/historical analysis of the law.
4) CRT insists on recognition of the experiential knowledge of people of color in analyzing law and society.
5) CRT is interdisciplinary.
6) CRT works toward eliminating oppression as part of the broader goal of ending all forms of oppression.

Critical race theory in education. CRT was transported from legal studies into the study of education in the mid-1990s. In their paper first presented at the American Educational Research Association (AERA) conference in 1994, Ladson-Billings and Tate built on the main themes of CRT in legal studies and demonstrated its relevance for the study of race and racism in education (Ladson-Billings & Tate, 1995). They asserted that despite the salience of race in U.S. society it remains untheorized, particularly in education. The application of CRT to the study of school environments and those who
reside in them, has begun to fill a theoretical gap, by providing a new analytical tool for looking at the persistent problems of racism in schooling, describing how being White provides numerous advantages in education and by pointing out the limitations of the current multicultural paradigm.

Institutional and structural racism contributes to the striking differences between Black and White students’ school performance (Ladson-Billings & Tate, 1995). Despite the civil rights era gains, many students of color continue to be educated in de facto segregated schools, since school desegregation has often led to increased White flight and loss of teachers and administrators of color. Consistent with the main tenets of CRT, Ladson-Billings and Tate (1995) named the “voice” component of CRT as the first step on the road to justice in education and a vital component in the effort to analyze the educational system, as it provides a way to communicate the experiences and realities of people of color.

Further, Ladson-Billings and Tate (1995) describe Harris’ (1993) idea that Whiteness is valuable and is property and how “property functions of Whiteness” contribute to educational inequity. First, students are commonly rewarded for conforming to perceived “white norms” and sanctioned for other cultural practices. Second, there are specific social, cultural, and economic privileges connected with Whiteness, such as extensive use of school property or access to enriched curriculum offerings. Third, schools or programs can diminish its reputation and prestige by being identified as nonwhite or other related term such as “urban.” Fourth, Whites often benefit more and are receiving better opportunities due to insistence on vouchers, schools of choice, gifted programs, honors programs, advanced placement classes and tracking.
Although multicultural education has been conceptualized as a reform movement designed to effect change and provide educational equality to students from diverse racial, ethnic and other social-class groups, the current practical demonstrations of multicultural education in schools often reduce it to trivial examples and artifacts of various cultures. Thus, despite recognizing the scholarly efforts of multicultural education proponents, CRT scholars criticize the multicultural paradigm for its inability to achieve justice for the oppressed (Ladson-Billings & Tate, 1995).

CRT is a powerful tool for analyzing school inequity in the areas of curriculum, instruction, assessment, school funding and desegregation efforts portraying how public education is configured. Ladson-Billings (1998) points out the distortions, omissions, and stereotypes of school curriculums, which legitimize the dominant, White, upper-class knowledge as the “standard” and mute all other perspectives. Moreover, students of color often lack access to “enriched” curriculum such as gifted programs and classes.

Current instructional approaches often involve some type of remediation for “at-risk” students and thus perpetuate this deficiency model, which blames students and their families and communities for school failure rather than inadequate schooling and teaching techniques. Deficit thinking suggests that minority students enter school without the normative cultural knowledge and skills, and that their parents do not value nor support their children’s education. This perspective often results in the banking method of education, which sees teaching as putting cultural knowledge (valued by the dominant society) into impoverished students (Ladson-Billings, 2009). However, CRT rejects this model of educating pointing out that “deficit thinking is one of the most prevalent forms of contemporary racism in U.S. schools” (Yosso, 2006c, p. 173).
CRT model has even been used to examine the inequities of educational testing, funding, and desegregation. As for issues with assessment, CRT argues that intelligence testing and traditional assessment perpetuate the mythology of White superiority by legitimizing deficiency of students of color under the disguise of scientific rationalism. Recent initiatives have called for better cultural representation among standardized testing. Additionally, funding is an area of schooling that also reflects racism in education. CRT recognizes that property is a powerful determinant of academic achievement and explains how the resulting immense funding disparities are a function of institutional and structural racism.

Despite the common public agreement on the civil importance of desegregation, CRT scholars argue that school desegregation has been promoted only in ways that advantage Whites. Thus, what is called a “model desegregation” program may in reality be a program where African Americans continue to be poorly served by the school system, yet Whites do not leave the system, since it offers special benefits such as magnet school programs or extended child care (Ladson-Billings, 1998).

Building on the notion of restrictive and expansive forms of equality, Tate and his colleagues offered a broader vision of desegregated schooling that considers student diversity, curriculum, instruction, and parent-community involvement. Because many policy-makers are unaware of the divergent construction of equality, some African-American students remain inhibited by policy based on the restrictive vision of equality (Tate, Ladson-Billings, & Grant, 1993). Other scholars utilized the distinctions between equality of process and equality of outcome in their research and hence called into question common practices of teachers in schools (Rousseau & Tate, 2003).
Many researchers have begun to apply CRT to education research since its introduction in 1994. This fast outgrowth has led to numerous research projects and publications at the forefront pushing the limits of CRT in education. However, some scholars have warned against moving quickly from the foundation laid by legal studies (Ladson-Billings, 1998; Dixson & Rousseau, 2006).

CRT Beyond Black and White

Although CRT has originally been articulated using the Black and White binary, some scholars have soon pointed out that oppression in law and society could not be fully understood within this two-dimensional discourse. Although African Americans have experienced a unique history of racism in U.S., the histories of other people of color have also been shaped by racism in their unique ways. Thus, the CRT was expanded to include the racialized experiences of Native Americans (TribalCrit), Asian/Pacific Islanders (AsianCrit), Chicanos/as and Latinos/as (LatCrit) or women of color (FemCrit).

Latino/a critical race (LatCrit) theory is a relatively new area of CRT dating back to mid-1990s. LatCrit extends the CRT scholarship by bringing the Chicano/a, Latino/a consciousness and examining racialized layers of subordination based on immigration status, sexuality, culture, language, phenotype, accent and surname. LatCrit in education begins with the perspective that Latino communities are places with multiple strengths and a wealth of cultural knowledge. In her model of community cultural wealth, Yosso (2006c) describes how communities of color and specifically Chicana/o communities (Yosso, 2006a) can be described by having at least six forms of capital: aspirational, navigational, social, linguistic, familial and resistant capital. However, this community...
cultural wealth is often ignored in the school context (Yosso, 2006c) and “White supremacy” in education policy and practice prevails (Gillborn, 2009).

Educational research framed by CRT shifts the focus away from the deficit view of communities of color and builds on the cultural wealth and knowledge that students of color bring with them from their homes and communities into the classroom. Thus, CRT scholars are committed to social and racial justice and seek to expose the underlying cultural deficit. By revealing the need to transform education, it utilizes the community cultural wealth and empowers people of color to use the assets already abundant in their communities (Yosso, 2006c).

CRT provides a useful framework for examining the experiences of Hispanic students in physical education (PE) by highlighting the need for understanding the Hispanic students’ perceptions, which is represented in the voice theme of CRT. Having the Hispanic students talk about what is it like to participate in PE, and how it relates to their schooling experience, can uncover some issues worth considering in education. Examining how the PE program including both curriculum and instruction utilizes the community cultural wealth of these students is another area currently ripe for exploration.

To stay committed to the main goal of CRT, this study will also explore practices related to institutional or structural racism that might be hindering the experiences of Hispanic students considering their PE participation. This is best accomplished by examining the whole school culture as well as the PE environment. However, the goal of this research is not to point out the deficits of either the school or the PE program, but rather provide a space for discussions about the status quo.
**Social Cognitive Theory.** Social cognitive theory (SCT) represents a commonly used framework in health behavior and PA intervention research (Painter, Borba, Hynes, Mays, & Glanz 2008; Keller, Fleury, Sidani, & Ainsworth, 2009). It has been used to explain and predict human behavior utilizing a conception of triadic reciprocity among one’s behavior, personal factors and environment (Bandura, 1986). The triadic reciprocity of SCT refers to the bidirectional nature of the causal relationship between the three sets of variables.

For instance, learning in physical education (PE) is shaped by factors within the school and class environment. At the same time, learning is affected by students' own thoughts and self-beliefs and their interpretation of the school and PE class context. However SCT also assumes that students have an agency or ability to influence their own behavior and the environment through forethought, self-reflection and self-regulation (Bandura, 2001).

From a social cognitive perspective, students are neither seen as powerless objects controlled by the school environment nor as free agents who can become whatever they choose (Bandura, 1977a). Rather, SCT explains human functioning and the nature of persons in terms of the following five basic capabilities: symbolization, forethought, vicarious experiences, self-regulation and self-reflection (Bandura, 1986).
1. *Symbolic capability* refers to the human ability and willingness to utilize symbols, as a means of adapting to the environment. Through symbols, people process and give meaning to their experiences and create internal conceptions that guide their future actions. Grounded in social learning, SCT assumes that humans can learn through observation. Observational learning can take place when models exhibit novel patterns of thought or behavior. Modeling is considered one of the most powerful means of transmitting values, attitudes, and patterns of thought and behavior. Observational learning requires more than simply witnessing a model demonstrate a specific behavior, instead learning is mediated by attention, retention, production and motivation. Thus instruction based on SCT should support students' engagement in each of the four sub-processes of observational learning. This idea is of particular importance when considering those individuals who have minimal command of the English language. Those with English as second language are likely to rely on other means of communication rather than verbal, such as signage to guide their actions.

There is promising evidence that signage (i.e., posters that identify when and how to be physically active on the school grounds) increases the likelihood of positive decision-making (Nomura, Yoshimoto, Akezaki, & Sato, 2009). For example, when school-aged children were presented with a positive message about being active at recess they were twice as likely to engage during that opportunity in PA as those who did not have such signage (Jurg, Kremers, Candel, Van Der Wal, & De Meij, 2006). The effects of such signage presented in multiple languages (i.e., signs containing both Spanish and English) is still unknown and warrants further investigation as a plausible strategy for increasing the rate of PA engagement.
Attentional processes prioritize an observed event by determining a focal point and identifying which information is most valuable. Little learning results from observation alone, but when relevant aspects of the modeled event are the focus of the observation and the individual is permitted time for practice, then learning is likely to take place (Bandura, 1977a). The rate and level of learning is further affected by the salience, affective valence, complexity, prevalence and functional value of modeled activities. Students’ attention in PE can be increased by using as models other students who are viewed as competent, prestigious and similar to themselves. Students also pay more attention when the skill or the physical activity demonstrated is interesting, exciting and personally relevant.

The observer’s attributes, which include sensory capacities, perceptual set, cognitive capabilities, arousal level, and acquired preferences, are also contributory to learning. As such, it is of particular importance that communication with non-native English speakers be clear and direct.

Retention processes refer to the storing of the representation of the modeled information in memory. Observational learning takes place only if something about what was observed is remembered, because learning is a relatively permanent, not temporary change in behavior. This happens through symbolic coding, mental images, cognitive organization, cognitive rehearsal, and enactive rehearsal. Symbolic coding involves active transformation and restructuring of information into succinct symbols that capture the essential features about the modeled activities. These may be the main cues that the PE teacher uses to describe a motor skill, which could be provided in Spanish for those with limited English proficiency to aid their retention.
Rehearsal of the new information augments retention by increasing the strength and number of memory traces, but also by providing opportunities to organize what one knows and refining the stored representation in the memory. Opportunities for rehearsal, both in the form of repeated exposure to models and in the form of time to reflect on the material or skills assist retention. Thus having multiple opportunities to learn a concept or skill in PE is crucial. Information is processed more efficiently if it is given culturally relevant meaning.

*Production processes* involve converting symbolic conceptions into appropriate actions. That means what was observed, learned and retained as symbols or images is reproduced in similar contexts. The production processes include cognitive representation, observation of enactment, feedback information and conception matching. These processes are influenced by the observer’s physical and cognitive abilities, as the observation must be transformed into personal behavior. Not only do students need to know how to do things and have multiple opportunities to practice skills or behaviors to become competent, but learning can be also enhanced by the use of effective feedback. This feedback needs to be specific, immediate and insightful about what the learner is doing well and how to improve what needs improvement.

*Motivational processes* can help to explain the discrepancies between acquisition and performance and likely represent the how and why individual’s act on the information acquired in the process of observation. Not everything that people learn is enacted, especially if it has little functional value or high risk for punishment. When incentives are carefully matched with the motivational level of the learner, what has been learned is likely to be translated into action.
Teachers can support the motivational aspects of learning through the purposeful use of rewards and punishments. In PE there are many ways to provide incentives such as the commonly used collection of toe tokens on a chain or medals for various physical activity accomplishments. Teachers in PE are also commonly trained in the use of time out as an effective way of correcting minor misbehavior and negative attitude. These consequences, further, can shape students' behavior when they are provided either to the learner or to a model. To improve motivation, teachers can also model attitudes that they want students to adopt such as enthusiasm or interest in physical activity or other content of the PE lesson.

2. **Forethought capability** is the ability to utilize the future time perspective in guiding human behavior. People anticipate the consequences of their actions, they set goals and plan their future. Feedback on anticipatory outcomes and behavior helps individuals self-regulate their motivation. Cognitive representation of future events can have strong impact on present action through self-regulation. The loop of performance, feedback, and self-regulation build confidence toward specific tasks. This confidence is called self-efficacy (Bandura, 1977b).

3. **Vicarious capability** is the ability to learn through the power of social modeling/vicarious experiences. Within these experiences, people acquire rules for regulating their behavior without having to suffer the consequences of making fatal mistakes in the process of learning through trial and error. Since humans come with few inborn behavior patterns, an advanced vicarious learning capability is vital for their development and survival. Social phenomena such as language, lifestyle, or cultural practices cannot be learned without the benefit of modeled examples. The process of
acquisition can be considerably shortened through modeling. The modern communication technology creates a symbolic environment that plays an increasingly powerful role in shaping human thought patterns, values, attitudes, and behavior.

4. **Self-regulatory capability** is the ability to regulate one’s behavior by internal standards and self-evaluative reactions to one’s own actions. Self-regulation operates through observation, judgmental process, and self-reaction. Observations provide information needed for setting realistic goals and evaluating one’s progress towards achieving these goals. Unlike other general observations, these are only observations of one’s own performance and not that of others who may also be in the environment. The information from self-observation is judged using personal standards, which indicate whether the performance is regarded favorably or not. These standards are formed through social comparison, self-comparison and collective comparison. Self-reaction represents the mechanism by which standards regulate courses of action. This self-regulatory control takes place via creation of self-incentives and anticipative affective reactions (Bandura, 1991).

5. **Self-reflective capability** is a distinctively human characteristic, which enables people to analyze their experiences and think about their own thought processes. Through reflection, people can gain understanding of the world around, but also evaluate and change their own thinking. Self-knowledge as a product of self-appraisal underlies the exercise of personal agency. People’s judgment of their own capabilities is central in effecting action. People tend to avoid threatening situations, but get involved in situations that they feel capable of handling. Collectively, the interaction between personal
characteristics, the environment, and one’s behavior influence learning as well as how someone will act. These constructs are impacted by self-efficacy.

*Self-Efficacy* is a construct that lies at the center of SCT. It can be defined as one’s belief on one’s ability to succeed in specific situations. How an individual believes that they will perform in a given situation, otherwise known as self-efficacy, determines not only what people do, but also how much effort they put forth, how long they persevere in face of difficulties and if they approach tasks anxiously or with self-assurance. The construct of self-efficacy suggests that self identity mediates human behavior (Bandura, 1986). Individuals pursue activities and situations in which they feel competent and avoid situations where they doubt their capability to be successful (Bandura 1993, 1997). Although self-efficacy can be increased or decreased within any environment, it is a concept that has immense implications for learning that takes place in schools.

Students with a positive sense of self-efficacy are more ready to participate, work harder, persist longer, and have fewer adverse emotional reactions when they encounter difficulties than students who doubt their capabilities (Bandura, 1997). Self-efficacy beliefs have been shown to have impact on students’ motivation, method of learning and achievement outcomes (Zimmerman, 2000). Thus, student self-beliefs about their academic capabilities play an essential role in their motivation to achieve.

Self-efficacy is based on four sources of information: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal (Bandura, 1977a). Performance accomplishments are particularly influential, because they are based on personal mastery experiences. Success raises mastery expectations,
repeated failure lower them. Vicarious experiences are a less dependable source of information about one’s capabilities, since it depends on social comparison rather than direct evidence. However seeing someone else perform threatening activities can enhance efficacy expectations.

Verbal persuasion is an easy and readily available means of influencing human behavior by telling people what to expect. By itself, it has limited power to induce a sense of personal efficacy, but it can contribute to success by providing provisional aids for effective action. Building self-efficacy is an emotional event, as it relates to one’s successes and failures. Thus the emotional arousal that accompanies life events is the fourth source of information that can affect perceived self-efficacy. Specifically, when coping with threatening situations people judge their anxiety and vulnerability to stress by evaluating their physiological state. They are more likely to expect success in absence of high arousal, which makes them feel tense and agitated. This arousal activates fear and avoidance of potential threats. Fear reactions produce further fear. By avoiding stressful activities, development of coping skills is hindered and the resulting lack of competency becomes a realistic basis for fear (Bandura, 1977a).

In the educational setting, student self-efficacy has a profound impact on the development of student cognitive abilities (Bandura, 1993). Individuals with low self-efficacy may perceive a task as too difficult and consequently not even engage; whereas, individuals possessing high self-efficacy will likely act on the task at hand. Among elementary children, motivation and performance are highly associated with self-efficacy; however, the strength of this association seems to vary by subject matter and method of assessment (Multon, Brown, Lent, 1991). Self-efficacy is a predictor of performance in
mathematics and reading (Multon, Brown, Lent, 1991) as well as in PE (Chase, 2001). Moreover, self-efficacy plays a key role in sustained engagement in PA among school-aged children (Dishman, Saunders, Motl, Dowda, & Pate, 2009). Because of the importance of mastery experiences, vicarious experiences and verbal persuasion, teachers can affect student self-efficacy by what they do and say (Margolis & McCabe, 2006; Fencl, & Scheel, 2005). How teachers create self-efficacy promoting environments and practices is dependent upon their own self-efficacy.

**Teacher self-efficacy.** Teacher self-efficacy is an important factor that influences the process of teaching and learning, particularly when considering the environment. Strong sense of teacher efficacy has been found to be related to numerous positive outcomes, such as student achievement, motivation or attitude towards school, reduced stress and increased enthusiasm in teachers, improved planning and organization, willingness to stay in the teaching profession, willingness to implement innovations, and willingness to work with students who are experiencing difficulties. High efficacy teachers tend to maintain more positive relationships with their students and manifest greater openness to student ideas and feelings. Teacher efficacy has also been found to be linked with school structure and school climate (Tschannen-Moran, Wookfolk, & Hoy, 1998).

Teacher efficacy is a two-dimensional construct and it is situation specific. General teaching efficacy refers to teachers’ beliefs that teaching can overcome external factors to the teacher such as the influence of home environment, television, or friends. Personal teaching efficacy refers to teachers’ beliefs about their own personal ability to affect learning through their teaching (Gibson, & Dembo, 1984). The extent to which
teachers believe in their ability to affect student performance influences both the effort they put into teaching and their willingness to persist in working with their most difficult students. However, psychological conditions in the schools such as teacher marginalization, lack of support and recognition or their sense of powerlessness and isolation can make it difficult for teachers to maintain a high sense of efficacy. Helping teachers take greater control of their professional lives, increasing their autonomy and sense of efficacy lies at the core of ecological reform in schools, which aims to increase the efficacy attitudes of teachers by enhancing the “ethos” of the school (Ashton & Webb, 1986).

Ashton (1984) identified eight dimensions to teacher efficacy development that distinguished the high from the low efficacy teachers. First, teachers with high sense of efficacy believe that their work is important and meaningful and that they have a positive impact on their students. Second, these teachers have positive expectations for student behavior and achievement. Third, they take responsibility for student learning and when their students experience failure, they look for strategies to be more helpful and facilitate success. Fourth, they plan for student learning and identify strategies for achieving these goals. Fifth, teachers with high sense of efficacy have positive feelings about teaching, about themselves and their students. Sixth, they have a sense of control over student learning and believe that they are responsible for student success. Seventh, they share common goals with their students. Finally, self-efficacious teachers allow students to have an active role in decision-making regarding goals and learning strategies.

These eight dimensions highlight many teacher characteristics of a highly effective teacher. A teacher who demonstrates high sense of teacher efficacy may thus be
a powerful asset to the school as an institution as well as to his/her students including the more difficult ones. PE teachers with a high sense of efficacy are likely to produce positive student outcomes with great implications for student health and well-being (i.e., regular PA engagement, fitness, healthy decision making). It is especially important in light of recent obesity trends and the increasing need to teach students how to lead active lifestyles.

Henninger (2007) conducted a study among urban PE teachers who stay in the profession using the framework of teacher efficacy. She described these teachers’ different reactions to the complex organizational context as closely aligned with their sense of personal teaching efficacy. Those with a high sense of efficacy, Lifers, were committed to teaching, were enthusiastic for their work, believed that they were making a difference and were not discouraged by experiencing workplace setbacks. Troupers on the other hand had lost their enthusiasm for teaching, they felt frustrated and powerless, and used their complaints about work conditions as a justification for lowering their teaching standards.

Thus, those teachers who have high self-efficacy are more likely to create a learning environment that will foster high achievement by building student-efficacy toward specific tasks. The role of the teacher in the development of healthy active lifestyles is therefore critical, given the causal relationship between self-efficacy and sustained PA engagement. Of equal importance is the ability of a highly self-efficacious teacher to generate a culturally relevant curriculum.
Teacher Cultural Competency

The U.S. population is becoming more diverse and the ethnic, racial, and religious diversity is even greater among the school-aged population. However, the teacher workforce is rather homogeneous and consists of mostly White middle-class women. Teachers face increasing challenges in fostering academic achievement in all students of various backgrounds. An increasing achievement gap suggests that there is an urgent need for teachers to develop cross-cultural competency (intercultural sensitivity or multicultural education competencies) that would lead to school success among their culturally diverse students.

A cross-culturally competent person can be described as someone who exhibits a high level of commitment to the unity of all humans, appreciation of the differences between people of different cultures, and commitment to combating racism, prejudice and discrimination (McAllister & Irvine, 2000). For teachers this means they need to “recognize and understand their own worldviews, they must confront their own biases and racism, learn about their students’ cultures and perceive the world through diverse cultural lenses” (McAllister & Irvine, 2000, p.3). Further, teachers need to embrace the responsibility to provide culturally relevant curriculum.

McAllister and Irvine’s (2000) review of three models used to structure cross-cultural learning emphasizes the importance of paying attention to the process by which teachers develop cultural competence. These three models include Racial Identity Development, Typology of Ethnic Identity and Developmental Model of Intercultural Sensitivity.
Cross’ (1978) and Helm’s (1984) Racial Identity Development models have been used by researchers and teacher educators to encourage anti-racist thinking and behavior and to examine individual and institutional racism in schools and society. Racial identity theory involves four elements: black identity development theory, white identity development theory, the people of color identity development theory and the people of color–white interaction model. The first three racial identity development theories explain various stages of racial identity development and the circumstances that influence this process. The people of color–white interaction model examines the superior–inferior interactions in various racial configurations and how these affect racial identity development.

Banks’ (1994) Typology of Ethnic Identity model, which focuses on cultural differences between the school and children’s culture and encourages teachers to continuously learn about their students’ cultures and to adapt teaching to meet the children’s needs, expanded the meaning of cultural competency among educators. This model describes six stages of ethnic identity development and implies that educators may better serve their students if their curriculum helps students to progress through these stages. Better understanding of ethnic identity development may help to raise awareness about vast differences in students’ ethnic awareness and affiliation to a cultural group.

Bennett’s (1993) Developmental Model of Intercultural Sensitivity focuses not only on cultural differences, but also increased understanding of cultural nuances and it provides a useful framework for understanding teacher’s cross cultural growth. It is organized into six stages of increasing sensitivity to difference from more ethnocentric to more ethnorelativ point of view. Each stage represents increasingly complex
understanding of cultural difference and allows more sophisticated experiences of other cultures.

According to the three process-oriented models described above, in the process of becoming culturally competent people move through a set of stages from self-centered state to identification with society and the global community (McAllister & Irvine, 2000). Teachers improve their ability to place their own and others’ identities within a larger context, thus providing more inclusive and integrative experiences for their students.

A growing body of literature has focused on the development of culturally proficient schools (Lindsey, Roberts, & Campbell Jones, 2005; Lindsay, Jungwirth, Pahl, & Lindsay, 2009), culturally competent teachers (Diller, & Moule, 2005; Lindsey, Robins, & Terrell, 2009), and culturally responsive teaching (Gay, 2000; Robins, Lindsey, Lindsay, & Terrell, 2006). Many teacher educators and researchers have called for the integration of issues of race and culture in teacher preparation programs and professional development of in-service teachers (Gay & Howard, 2000; Irvine, 2003). Multiple methods such as case studies, diversity workshops, sociocultural courses, and multicultural field experiences have been used to develop cultural responsiveness in preservice teachers and to equip them for diverse teaching contexts.

Meaney, Bohler, Kopf, Hernandez, and Scott (2008) found that field experiences can help develop future teachers’ understanding, compassion and respect for minority children living in poverty. Participants in the study reported acquiring culturally relevant language and refining their communication skills, a critical element for establishing rapport with children. The in-service program also helped these future teachers change
their preconceived stereotypes, enhanced their insight into the needs of culturally diverse students, and impacted their future teaching expectations.

According to Ladson-Billings (2009) teachers achieve cultural competence when they are able to facilitate achievement of their culturally diverse students. Ladson-Billings (2009) specifically outlined the differences in behaviors of culturally competent, who she calls Culturally Relevant, teachers versus those who have emerging skills, who she calls Assimilationist (see Table 1).

Table 1 (Ladson-Billings, 2009, pg. 38).

<table>
<thead>
<tr>
<th>Culturally Relevant</th>
<th>Assimilationist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher sees herself as an artist, teaching as an art.</td>
<td>Teacher sees herself as technician, teaching as a technical task.</td>
</tr>
<tr>
<td>Teacher sees herself as part of the community and teaching as giving something back to the community, encourages students to do the same.</td>
<td>Teacher sees herself as an individual who may or may not be part of community; she encourages achievement as means to escape community.</td>
</tr>
<tr>
<td>Teacher believes all students can succeed.</td>
<td>Teacher believes failure is inevitable for some.</td>
</tr>
<tr>
<td>Teacher helps students make connections between their community, national, and global identities.</td>
<td>Teacher homogenizes students into one “American” identity.</td>
</tr>
<tr>
<td>Teacher sees teaching as “pulling knowledge out” – like “mining.”</td>
<td>Teacher sees teaching as “putting knowledge into” – like “banking.”</td>
</tr>
</tbody>
</table>

Teacher training and professional development models inadequately develop this type of cross-cultural competency in teachers, which is essential for school success among diverse learners (McAllister & Irvine, 2000). According to Gay (2002), the majority of preservice teachers do not receive sufficient exposure to ethnically and racially diverse classrooms in their teacher education programs. Although most current teacher education programs have at least one multicultural education course, most
teachers who have been in the profession for more than 15 years have probably not had the same opportunity (Harrison, Carson & Burden, 2010).

Cultural competency has been called a “requisite skill for all 21st-century PA leaders” (Tritschler, 2008, p. 7). In her article, Tritschler (2008) views cultural competency not as an end product but rather as an ongoing process of mutually respectful interactions and partnership with students and the communities that they represent.

**Culturally competent physical education teachers.** Cultural competency is especially critical if we consider the health disparities among various segments of the U.S. population. One of the overarching goals of the national initiative Healthy People 2010 (U.S. Department of Health and Human Services, 2002) has been to eliminate these disparities, with PA and physical fitness as one of its focus areas. In response to the rising overweight and obesity trends, schools have been called to provide adequate opportunities for children to be physically active (Centers for Disease Control and Prevention, 1997; National Association of State Boards of Education, 2000; National Association for Sport and Physical Education & American Heart Association, 2004). PE programs are called to play a major role in the provision of PA by offering quality instruction with high percentage of engagement in activity. PE teachers therefore are to exhibit the desirable attitudes and behaviors of a cross-culturally competent person not only in their role as teachers, but also in their role as PA leaders in their schools and communities.

Research on cultural competency of PE teachers has been scarce and so our understanding, its development, and implications for student learning is rather limited and often based on assumptions. In a recent study, Harrison and colleagues (Harrison,
Carson & Burden, 2010) tested two of these common assumptions about PE teacher cultural competency stating that teachers of color and teachers who teach in settings with diverse student populations have greater cultural competency. Both of these assumptions have been confirmed, which suggests that to increase cultural competency of future PE teacher workforce efforts need to be made to recruit more candidates from diverse backgrounds and provide field experiences in settings with diverse learners.

It has been found that pre-service PE teachers’ cultural competency can be enhanced by designing in-service experiences in settings with diverse learners. Domangue and Carson’s study of PETE students (2008) involved in a service learning program among poor African American students in a government-funded housing community revealed positive changes in cultural competency of the preservice teachers. The participants have identified consistent engagement with these students and their culture, as well as an engaged instructor as the major elements that contributed to this change. The authors have pointed out the critical role that continuous reflection played in this process of reducing stereotypes and facilitating greater cultural and racial understanding.

Timken (2005) described a “culturally responsive and inclusive PE teacher” as someone who exhibited the following five characteristics: a) was socioculturally conscious, b) held affirming attitudes toward students from diverse backgrounds, c) embraced the constructivist view of learning, d) learnt about students and their communities, and e) had the commitment and skills necessary to act as an agent of change.
Socioculturally conscious PE teachers have cultural content knowledge and recognize that student behavior is influenced by culture. These teachers set high standards for achievement for all students and create a learning environment that is safe, supportive, and promotes mutual respect and caring. Further, they provide rich curriculum and instruction that helps students explore the inequities in education, society, and PA settings.

Affirming teachers are aware of their own beliefs and values, yet they also view all students with their unique cultural characteristics as capable learners with great potential. Culturally competent teachers build on individual and cultural resources of the students, by for instance utilizing students’ native languages, or by including a variety of movement forms that represent marginalized students’ interests. Finally, competent teachers have a genuine respect for all learners, and the respective cultures and communities they represent.

Teachers who embrace the constructivist view of learning help students find meaning and relevance to learning through real-life situations and applications and are more likely to be culturally competent. Using the students’ pre-existing knowledge and experiences to make sense and connect with new content, leads to greater critical thinking. The expectation that students will employ problem-solving strategies to demonstrate learning through various assessment methods such as authentic assessment, contributes to perceptions of cultural competence (Timken, 2005).

Teachers who learn about students and their communities are better positioned to make real connections with them. This takes time and effort, yet strong relationships between teachers and students might be the very thing that keeps students engaged and in
school. Being aware of personal bias and pursuing personal contact with students’ parents and community members and spending time immersed in their culture is a great avenue for developing affirming attitudes for all students.

To act as agents of change, first, teachers need to be aware of institutional inequalities, yet remain empathetic, hopeful, passionate, and idealistic about education and children. Although historically change in PE has been difficult, there are many new curricular and instructional approaches that can facilitate change toward equitable and meaningful PE experiences for all students. However, none of these techniques will serve its purpose without a clear reconceptualization of the main outcomes of PE. Traditional approaches and curricula are inadequate and without drastic change in the purpose and vision of PE will continue to foster inequalities. A culturally competent PE teacher could be an asset in reaching all students from various backgrounds and be impactful not only on their PA related attitudes and behaviors, but also in preparing all students to be fully contributing members of an equitable global society.

**Obesity, Sedentary Behaviors, and Physical Activity Engagement among Hispanics**

In this section, various issues pertaining to PA of Hispanics and their children will be discussed. First, the connection between disease, obesity, and lower PA engagement among Hispanics will be overviewed. Next, factors associated with PA engagement will be identified. Literature on sport, physical recreation, and PE of Hispanic children will be summarized last.

**Hispanics’ obesity and overweight.** The prevalence of obesity in the U.S. is generally higher among Hispanics from all age groups when compared to Whites (Ogden et al., 2014). Specifically, obesity rates in adults in 2011-2012 were disproportionately
higher among Hispanics (78% overweight or obese) than Whites (67% overweight or obese). Hispanic children and youth were found to have higher rates of overweight and obesity (Jolliffe, 2004; Ogden et al., 2006; Delva, O’Malley, & Johnston, 2006; Urrutia-Rojas et al., 2008; Ogden et al., 2008; Ogden et al., 2014). The higher rates of obesity among Latinos can be traced to children of very young age and were found in Hispanic preschool-aged children (Sherry, Mei, Scanlon, Mokdad, & Grummer-Strawn, 2004; Ogden et al., 2008; Anderson & Whitaker, 2009; Whitaker & Orzol, 2006), particularly those born to immigrant less acculturated mothers (Sussner, Lindsay, & Peterson, 2009). The highest risk factor associated with obesity in Hispanic children was found to be physical inactivity (Urrutia-Rojas et al., 2008).

Data from the NHANES 2011-2012 (Ogden et al., 2014) revealed that Hispanic children and youth aged 2 to 19 years had a prevalence of obesity (BMI ≥ 95th percentile of the CDC growth charts) greater (22%) than non-Hispanic White children (14%) or non-Hispanic Asian (9%) and similar to non-Hispanic Black children (20%). Hispanic boys had a prevalence of obesity greater (24%) than non-Hispanic White (13%), non-Hispanic Asian (12%) or non-Hispanic Black (20%) boys. Among Hispanic girls, obesity (21%) was greater than in non-Hispanic White girls (16%) or non-Hispanic Asian girls (6%) but similar to non-Hispanic Black girls (21%).

The disparities in the prevalence of obesity are even greater in the age group of the 6 to 11 year-old Hispanic, non-Hispanic White, non-Hispanic Asian and non-Hispanic Black children (26%, 13%, 9%, and 24% respectively). For Hispanic boys (29%) it was greater compared to non-Hispanic White (9%), non-Hispanic Asian (13%) and non-Hispanic Black (26%) boys. Among Hispanic girls (23%) it was greater
compared to non-Hispanic White girls (18%), non-Hispanic Asian girls (4%), but similar to non-Hispanic Black girls (22%). The statistics become even more alarming when we consider the prevalence of both obesity and overweight (BMI ≥ 85th percentile of the CDC growth charts), which is the highest among the 6 to 11 year old Hispanic boys (49%) and girls (44%).

The prevalence of obesity was found to be increasing with length of stay in the U.S. (Popkin & Udry, 1998; Goel et al., 2004; Akresh, 2008; Kaplan et al., 2004). Kaplan, Huguet, Newsom, and McFarland (2004) found that obesity among Hispanic immigrants was 9% for those living in U.S. for less than 5 years, but it increased to 24% for those living in U.S. for 15 or more years. The most striking increases in overweight were found to occur between first and second or third-generation Hispanic immigrants to the U.S. (Popkin & Udry, 1998; Gordon-Larsen, Harris, Ward, & Popkin, 2003). It is believed that this occurs because of the rapid acculturation of overweight-related behaviors, such as poor diet, and inactivity in U.S.-born relative to foreign-born immigrants.

**Sedentary behaviors among Hispanics.** Sedentary lifestyle was found to be prevalent among Hispanic immigrant families (McArthur, Anguiano, & Gross; 2004). In this study, the activities undertaken by the majority of the families as a unit were mostly of sedentary nature (i.e., watching television, listening to music, and reading). Most families reported no moderate to vigorous PA such as hiking, running, swimming, playing basketball, or playing football. Additionally, fewer adolescent Latinos (first and second-generation immigrants in particular) meet the CDC minimum PA recommendations than Whites (Allen, Elliott, Morales, Diamant, Hambarsoomian, &
Schuster, 2007). Hispanic children also report less PA than majority Whites (Simons-Morton et al., 1997).

Adopting sedentary lifestyle was one of the main themes in another study examining mothers' beliefs, attitudes and practices related to early child feeding and weight (Sussner et al., 2008). Comparing lifestyle in their native country and in the U.S., Latino mothers identified a dramatic PA changes upon immigration. Possible explanations included warmer weather, more physical labor, active forms of transportation and greater promotion of exercise in their home country. A number of comparative studies among Latino immigrants and their home country counterparts indicate a striking decrease in their PA engagement upon arrival (Smith, Bogin, Varela-Silva, & Loucky, 2003; D’Alonzo & Cortese, 2007; Ng, Rush, He, & Irwin, 2007).

As Hispanic families do not engage in much PA together, both adults and their children experience lower levels of PA. Unless these children are participating in regular PA in school or at play, their inactive lifestyle at home is putting them at risk of becoming overweight. Early intervention with diet and PA may help prevent weight gain, obesity, and obesity-related chronic illnesses in the population of Hispanic immigrants and their children on subsequent generations.

**Correlates of physical activity of immigrants/Hispanics.** Children’s PA is a complex behavior determined by many factors. In a review of correlates of PA a number of variables from various categories were found to be associated with PA of children and youth (Sallis, Prochaska, & Taylor; 2000). Among the variables classified as consistently associated with PA for children aged 4-12 were biological variables (sex), psychological variables (perceived barriers, intentions to be active, and preference for PA), behavioral
variables (healthy diet, and previous PA), and physical environment variables (access to facilities and programs, and time spent outdoors).

Numerous variables were classified as having an indeterminate association with PA of children, suggesting that more research is necessary to explore the inconsistent findings and what other factors might moderate these associations. Among the variables of indeterminate associations with PA for children aged 4-12 were biological variables (age, ethnicity and body mass index), psychological variables (perceived competence, self-efficacy, and attitudes), behavioral variables (sedentary time – TV & video games), social variables (parent PA), and physical environment variables (season). Considering that many children from Latino families might exhibit slightly different tendencies it would be beneficial to review the correlates of PA among Hispanic children. However, studies exploring the unique characteristics of Hispanic children’s engagement in PA are rare.

In a one study conducted among Mexican American children (aged 5 to 7 years) the correlates found to be associated with reduced time in moderate-to-vigorous PA (MVPA) included time spent viewing media, being indoors, and parents being present (McKenzie et al., 2008). Increased PA was associated with siblings or other children present at home, prompting of active behavior and number of children living in the household (McKenzie et al., 2008). Among preschool children, Mexican American children were found to be less active than Anglo-American children were. Among the variables that contributed to this difference between the two ethnic groups was viewing media, outdoor and indoor play rules, family recreation, play spaces, organized activities participation, and toys availability. Mexican American children made fewer requests for
activity, received fewer prompts from parents, and spent less time outdoors (Sallis et al., 1993).

Due to scarcity of research on issues of PA among Hispanic children, literature on PA among Hispanic adults may serve as an extremely valuable source of information, as PA patterns tend to track into adulthood (Kelder, Perry, Klepp, & Lytle, 1994; Dennison, Straus, Mellits, & Charney, 1988; Tammelin, 2003). A variety of issues are associated with the level of PA engagement of different ethnic/immigrant groups. Among these correlates of PA are: a) ethnicity/place of origin, b) length of stay since arrival, c) level of acculturation, or d) perceived constraints to participation.

PA levels vary by ethnicity and length of time spent in the U.S. The results of a study among recent (no more than 10 years) immigrants to Canada indicated that the prevalence of being physically active differed by ethnicity (Tremblay, Bryan, Perez, Ardern, & Katzmarzyk, 2006); White (21%), Black (19%), Latin American (17%), West Asian/Arab (16%), East/Southeast Asian (14%), South Asian (11%). The prevalence of being PA increased with length of stay: recent immigrants (16%), immigrants (20%), non-immigrants (24%).

The level of acculturation was found to be associated with PA in a study among first generation Latina (Hispanic women) immigrants (Evenson, Sarmiento, & Ayala, 2004). Latinas with higher English language acculturation were more likely to be physically active than women with lower English language acculturation. Likewise, women who arrived to the US when they were younger than 25 years were more likely to report being physically active. Bicultural or American ethnic identity were found to be associated with greater participation in PA. Spanish speaking Hispanics were more likely
to report less than the recommended level of PA and no leisure time PA at all (DuBard & Gizlice; 2008).

Ham, Yore, Kruger, Heath and Moeti (2007) found that this change in the prevalence of participation varies not only by region of origin or with acculturation, but also by domain. The prevalence of occupational and transportation-related PA declined, whereas leisure-time and household PA increased with acculturation. The amount of time lived in the U.S. was associated with a lower prevalence of transportation-related PA among Latinos born in Central America and the Caribbean/Atlantic islands but not among those born in South America. To assess PA levels in Latino communities, it is necessary to consider all types of PA and the effects of acculturation on each type of activity.

A number of studies have explored the perceived constraints to greater participation in sport and PA. In Yu and Berryman’s (1996) study with immigrant adolescents in New York City the perceived barriers to participation cited most often by the participants were lack of English proficiency, lack of opportunity, lack of partner, lack of money, and lack of knowledge about sites or information about activities. The study reported that as acculturation increased so did the sport and recreation participation. Acculturation and self-esteem had a positive correlation with the level of sport and recreation participation and a negative correlation with the number of perceived barriers.

In another study Evenson, Sarmiento, Macon, Tawney, and Ammerman (2002) identified environmental and policy constraints to activity, which included transportation, lack of facilities, cost, and safety. Sociocultural correlates of activity included gender roles for activity, importance of support from the family and husband, childcare issues
tied to having few relatives who lived close by, language, and isolation in the community. The women suggested changes and programs that could promote PA through multiple channels, especially involving the family.

Taylor and Doherty (2005) identified other challenges that recent immigrant youth face concerning their participation in PE, sport and recreation. This study was conducted with 87 high school students in English as a second language (ESL) programs in three high schools in Ontario, Canada. The participants identified too much schoolwork and not enough free time as the greatest limiting factors to their sport and recreation participation. They also noted language difficulties, unfamiliarity with activities, feelings of exclusion, clothing requirements, and other commitments such as part-time job or family responsibilities as common challenges to participation. Further, there were gender differences in the response to these challenges. Boys maintained much more optimistic perspective on participation, they reported fewer problems with other students or teachers and they were less likely to discontinue participation as a result of negative experiences. Girls were more inclined to take these challenges personally and limit their participation. In combination with greater constraints that girls identified concerning their work and family commitments, this may help explain their lower level of participation in sports and physical recreation outside of required PE.

However, this study found many perceived benefits to participation as well. Fun and other affective responses (feeling good or happy), being physical and healthy and playing with friends and socializing were identified as top reasons for getting involved. Opportunity to learn and practice English and learning about Canadian culture were noted as distinct benefits as well. Supporting and understanding teachers, coaches, and other
students had a great impact on a student’s motivation to participate. These findings support the notion that participation in sport and physical recreation can both facilitate acculturation, but it can also lead to greater social exclusion.

Doherty and Taylor (2007) questioned the long established argument that participation in recreation and play activities aids immigrant children and youth during the assimilation and acculturation process (Kelly, 1983; Kraus, 1987). It had been believed that engagement in sport and physical recreation can contribute to positive identity formation, social inclusion and successful adaptation in the process of cultural transition of immigrant youth (Donnelly & Coakley, 2002; Omidvar & Richmond, 2003). It remains unclear whether sport provides equality of opportunity, as many minority groups have been denied participation (Doherty & Taylor, 2007; Fleming, 1994). Additionally, sport and PA experiences were found to be helpful in the improvement of psychosocial and physical well-being, development of language skills and in providing orientation to the mainstream culture. Nevertheless, they also led to feelings of social exclusion because of language difficulties, unfamiliarity with mainstream sports and prejudice and discrimination related to cultural and racial differences (Doherty & Taylor, 2007).

Grey (1992) found that American sports offered in schools could marginalize immigrant and other minority students in the school and the local community. His case study explored the role of sports in relations among immigrant, minority and Anglo students in a high school in Kansas. Many immigrants were interested and involved in a school soccer club prior to the year of the study. However, during the year of the study despite the high interest in playing soccer among immigrant students, there was no
faculty member among the 70 full-time teachers willing to become involved and sponsor the club. The school principal showed little interest in finding someone to sponsor the soccer club either and actually he actively worked against its regeneration because it would create “distraction from the excitement of the anticipated new football program” (p.262). Thus, the one school activity that involved many minority and immigrant students was eliminated.

Athletic programs (particularly football) were found to serve as the focal point of contact between the school and community (Grey, 1992). Many, including the principal, perceived football as a catalyst for successful academic school year. Yet, not many immigrant and minority students participated in the established school sports programs. This failure to participate or even attend games was perceived negatively as unwillingness to identify and assimilate with the school. The majority of those who observed the games were adults from the surrounding community and through their support helped to form and perpetuate a value system with expectations to participate in these activities, and passed it along to the youth of the community. These rituals acted as gatekeepers to school success and to the reward system of the outside community. Thus an emphasis upon established forms of American athletics and their related rituals exacerbated the process of isolating and marginalizing immigrant and minority students.

The notion that immigrant and minority students were enabled to gain respect only on “American” terms was highlighted in the study (Grey, 1992). Involvement in sports, particularly football, was a means to escape the relative marginal status of their social background. There was a long-established argument that interscholastic sports programs promote democratization of the student body. Yet, there was a limited number
of minority students who benefited from this democratizing process by receiving recognition for successful contribution to the popular sports.

Therefore, emphasis on participation in established sports as the means to achieve higher status contributed to and perpetuated the lower status of minority and immigrant students in the school’s social hierarchy. A mechanism to accommodate varied student athletic interest, such as administratively supported soccer club, could indicate to students that the school was genuinely interested in accommodating their unique cultural backgrounds and thus serve as legitimate venue for them to demonstrate their willingness to identify with the school and become integrated active members of “American” society on their own terms.

These studies indicate that sport and physical recreation can play a key role in the successful settlement of recent immigrant youth, but only if there are conditions that foster inclusion. It highlights the potential positive force that teachers, school administrators, coaches and other PA providers can represent in this process by minimizing the experience of social exclusion. This necessitates that the leaders guiding the newcomers and their mainstream peers are sensitive to the “issues of language barriers, lack of familiarity with the rules or skills of the game, the potential for group activities to be exclusionary, and discrimination by other students,” (p.50) as Doherty and Taylor (2007) suggest.

These studies also confirm that PA participation and its role in young immigrants’ process of adaptation to the new environment are more complex than traditionally assumed. Stodolska and Alexandris (2004) found that the role of recreational sport participation in immigrant communities can be quite complex. Studying the role of
recreational sport in the adaptation of first generation immigrants, they found that newcomers followed very distinct paths in their adaptation process. For some, recreational sport participation acted as a factor promoting their acculturation to the White American mainstream; however, for others it helped in reinforcing their ethnic identity, facilitated retention of traditional culture and strengthened ties with ethnic community members.

Yet, this study (Stodolska and Alexandris, 2004) also introduced a third path immigrants may follow in their adaptation to the host country and that was adopting the sub-culture of their own ethnic community. An interesting finding of this study suggested that some immigrant parents’ process of acculturation was accelerated by their children’s involvement in recreational sport. These middle-class Polish immigrants attended sporting events and games where they established contacts with parents from other ethnic groups. This study also provided evidence about the lack of involvement in children’s school activities among working-class immigrant parents. Therefore, it is believed that PE teachers and coaches could help immigrant youth overcome the barriers to social inclusion through sport, yet, the frequency and quality of this facilitation is in question.

Studies about specific ethnic/immigrant groups and their experiences in PE have been limited despite the long history and number of immigrant newcomers in the United States, Canada or Britain. Nevertheless, the findings provide invaluable information about the issues that these young newcomers face when confronted with numerous challenges posed to them by the traditional approach to PE taught by teachers with limited understanding of their culture.
Immigration, diversity, and issues of racial, ethnic or religious differences within the PE context have been understudied (Hodge, Kozub, Robinson, & Hersman, 2007). Therefore, this proposed research study is both timely and important to better understand the needs of a growing Hispanic population. Specifically, there is a clear need for future studies to focus on the experiences of young students from Hispanic families during PE and sport. A key focal point is how inclusive practices that would cater not only to the mainstream students but to various minority children can be created and sustained. Researchers should also explore ways how to best prepare future PE teachers for their role as facilitators of social inclusion in PE and sport.

**Purpose**

Guided by the underlying assumptions of the Critical Race and Social Cognitive theories, the purpose of this case study is to describe the physical education experiences of Hispanic students in relation to the cultural competence of their physical education teacher and the school environment at one rural elementary school. Additionally, it is the goal of the researcher to identify how students describe their own PA engagement during PE and what factors are associated with that engagement. Through prolonged and persistent observation and discussion with the participants, the researcher will identify culturally relevant practices that could be recommended to other physical education teachers. Given the health disparities that exist among ethnicities, this study may help to discover characteristics that enhance the PE experience and in-school PA engagement as a means of disease prevention.
Chapter Three: Methodology

Both the level of PA engagement and risk for sedentary disease are associated with ethnicity. Hispanic children exhibit lower levels of participation in both non-school moderate to vigorous PA and PE-based PA than do their White peers (Gordon-Larsen et al., 2000; Johnston et al., 2007; Springer et al., 2009). Hispanic children spend more time in sedentary pursuits such as watching TV or playing video games than Whites (Sallis et al., 1993). Combined with consuming high-calorie diets this puts Hispanic children at greater risk for becoming overweight and developing obesity-related diseases such as diabetes, cardiovascular disease, or depression. Given the growth of the Hispanic population in the US as well as higher risk for sedentary disease in this population, further research is warranted. Accordingly, the purpose of this case study was to describe the PE experiences of Hispanic students in relation to the cultural competence of their PE teacher and the school environment at one rural elementary school.

To ensure that each research question is answered effectively, various quantitative and qualitative research methods were utilized. Despite considerable differences between quantitative and qualitative research, their integration in mixed methods approach has been widely used and is popular among researchers for its utility and the empowerment it offers (Tashakkori & Teddlie, 2009). The research questions and relevant previous research guided the design of this investigation.

Because this research was novel, it was conducted as a case study. Case studies are commonly utilized in the study of health issues as well as educational cultural competence (Stake, 1995). Because a case may be an individual, a practice, or an entire school, it affords the researcher opportunity to fully adhere to the underlying tenets of
the CRT. Specifically, it permits the researcher to develop a meaningful understanding of and implications for teacher and learners perceptions about effective, iterative learning experiences.

Yin (2003) defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context and is commonly employed for exploratory, descriptive, and explanatory purposes. The use of case studies for research is dependent upon three conditions: “(a) the type of research question posed, (b) the extent of control an investigator has over actual behavior events, and (c) the degree of focus on contemporary as opposed to historical events” (Yin, 2003, p. 5). Research questions that ask “how” or “why” are the best fit for case studies. These data were collected for both exploratory and confirmatory purposes as it was necessary for the researcher to authenticate the level of PA engagement of the students participating in PE and the extent to which this met the best practice guideline of 50% of the classtime (National Association for Sport and Physical Education [NASPE], 2009).

The extent of the control and the degree of focus on contemporary events also influences the decision to utilize the case study method. If “a ‘how’ or ‘why’ question is being asked about a contemporary set of events, over which the investigator has little control” (Yin, 2003, p. 5) it is an ideal circumstance for case study analysis. Further, case studies can be based on any mix of quantitative and qualitative evidence. Among the six most commonly used sources of evidence in case studies are: documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts; all of which were utilized as data in this study.
**School Context**

This research study was conducted in a traditionally White small town community in the Midwest with a small but rising proportion of Hispanics. Although the official statistics about the city’s population (total population approximates 13,000) indicate that only 10% identify themselves as Hispanic/Latinos, in the primary school (3rd through 5th grade) chosen for the study Hispanic students constituted more than 30% in 2011-2012, which is higher than the overall proportion of Hispanic children in the state and in the U.S. schools. Low-income families represented 85% of the school community; the mobility rate was 33% and attendance approximately 96%. Of the students, 24% were classified as having limited English proficiency (LEP). Although the student population was diverse, the teachers were very homogeneous, comprised of entirely non-Hispanic White teaching staff (100%) and mostly females (90%).

All students in the school participated in three days of PE classes each week. The first two classes of the week were 45-minutes long, while the final class on Friday was only 20-minutes long. The PE teacher had purposefully created this schedule as a means of offering extended opportunity for practice and exposure to health-related fitness content. The brevity of the Friday classes permitted the PE teacher to teach all of the students in the school prior to the weekend. This was important to the teacher because he felt that it aided the students in creating positive habits related to PA engagement. Further, he could inform the students how to be physically active over the weekend. The teacher was a non-Hispanic White male, who had been nominated for several teaching awards over his 30-year career and has a well-established relationship with the university
conducting research, serving as a model teacher. The PE curriculum has a distinct scope and sequence focusing on motor skill practice, physical activity engagement, attainment of fitness goals, nutritional content, and understanding of the value of health-related fitness and movement concepts.

Given the evidence of best practice by the teacher, implementation of standards-based curriculum, and administrative support for research (collected during previous research studies, i.e., Erwin, 2006), this school, program, and teacher were selected for further study over other schools where there was little evidence of culturally relevant pedagogy and lower proportions of Hispanic students. Due to the previously established relationship between the school and the university through collaboration on different research projects, the principal and the PE teacher were eager to host this project.

Participants

There are no rules for sample size in qualitative research, as “the validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size” (Patton, 2002, p. 245). Both purposeful (interviews with Hispanic students, PE teacher, principal) and random sampling (which PE classes were observed) were utilized in the study. Purposeful sampling ensures that rich information is gathered from a targeted audience.

We planned to recruit up to 120 elementary school children in grades 4 and 5 between the ages of 9 and 11 for this study. At least 10, but no more than 25 of the 120 participants were to be Hispanic students. Hispanic children (both the well-acculturated and the less acculturated from recent immigrant families) were targeted because they had
been found to exhibit lower levels of PA participation and higher stress related to
language barrier, fitting in, cultural tensions, or adjustment related to migration.

**Personal Bias**

Conducting research grounded in CRT suggests that the researcher be a participant-observer and utilize storytelling or counter-storytelling. Therefore it was valuable to document my own know bias as the researcher. At the time of the study (2011-2012 school year), I was a graduate student researcher and was 33 years old. I identify myself as a transnational migrant, with Czech being my primary nationality and culture. I was multilingual: proficient in Czech and English. I could also read, write, and communicate in intermediate-level Russian, German and French and beginner-level Spanish.

I studied teacher education and my Master’s thesis explored multicultural education and its possibilities for impacting the education of “Romani” children, the biggest and most marginalized minority ethnic group in Czech Republic. In my Master’s thesis, I integrated both journal entry observations from a one year stay as a teachers’ assistant and volunteer in two elementary schools in Pennsylvania and years of exploration of the Czech Romani sub-culture. I worked as an English language and PE teacher in Czech Republic before beginning doctoral work in Physical Education Teacher Education in the US.

I could strongly identify with Gloria Anzaldúa, when she described her “borderland” identity saying: “I am a turtle, wherever I go I carry home on my back” (Anzaldúa, 2007, p. 43). I believe that my cultural background, which I cannot dismiss wherever I am, gave me a unique lens through which to view the often unquestioned
status quo. Personally and professionally, although not Hispanic, my experience in crossing cultures and languages positioned me as an in-betweener rather than an outsider in this study (Anzaldúa, 2007). The findings from this research will be reported in first person or how I saw the study participants’ PE and PA engagement and its related characteristics.

Regarding anticipated outcomes of the study, I believed that Hispanic students would exhibit a lower level of PA engagement in PE due to personal characteristics and environmental factors. Based upon previously observed work with this teacher, I anticipated there would be evidence such as lessons plans, symbols, verbal praise, positive feedback, and other unique strategies utilized to accommodate Hispanic students, especially the less acculturated. Hispanic students would report experiencing constraints that inhibit PA engagement during PE, such as lack of understanding of the PA task, lower level of enjoyment during class, higher amount of incidents experiencing conflict and less satisfaction in relationships with peers.

Institutional Review Board Approval and Consent/Assent Documents

Upon procurement of Institutional Review Board approval, I started recruitment by first having a table at the parent orientation and registration evenings at the school and then by visiting the PE classes and introducing the study to the potential participants. Information about the study was distributed among students to take home to solicit parental consent. Parent consent forms and child assent forms were provided in both English and Spanish (Appendix A). In addition, consent was solicited from one PE teacher, and one principal (Appendix B). Once parental consent and child assent were
secured and recruitment had ended the following steps were taken to collect the data (view Appendix C for data collection overview).

**Data Collection / Procedures**

To create a study of the highest scientific standard aligned with the research questions, many quantitative and qualitative methods were employed. Various data methods broaden the perspective and permitted confirmation of the findings. The procedures utilized to gather and analyze these data are described in the section below. Data reduction and analysis is described by method and then collectively at the end of this section.

Given the race, ethnicity, and age of the participants as well as the potential impact of bias in this study additional care was taken to utilize culturally sensitive assessments. Because some children may be less acculturated or appear acculturated but may actually be more adept in their native tongue, the researchers provided all written documents both for the students and their parents in English and Spanish. A Spanish translator was present during group interviews with Hispanic students.

Assessment can be made culturally sensitive through basic and active preoccupation with the culture of the group or individual being assessed (Ponterotto, Suzuki, & Meller, 2001) and therefore those gathering information should consider ethnic identity and acculturation. Specifically, there are three major characteristics to consider: (a) Does the question give an unfair advantage or inhibit one ethnic group over the other; (b) How do incident factors such as order of interview questions, interviewer personality characteristics and ethnicity influence the participant response; and (c) Are the data
collection methods culturally relevant. The following instruments/data collection techniques were selected for use in this study because bias was minimized.

**Initial interview with the PE teacher.** At the convenience of the PE teacher, a one-on-one semi-structured interview was scheduled and conducted in a private office on school grounds. This took place during the first full week of school of the fall semester 2011. An interview guide was utilized to ask questions about professional training, curriculum, and lesson planning. The interview questions (Appendix D) were followed by a prompt, if needed and were audio recorded and transcribed verbatim. A constant comparative process was employed to analyze data by individual instrument or method as well as collectively (Patton, 2002). Discrete statements were coded and patterns identified (Strauss & Corbin, 1998).

Abbreviated, frequent informal interviews were conducted with the PE teacher throughout the semester, as a follow-up to the formal initial interview and as a means to comment on the events happening and providing explanation and his thoughts on particular daily events.

**Multicultural Teaching Competence Scale (MTCS).** Following the initial interview, the PE teacher was asked to complete the MTCS survey (Appendix E) to identify his perceived level of cultural competence. The MTCS (Spanierman et al., 2006) was developed to evaluate the cultural competence of teachers. Given that focus on cultural competency in preparation of PE teachers is a relatively new idea, the PE teacher in this study had not been introduced to these ideas during his teacher education. However, teacher cultural competence can be improved through other means such as professional development, interactions with people from diverse backgrounds, and self-
education. The MTCS scale has 16 items using a Likert scale ranging from (1) “strongly disagree” to (6) “strongly agree.” Six items assess teacher’s multicultural teaching knowledge (MTK), which is their perceived confidence in knowledge of concepts such as ethnic identity theories, historical experiences of ethnic minorities or community resources. The other 10 items assess teacher’s multicultural teaching skills (MTS), which is their self-reported ability to utilize culturally responsive methods, such as providing equal opportunity for success, planning activities that celebrate diversity, examining instructional materials for ethnic bias, and integrating cultural values of ethnic minorities into their teaching. Cultural competency score is derived from averaging the MTK items and MTS items, respectively.

This survey was selected and included in this study as a means of gaining insights into the PE teacher’s cultural competency, which is the foundation for providing culturally relevant learning experiences for students. As previously reported on page 32 of this proposal, Ladson-Billings (2009) highlighted the difficulty in differentiating between culturally relevant and assimilationist behaviors and therefore suggests that as many sources of information (MTCS survey, extensive and improvised interviews, and artifacts) be used to ensure authentic assessment. For example, a teacher’s cultural competency may be the reason why racism is minimized and learning maximized in his/her classes. Further, his/her expansive view of equality may be the trait that allows him to consider each student’s unique characteristics rather than providing homogeneous instruction to all learners. Cultural competency may also be viewed as a prerequisite for understanding the Hispanic student voice and ability to consider all students’ views when
designing learning experiences for them. This survey compliments the interview questions and helps to provide triangulation and trustworthiness.

**Observations of PE classes.** Upon completion of the initial PE teacher interview, arrangements were made with school officials to conduct multiple systematic and informal observations of the PE classes. Observations took place during the whole school year starting on the first day of school. These observations mainly focused on observing the engagement of the selected study participants in their PE class and their interactions with the PE teacher and others. Observations not only focused on the PA engagement of students, but also instructional strategies, evidence of cultural competency of the PE teacher or the focus of an observation was based upon the questions that emerged from the observation of a previous lesson.

Observation notes and a reflective journal were kept for further analysis. As data were constantly compared questions arose regarding specific criteria from the SCCOC or aspect of culturally relevant pedagogy that required further investigation. Specifically, observations were used for confirmatory purposes, used to provide rich details about a given situation, or to explain a negative case.

**Interview with the principal.** Within the first few weeks of the school year, a semi-structured interview was conducted with the principal (Appendix F). In this interview, I gained insight and better understanding of the school environment concerning the education of Hispanic students and the principal’s view of the PE program and the PE teacher. Following the interview the principal completed the SCCOC.

**School-Wide Cultural Competence Observation Checklist (SCCOC).** Both the principal and the PE teacher completed the SCCOC survey. The SCCOC (Appendix G)
was designed to be used by school leaders for conducting culture audits in schools based on review of literature on cultural proficiency, inclusive schools, and cultural competence in human service organizations (Nelson & Bustamante, 2008). The SCCOC examines policies, programs, and practices through observations rated on a Likert-type scale from one (never) to five (always). It contains 33 items relevant to school-wide cultural competence and these items are organized in eight domains: (a) school vision, (b) curriculum, (c) student interaction and leadership, (d) teachers, (e) teaching and learning, (f) parent and community outreach, (g) conflict management, and (h) assessments. The checklist contains an additional column asking observers to note evidence or documentation supporting their observations. An area for additional field observation notes is also included at the end of the checklist.

This tool was designed to help school leaders assess strengths and needs related to characteristics of their school’s cultural competence and determine action plans based on this assessment. The SCCOC was tested for construct validity with a sample of 151 school leaders (Nelson, Bustamante, Wilson, & Onwuegbuzie, in press). The results of an exploratory factor analysis revealed two significant domains in the areas of policy and practice that were consistent with the literature on organizational cultural competence and supported the use of all 33 items on the SCCOC. Additionally, the observation checklist was field tested by practicing school leaders who used the SCCOC to make school-wide observations and determine areas of strength and need in moving their own schools toward cultural competence. School leaders selected three primary need areas based on low ratings on the checklist scale (below a three) and developed short and long term goals focused on improving cultural competence in these need areas. These goals were included in an overall cultural competence action plan. School leaders reported that they
found the SCCOC very helpful in guiding both their observations and their strategic planning efforts.

The SCT suggests that the greatest level of PA engagement will result when learning experiences are vicarious. Experiences of this type help individuals define which behaviors are acceptable in a given environment (i.e., it is cool to play hard and be active during PE). Since school cultures are unique, this survey is particularly valuable in understanding how welcoming the atmosphere is in relation to ethnic and cultural diversity. I utilized the results from the SCCOC to describe the school environment. Additionally, the criteria were used by the researcher for observations and collection of artifacts that provide evidence/documentation of multicultural practices specific to serving the Hispanic students.

**PA data collection using GXT3 Accelerometers.** Once a level of comfort was reached among the PE teacher, researcher, and students, the PA data were collected using accelerometry. As the students entered the gym those who provided parental consent and signed a child assent were given the Actigraph accelerometer to wear during the lesson. At the end of the lesson during exiting the gym students returned the accelerometers to the researcher. Data from the accelerometers were downloaded daily into a computer, stored and later analyzed using Actigram software.

GXT3 Actigraph accelerometers were utilized to measure PA engagement within PE classes. An accelerometer is a small box similar to a pedometer, which is worn on a belt to collect information regarding the frequency and intensity of vertical and horizontal movements and is measured as epochs. Actigraph accelerometers are devices that are not invasive and only require the child to wear an elastic belt with a small box on it around his/her midline. Participants simply place the belt with the accelerometer around their waist and engage in PE class.
PA data collection continued in each class over a three-week period or until at least six days of PA data was secured (Kang et al., 2009). Altogether there were 52 lessons during which accelerometry was collected for the whole length of the lesson. Accelerometers are validated for measuring PA in children (Puyau, Adolph, Vohra, & Butte, 2002; McClain, Abraham, Brusseau, & Tudor-Locke, 2008). Accelerometers are often used for PA assessment in children because of their objectivity and high validity (Sirard & Russell, 2001).

The use of accelerometers enabled the researcher to identify the amount of time students spent in moderate to vigorous physical activity (MVPA) during a lesson. This is an imperative criterion for determining the effectiveness of the PE lesson. It is best practice to have at least 50% of the lesson time spent in MVPA. Accelerometry allowed the researcher to make comparisons of PA engagement between and among the students embedded in the same and different classes.

**Acculturation, Habits, and Interests Multicultural Scale for Adolescents (AHIMSA).** In the second half of the school year when all the students were familiar with the researcher and a desirable level of trust was reached, all the Hispanic student participants completed the AHIMSA survey (Unger, Gallaher, Shakib, Ritt-Olson, Palmer, & Johnson, 2002), which took approximately 10 minutes to complete. This survey served as a great tool to gain better insight into the Hispanic students’ levels of acculturation. The AHIMSA survey was adopted and modified for the use with the children in this study (Appendix H).

These modifications included but were not limited to: (a) providing both English and Spanish version of the survey and allowing students to choose a version they wanted
to complete, (b) being available to answer any questions students had in small group settings, (c) providing clarity whenever needed, and (d) noting their explanations of areas in which they need clarification. For example, many of the students wanted to understand what to write in the space for national origin since each parent may have been of different nationality. Sometimes they wrote two different national origins with notes about which was for their mom and which was for their dad. At other times I made notes from their oral responses about each of their parents separately.

The AHIMSA includes eight statements and generates four sub-scores: United States Orientation (assimilation), Other Country Orientation (separation), Both Countries Orientation (integration), and Neither Country Orientation (marginalization). The statements assess friendships, favorite movies, TV shows, holidays celebrated, food, and personal preferences on a 4-item scale. This scale coupled with questions about national origin and language usage served as a basis for understanding the participants’ levels of acculturation. Since level of acculturation has been associated with physical activity engagement, this was believed to provide insight into the variation in PA engagement.

This survey was selected and included in this study as a means of identifying the child participant’s family origin and ethnicity and gaining initial insights into the child’s acculturation level. According to the CRT, this information is valuable as it facilitates descriptions of nuances in individual’s lived experience. This survey also aided in the discovery of factors that may be associated with PA engagement during PE. AHIMSA is a valid and reliable tool to measure student participants’ level of acculturation (Unger, Gallaher, Shakib, Ritt-Olson, Palmer, & Johnson, 2002).
Opinionnaires. Additional observations of the PE classes took place with oral opinionnaires utilized at the end of a class session. These were brief, no longer than five-minute interviews, conducted as the students transitioned out of the gym. Up to two students per class were selected to answer two to four reflection questions (Appendix I) related to the completed PE lesson.

Focus group interviews. Four focus group interviews with Hispanic student participants in groups of four to six children were conducted towards the end of the school year after the students were well accustomed to the researcher’s presence in the gym during PE lessons. A semi-structured interview guide (Appendix I) was utilized to ask questions about the school, participation in PE and PA, with the intention to better understand the potentially unique experiences of Hispanic children with PE.

The focus group interviews followed the guidelines of Krueger (1998) and began with broad topics, progressing to more focused questions concerning students PE experiences. The interview sessions took up to 30 minutes. Due to the students’ varied English language proficiency, some of the Hispanic focus groups were conducted with the assistance of a translator fluent in Spanish. All interviews were audio recorded, transcribed verbatim and when necessary translated into English.

Collection of artifacts. Additional information was gathered through collection of artifacts from the teacher. These were materials used in lesson planning or lesson delivery such as quizzes or worksheets. Other artifacts included copies of grading book, letters sent home to parents or copies of various PE assessments.

Final Interview with the PE teacher. A few weeks after the end of the school year, a final interview was conducted with the PE teacher as a means of debriefing the
experience. The interview was conducted at the time of his convenience and he was asked to reflect on the school-year and evaluate his work with the classes and particularly with the Hispanic students. An interview guide was utilized to that posed questions about his perceptions of school year with focus on the working with Hispanic students (Appendix J). This interview was audio-taped and transcribed verbatim.

**Data Analysis and Trustworthiness**

This case study employed a mixed methods approach to describe and understand the level of PA engagement among Hispanics in a PE program in the rural Midwest. To comprehensively interpret these data all sources were triangulated. The AHIMSA, MTCS and SCCOC surveys were scored in accordance with the valid and reliable scoring scale.

Quantitative data gained through accelerometry were examined for normality, and analyzed using descriptive statistics. Pearson Product Momentum correlations were employed to identify associations between variables such as level of acculturation, gender, ethnicity and environmental factors (Kang, Bassett, Barreira, Tudor-Locke, Ainsworth, Reis, Strath, & Swartz, 2009). Surveys results (e.g., AHIMSA overall score, US orientation score (assimilation), other country orientation score (separation), both countries orientation (integration), and neither country orientation (marginalization)) were also analyzed to identify potential associations using the Spearman rank correlation, Chi-Square, or cross tab analyses.

Qualitative data gathered through interviews, observations and documents were analyzed using content analysis (Patton, 1987). Content analysis involves identifying coherent and important examples, themes, and patterns in the data. This analysis took place in two phases. First, it was coded for emerging themes in the process of inductive
analysis. Deductive analysis was used in evaluating the school environment based on SCCOC criteria and effectiveness of the PE program based on NASPE recommendations. The case of this one PE teacher and his Hispanic students were created in the form of a narrative using storytelling and verbatim citations of the transcriptions.

Trustworthiness, a term suggested by Lincoln and Guba (1985), was established through various means. The basic question to be answered when establishing trustworthiness of qualitative research is that of true value. In other words, are the findings of the research true for the context and the participants? Are they credible? Considering that there are multiple constructed realities that are true for different people in different settings qualitative researchers use multiple techniques to establish credibility.

First, prolonged engagement, which is described as extended time spent in the research setting to allow research participants to build trust in the researcher and feel more relaxed to be themselves. It also allows the researcher to learn the culture of the setting and penetrate into some nuances in meaning of the events occurring. By spending extended time in the setting, the researcher may detect misinformation and distortions in understanding participants’ reality. However, the researcher must also be careful about her/his ability to keep a certain healthy level of distance that will allow for using some of her/his own judgment in describing the setting and participants and prevent going native. I integrated many of the above mentioned quality checks into the current study.

As a researcher, I utilized prolonged engagement by spending many hours in the school setting with children and the teacher in the PE classes across one entire school year. This allowed the participants to become accustomed to my presence and be more
open when later interviewed. It also allowed me to better understand the culture of the school and the PE environment.

Second, persistent observation refers to the researcher’s ability to be vigilant while emerged in the setting, which provides for a depth of understanding of the different occurring phenomena. Using persistent observation enabled me to reach a deep level of understanding of various nuances related to the PE class environment.

Third, the most important and practical technique for establishing credibility is triangulation. Denzin (1978) described triangulation as the use of multiple sources of information, multiple methods, multiple investigators and multiple theories. Triangulation of methods was reached by using observations, interviews and document analysis; triangulation of sources by utilizing both the students’ and the PE teacher’s perspectives.

Fourth, peer debriefing is the opportunity to regularly discuss the research project with a peer, which can serve multiple functions, such as testing the researchers honesty, probing bias, testing hypothesis and ideas, reconsidering next steps in the research project, and allowing for catharsis by clearing one’s mind and sharing emotions. Peer debriefing was done by meeting with another graduate student to discuss the research progress, share new insights, ideas and hypothesis.

Fifth, negative case analysis is the process of looking for and utilizing disconfirming data to revise hypothesis. However, attempting zero exceptions might be too rigid of a standard for which to aim. A negative case analysis ensures that all ideas are accounted for within the act of coding (Lincoln & Guba, 1985). Negative case analysis was used to further explicate the breadth of the major findings.
Sixth, member checking is a technique in which the study participants are asked to judge the overall credibility of the research. Member checking took place by providing the adult informants with case narrative for corrections and feedback.

The second feature of trustworthy qualitative research is transferability. It is analogous to the term external validity used in quantitative research. However, transferability is different from external validity as naturalist cannot provide any index of applicability per se, but rather provide as much information as possible and leave it on the judgment of those who might wish to apply it. Thick description of the participants and the setting is the main technique utilized that provides basis for transfer to be contemplable. Contextual journal was kept with space both for description of events but also emerging hypothesis and new ideas to inform the research process.

Dependability is the third feature of trustworthy qualitative inquiry and is analogous with reliability used in quantitative research. Consistency of results in conventional studies is demonstrated by replication. This is based on naïve realism that posits there is something “unchanging” to be studied. The naturalist on the other hand sees the world differently, which could be nicely illustrated by the famous saying by the Ancient Greek philosopher Heraclitus of Ephesus ‘You cannot step twice into the same river.’ Thus qualitative researchers seek means to account for naturally occurring instability instead.

This can be operationalized by overlap of methods, stepwise replication or inquiry audit. In an inquiry audit both the process and product of research are examined. It is analogous to business audits where an external evaluator checks records to confirm the business’ compliance with legal regulations and standards of operation. In a similar way,
in an inquiry audit an experienced researcher was invited to examine the process of data collection, storage, data analysis, and the logic leading to research findings, interpretation of findings and recommendations.

The last feature of trustworthy qualitative research is confirmability, which is analogous to the term neutrality in quantitative research. It is established by focusing on the characteristics of the data, not the researcher, through conducting a confirmability audit. All data is organized and an audit trail prepared with residue of records systematically placed in six classes: raw data, data reduction and analysis products, data reconstruction and synthesis products, process notes, intentions and dispositions related material and instrument development information. Lincoln & Guba (1985) provide practical information how this audit might be arranged and conducted. All data in the current study was well organized and an audit trail kept. Expert review was utilized by frequent discussion with my advisors and committee members to ensure high quality of every step taken in the research process. It provided me as a young researcher regular checks to make sure every step of the study was high-quality work.

Patton (2002) claims that other features of qualitative inquiry play an important role in establishing trustworthiness. According to him, credibility depends not only upon use of rigorous methods, but also on philosophical belief in value of qualitative research and credibility of the researcher, which can be established through training, experience, keeping a good track record, professional yet honest presentation of self-proving awareness about one’s own bias as a researcher.

In the current study, a reflection on my own personal bias was written and is presented with the research findings. As a researcher I expected to see that the unique
establishment of Hispanic families in this community would result in specific issues in the PE settings. I anticipated that some of the Hispanic children would be struggling in the process of assimilating to the mainstream culture represented by the school and hence would not exhibit the common pattern of participation in PE. I also anticipated that the interviewees would identify the natural and social environment as one of the main factors influencing their PA participation in and out of school. From the PE teacher interviews I expected to reach better understanding of his struggles and successes with reaching the Hispanic students.

I planned to use rich description of the environment and the study participants and to employ storytelling and narrative text, supported by participant quotations, survey scores, and analysis of quantitative data to describe the main findings of this case study investigation. Results and relevant implications were intended to be disseminated to the public including PETE professors, PE teachers, or PA coordinators.
Chapter Four: Results

Given the known health disparities associated with Hispanic children (Ogden et al., 2008) and the potential leadership role that physical education (PE) programs and their teachers can play in the effort to increase children’s health (Pate et al., 2006), it is important to describe Hispanic children’s experiences during PE and how experienced, effective PE teachers attempt to meet their needs. The primary purpose of this study was to describe PE experiences of Hispanic students particularly in relation to the cultural competence of their PE teacher and the school environment at one rural elementary school. The main research questions guiding this study were:

1. What are the experiences of Hispanic students in PE?
2. In what ways does the PE teacher contribute to the Hispanic students’ PE experiences?

To ensure that each research question is adequately answered, various quantitative and qualitative research methods were utilized. Because this research is novel, it was conducted as a case study of one elementary school PE program. The overview of data collection is provided in a diagram on page 227 (Figure 1).

In order to explore from a theoretical perspective Hispanic student participants’ perceptions of their own experiences and the contextual factors within an elementary school physical education setting that influence these experiences, Social Cognitive Theory (Bandura, 1986) and Critical Race Theory (Ladson-Billings & Tate, 1995) were chosen to ground the investigation.

After a detailed description of study participants, the setting, the PE program, and the PE teacher, the results are organized into two main sections: quantitative and
qualitative results. The quantitative data section is divided into six subsections: body mass index, caloric expenditure, measure of PA in metabolic equivalents, percent time spent sedentary during PE, percent time spent in moderate to vigorous PA, and moderate to vigorous PA by lesson content.

The qualitative data section is divided into five subsections each describing one of the main themes and many subthemes that emerged from analyzing all available qualitative data sources. Comments are provided where results from quantitative data support the qualitative data. The chapter is concluded with a summary of the main findings. All names (of the school, the PE teacher's and the children's) used throughout the chapter are pseudonyms.

**Student Participants**

Among the 247 students at Eastlake Elementary School (EES), there were 160 students enrolled in grades four and five who were the potential participants in the study and who were given parent consent forms to take home for their parents to read and sign. Approximately 58% of these parents (i.e., 93 parents) signed the consent forms agreeing that their child could participate in the study. Only one of the students whose parents gave permission to participate refused to sign the child assent. There were many students, however, who did not attend school on particular days or moved away from the area, and thus were not able to participate in all parts of the study.

Among the 160 potential study participants, 47 were Hispanic, which represents approximately 29% of all fourth and fifth grade students. Among the 92 study participants 23 were Hispanic, which represents 25% of study participants and is similar to the percentage of Hispanic students in grades four and five. Although both the parent
consent forms and student assent forms were provided in English and Spanish, Hispanic parents may have been reluctant to allow their children to participate in a research study or simply they did not return the form back to school. In summary, 92 students were participants in the study, with 23 identified as Hispanic.

The overall mean age was 10.05 (SD=0.56) with 12% identified as 9-year-old, 70% as 10-year-old, and 18% as 11-year-old. Further analysis of age using an ANOVA revealed no significant difference in age between Hispanic (M = 10.01, SD = 0.57) and non-Hispanic (M= 10.03, SD = 0.55) students.

Hispanic Students’ Acculturation

Hispanic student participants completed Acculturation, Habits, and Interests Multicultural Scale for Adolescents (AHIMSA) survey, participated in an opinionnaire (short individual or up to two-student interviews at the end of PE class) and participated in a focus group. The AHIMSA survey was used to evaluate Hispanic participants’ levels of acculturation. Among the 23 Hispanic students one did not fully complete the survey.

Among the 22 complete responses, 13 students claimed that their family was of Mexican origin, six claimed as their families’ country of origin Mexico and another country – three had one parent from Mexico and one from US, three had one parent from Mexico and the other parent from Honduras, Guatemala or Spain, two identified Puerto Rico as their families’ country of origin and one student explained that one of his parents was from Puerto Rico and the other from US. To summarize, 19 students were of Mexican origin (six mixed) and three students were of Puerto Rican origin (one mixed).

Among the 23 participants, 15 were born in the US, six were born in Mexico and two were born in Puerto Rico. Among the eight students born out of the United States
(U.S.), four had been in the U.S. for at least five years and four had been in the U.S. for two years or less. Quite logically, six of the foreign-born students chose to complete the survey in Spanish. It included all four of the students who had been in the U.S. not more than two years and two other students from the group who had been in U.S. at least five years.

As for their linguistic ability, all the Hispanic students could be divided into three primary groups: Spanish only, bilingual and English only. The same above mentioned six students who chose the Spanish version of the survey belong to the Spanish only group. Not only did they prefer Spanish on the survey, but they also used Spanish when providing responses during group interviews and oral opinionnaires; the use of a Spanish translator during these interviews was necessary. Given these findings, related variables in the database were coded as such.

Most of the other students (n = 15) were identified as having varying levels of linguistic abilities in both English and Spanish and were considered bilingual. Only two students were identified as English only because they did not speak Spanish and had little to no knowledge of the Spanish language. In summary, among the 23 Hispanic participants there were six Spanish-speaking only, 15 bilingual and two English-speaking only.

The AHIMSA includes eight statements and generates four sub-scores: United States orientation (assimilation), other country orientation (separation), both countries orientation (integration), and neither country orientation (marginalization). The statements assess friendships, favorite music, TV shows, holidays they celebrate, food, and other personal preferences on a four-item scale.
Six students scored high (four or higher) on the assimilation sub-score and quite logically both the English-speaking-only students and none of the six Spanish-speaking only students were among them. It is interesting to note that this group included all four students who reported that one of their parents was from the U.S. Seven students who scored low (2 or 3) and nine students who scored very low (1 or 0) on the assimilation sub-score.

Only three students scored highest (four or higher with no other score being higher than 3) on the separation sub score. All of these students were among those identified as Spanish-speaking only. Most students (10 all together) scored highest (four or higher with no other score being higher than 3) on the integration sub score, which suggests that they were able to integrate parts of the culture of both countries.

Overall Hispanic students who participated in the study represented a diverse group with varying degrees of English and Spanish language abilities, distinct levels of acculturation, different immigrant generation status and varied ethnic affiliation. Given these findings, the variable of assimilation and ethnicity were both considered in the initial analyses. After correlations were calculated the lack of a significant relationship between assimilation and ethnicity and the dependent variable measuring level of physical activity participation (e.g., percent of time in light physical activity) was removed from subsequent analyses.

**Description of the setting**

The school chosen for this study, further referred to with a pseudonym Eastlake Elementary School (EES), was situated in a small town in the Midwestern part of the U.S. with population of about 13,000. Although the official statistics from the 2010
Census state that Hispanic population accounted only for approximately 10% of the population, the percentage of Hispanics in local schools was approximately 18%.

EES was an intermediate level school building including third, fourth, and fifth grades. Based on information from 12 months (first observation took place in May 2011 and last in May 2012) of prolonged observation, the School-Wide Cultural Competence Observation Checklist (SCCOC) completed by the PE teacher and the school principal, the interviews with the PE teacher and the principal, and other available resources such as the school website, the following describes the cultural competence of the school.

Although the mission and the vision statement of EES did not include clear commitment to diversity, there were many areas of the school life where diversity was at the forefront. The curriculum included a variety of cultural perspectives and there was a strong commitment to provide adequate linguistic and content instruction for second language learners.

Students from various racial/ethnic groups were not equally represented in gifted program, though support programs were in place that promote achievement and retention of lower achieving groups and facilitated the adaptation of new students into the school and classroom. Also students did not have many opportunities to be involved in community service and other service learning activities.

More than 90% of the teachers in the school were Caucasian females, however more of the beginning teachers spoke at least some Spanish. New teachers were formally inducted through structured mentoring. Although recent professional development workshops addressed certain issues of race, ethnicity and special needs, as reported by the PE teacher, there has not been a workshop that focused on issues of language and
dialect or Hispanics as an ethnic group. Rather than addressing the needs of the various groups of children, the school has a philosophy to look at the needs of individual children and serve them as individuals.

The school’s philosophy was that instruction should be differentiated to address students with special needs, while challenging all students. Strategies that account for various learning styles were used in classrooms as needed. As deemed developmentally appropriate, scaffolding was used to make connections to students’ culture and prior knowledge, as reported by both the principal and the PE teacher in the SCCOC survey. Teaching strategies accommodated the needs of culturally and linguistically diverse learners as well as children from families of low socioeconomic status.

Efforts were in place to strengthen the connections among the parents and the school with the greater community. There were ongoing, conscientious initiatives to strengthen these ties and directly increase parental involvement, by organizing events at the school such as Family Fun Night. Parent involvement programs were in place for all culture groups. Newest technology aided in building relationships through creation of an electronic community. The school however did not have any established partnerships with similar national or global schools or organizations.

Although the occurrence of intercultural conflict was recognized and proactive approaches to conflict resolution were established (reiteration of commitment to peaceful conflict resolution by reciting the Peace-Builders’ Pledge every morning or implementation of Positive Behavior Intervention and Support System) the school’s tendency was to deal with conflict on an individual basis rather than addressing it as an
issue between various groups in the school. Numerous practices were in place to ensure classroom and school safety.

Standardized testing occurred in the school as it is required by the federal government, but the school prided itself on its use of authentic assessment. Both formative and summative program evaluations were conducted across subject matters. Teachers and administrators were regularly evaluated by various constituency groups, as mandated by the state, based on the Charlotte Danielson Framework. There were no practices in place that examined the organizational traditions regarding exclusive/inclusive practices, however, there were commonly people representing all the diverse community groups at various school events and celebrations that promoted fun free activities for families, as observed when visiting Open House in the fall and as reported in the SCCOC surveys.

Students from all fourth and fifth grades were targeted for recruitment in this study because they are more mature to provide responses in interviews and participate in a survey than third graders. Based on information from the School Report Card there were 247 students in the school during the year of data collection. Approximately 35% of the students were White, 30% Hispanic, 27% Black, 7% multiracial/ethnic and 1% Asian. Most of the children (85%) came from low-income families and 24% were of limited English proficiency. The school also had a high mobility rate of 33%.

Based on the class rosters for all fourth and fifth grade students, there were 160 students who were potential participants for the study, with 47 (29%) being Hispanic. Of those 160 students, 58% or 92 provided parental consent and individual assent to participate in this study. The number of Hispanics in fourth grade reached the threshold
number that requires the school to provide transitional bilingual classroom instruction. Therefore, all fourth grade Hispanic children with limited English proficiency were placed in a separate classroom with a bilingual teacher. Hispanic children in fifth grade, however, were dispersed throughout all four of the fifth grade classrooms. This created a unique scheduling for nine fourth grade Hispanic students in this study. Accordingly, these student participants were coded and tracked as having a slightly different experience over other students in their grade level.

Hispanic children in fifth grade were integrated into all the grade-level classrooms and stayed with their class for subjects taught by specialists, which included PE and music. In classes taught by specialists, however, students were integrated with two other fourth grade classes. In PE, this meant that half of the Hispanics-only class children joined one of the four, fourth grade English-only classes and the second half of the Hispanics from the bilingual class joined another fourth grade class. This created two classrooms with a higher number of students on average, and higher percentage of Hispanics both in music and in PE. This is an important consideration because class size is related to teaching effectiveness in PE (NASPE, 2001).

The principal expressed her view that an extraordinary effort had focused on serving all the children in the school including Hispanics from migrant families. She specified in a formal interview,

I have a wonderful staff and what we have to concentrate on is how they’ve [students] improved… So you start at the bottom and rejoice with them for each low increment they make and that’s all you can do… We have teachers that lay down their lives for children and it doesn’t matter if they’re Hispanic, Black or
whatever, they need to be loved. They need to be nurtured. They need to be encouraged. Most of our little ones don’t have any adults to listen to them, to talk to them, to read to them. They’re busy trying to put food on the table. They’re busy trying to work three jobs. So really what we have to do is parent these little ones… It’s a very exciting thing… I heard a woman say once that the worst enemy of a little Black boy, and I would say it’s the same as for Hispanic children, is a White teacher who would not hold their feet to the fire – academically – and let them off and feel sorry for them. So that’s what we do. ‘You will do your homework.’ ‘You will learn to read this’. And we buy everything we can think of to bait the hook. And with these little ones, these little have-nots, that works… They [the teachers] spend hours and hours and hours planning and trying to find something that works with them [students]. And so teachers are just a Vanguard…

In his final comments on the SCCOC survey, the PE teacher, Mr. Strong, expressed his overall view of the efforts of the school staff to provide a positive learning environment for children from various community groups and promote academic achievement. He noted, “With the amount of time available, I believe, we are doing as much as possible to address cultural needs, traditions, beliefs, etc.”

This study was conducted in a small school community dedicated to serving the Hispanic students as best as they could while quickly adjusting to the changing demographics of the student population not only with increasing number of Hispanics (30%), but also students from families with low socio-economic status (85%). Based on results from the School-Wide Cultural Competence Observation Checklist (SCCOC) this
school demonstrated many features of a culturally competent school, however it also had ample room for improvement. There could be more focus on integrating global perspectives into curricula, making sure that ethnic representation in gifted program is balanced, establishing global ties through partnership with another school from across the globe, and periodically examining the organizational traditions to check for exclusive/inclusive practices.

**Physical Education (PE) Program**

All children were scheduled to have PE for 100 minutes per week, which falls short of the NASPE guidelines for best practice (135 minutes per week). In a given week with regular schedule, students participated in PE twice for 40 minutes (either on Monday and Wednesday or on Tuesday and Thursday) and once for 20 minutes on Friday. There were four class periods of PE for fourth graders and four class periods of PE for fifth graders. Classes were scheduled back-to-back in the morning with only one five-minute break for the teacher during the middle of the morning. As for the order of the classes, there were always two fourth grade classes followed by two fifth grade classes Monday through Thursday, and all fourth grade classes followed by all fifth grade classes on Friday.

Despite there being a state mandate requiring daily PE in the state in which this school was housed, the teacher and principal developed this modified schedule because: (a) it had the greatest direct contact time with students; (b) it provided time to develop learning within each lesson (e.g., 40 minutes two days per week over 20 minutes each day of the week); (c) it was highly important for the students to have PE on Friday so the teacher could remind the students to be physically active during their weekend leisure
time. Thus, the schedule reflected both the teacher’s philosophy and responsiveness to the
students needs.

Based on observations during the whole school year, the PE program provided a
great variety of experiences to the children. A lesson in the gym usually started with an
instant activity focused on a health-related fitness component. The instructions were
written on a whiteboard by the entrance of the gym. A fitness fact of the day followed
next with some type of fitness activities such as stretching on a mat, using fitness balls,
elastic bands, or other pieces of equipment. At least once a week children worked on
cardiovascular endurance by participating in some kind of aerobic fitness activity such as
running or rope jumping. There were usually between one to three primary activities each
day, such as two learning experiences that emphasized skill development, which were
followed by a small-sided game.

Throughout the year students participated in practice and preparation for many of
the popular (soccer, football, basketball, volleyball, softball) and less common sports
(badminton, floor hockey, bowling, tumbling), nevertheless the program also provided
fitness instruction with focus on muscular endurance, muscular strength and flexibility,
regular aerobic endurance training, teaching basic fitness and nutrition facts and fitness
monitoring. The PE curriculum also included fun games and activities, and special events
such as a cross-country run in the fall, adventure race and orienteering in the spring,
themed game days toward the end of the school year, and PE Challenge in both the fall
and the spring.

PE Challenge was a time in class when students could chose one of five stations
with a specific challenging task to work on and possibly pass. Each semester they would
get six new challenges to work on and the teacher would designate 10 to 15-minute time slots in PE for students to work on these. For example, during the fall PE challenge times at one station students needed to make 25 consecutive passes with a football without dropping the ball while standing in designated area behind two lines in fare distance. At another station their goal was to hula-hoop for 20 seconds nonstop. The goal of PE Challenge was to pass as many challenges as possible during the given semester. Because PE Challenges targeted fundamental motor skills, it was viewed as a creative way to motivate students.

The PE program was well organized with every lesson being purposefully planned to the smallest detail. Although the teacher did not write extensive lesson plans, he used mental planning and based on observations and informal conversations with the teacher almost nothing escaped his attention in planning. Children were taught basic rules and routines at the beginning of the school year and these were regularly reinforced and reintroduced when necessary. There were high expectations for children responsibility and self-guidance wherein they were held accountable for their behavior. Despite the high standards for student behavior set by the teacher, a positive, relaxed atmosphere was present within class and children were highly involved in the activities of the day.

Overall, this was an exceptional PE program developed by the PE teacher over many years of dedication to his profession (see Quality PE program for evidence of this assertion). This is important to note, because the participants in this study were privileged to take part in an above average program that was well recognized, respected and was nominated for various professional physical education organization awards.
Quality PE program

While focusing on the academic achievement of students and their performance in subjects included in the state standardized testing this school managed to maintain many features of a quality PE program. According to the National Association for Sport and Physical Education (NASPE, 2001) quality PE programs are comprised of five main elements: a) they are delivered by certified PE teachers, b) they provide adequate opportunities to learn (150 min per week at the elementary level), c) they teach meaningful content, d) they utilize appropriate instruction according to state and national standards, and e) incorporate accurate student and program assessment.

PE at EES was taught by an experienced certified PE specialist. All students were required to take PE. Although the time allotment did not reach the optimum amount of 30 minutes a day, it did provide the equivalent of 20 minutes a day. PE class size was in most cases consistent with other subject areas, except for the fourth grade PE integrating children from the Hispanics only class into other classes for PE. However even in those classes students were afforded reasonable access to the teacher by keeping the teacher/pupil ratio no greater than 1:25. The PE program provided students with adequate and safe equipment and facilities available for PE at all times.

The PE teacher provided children with developmentally appropriate instruction and utilized age-appropriate activities. The PE teacher was also assigned to oversee recess. He used it as an opportunity to extend his influence over the students’ whole school physical activity (PA) by establishing PA requirements, providing equipment and facilities that encourage active play and using PE time to teach activities that can be played during recess.
According to the National Standards for Physical Education (NASPE, 2004) the goal of quality PE is to develop a physically educated person who has the skills, knowledge and confidence to enjoy lifetime of healthful PA. Thus quality PE is a formal learning environment where qualified PE specialists teach students a) the skills necessary to perform a variety of physical activities, b) the implications and benefits from involvement in PA, c) to participate in regular PA, d) to be physically fit, and e) the value of PA and its contributions to a healthful lifestyle (NASPE, 2004).

PE lessons at EES were designed to develop both variety of motor skills and cognitive skills as well as teach students the value of PA. The program focused on developing the whole child by setting high expectations for student psychomotor, cognitive and affective learning. Various forms of formative assessment were utilized including fitness assessment, which provided students and their parents with ongoing feedback about their fitness levels and strategies for maintaining and increasing the respective fitness parameters. However, grading was not based on assessment of student achievement in all learning domains, but rather on participation and appropriate behavior, as is often the case among many PE teachers (Wood, 1996; Matanin & Tannehill, 1994).

As a quality PE program it was designed to offer meaningful and appropriate instruction, not only time to be physically active (Le Masurier & Corbin, 2006). Over the years the curricular focus of the PE program has shifted away from traditional sports towards establishment and maintenance of health-enhancing level of fitness by offering a variety of enjoyable age-appropriate physical activities that keep children engaged at a high activity level for majority of the lesson time. This shift evolved from the strong
support for increasing student health-related fitness and preparing students for lifelong participation in physical activities (McKenzie, 2003).

Physical Education Facilities

Based on observational notes, it was noted that a newly renovated gymnasium in the school building was always available for PE. In PE across the country, this is not always the case and therefore it was concluded that the PE teacher faced few barriers that related to facilities. This gymnasium always looked clean and shiny with appropriate lighting. With a state-of-the-art climate control system, temperature was always pleasant. The gymnasium space contained a hardwood basketball court with two basketball hoops at each end. On the left side was a climbing wall with nice clean red mats covering it when not in use. At the front of the gym was a stage covered by curtains.

On the left side of the stage was a poster with the PE rules and on the right side was a poster with Peace Builders Pledge. Throughout the year other colorful posters temporarily hung on different walls of the gym such as the Food Pyramid poster, the PE Hall of Fame listing student names with results for various physical achievements, and other posters related to instruction of the day such as PE Challenge descriptors, jump roping techniques, and physical activity recommendations.

In the middle of the wall on the right was a green chalkboard used to assign children to a team by their PE numbers. On the bottom of the right wall towards the front of the gym were stickers with numbers in order used at times to have children quickly organized and sit at their PE numbers for certain type of instruction, such as rules explanation, and in the beginning of the year, to facilitate efficient attendance checking. However, children often sat on blue marks on the floor towards the front of the gym.
when listening to instructions rather than at their numbers. There was a simple black and white clock hanging above the numbers on the wall, which was sometimes used by children when they needed to measure time in seconds, as observed during some of the PE Challenge activities.

There was a small table with a chair and a plastic box with two drawers by the wall on the left side of the gym. A clean garbage can was positioned on the left side of the stage in front of the curtains. By the exit door were marks on the sideline to facilitate students lining up so that they were spaced out and did not push each other. Overall, the gym appeared neat and clean with well-organized and stored equipment. The shipshape appearance contributed to the facilitation of positive learning environment and high expectations of civility and respect in this space.

In front of the gym by the entrance door was a small white board used by Mr. Strong for communicating instructions for instant activities at the beginning of class. Underneath was a poster with the fitness fact of the day, which contributed to increase in cognitive learning. On the ground below was a big plastic container with tennis shoes of different sizes and two buckets – one full of clean spare socks and the other for dirty socks. The PE teacher took them home regularly to be washed. This allowed the children who did not bring proper footwear to borrow the extra shoes and socks and safely participate in PE activities.

In front of the school building was a big grassy field with two soccer goals and fitness trail equipment along the fences. In the back of the school building was a large grassy area with playground equipment and a blacktop sometimes used for games such as kickball. All around the school building was a paved walking trail mostly used for
running practice. The outside areas were well maintained, clean and clearly marked with white lines in the grass. Mr. Strong maximized the effectiveness of the PE program by using all the available spaces efficiently and he seized every opportunity to teach PE class outside, weather permitting, and thus further contributed to the overall health benefits offered to students through participation in this program.

**Physical Education Teacher**

Mr. Strong was the only PE teacher in the school; he was a 56-year old Caucasian male with over 30 years of PE teaching experience. The year of the data collection was his 28th year teaching elementary PE in the same school building. The following description is based on information from two formal interviews with Mr. Strong, multiple spontaneous conversations with him in the gym or between lessons, one formal interview with the principal, multiple observations, and all other interactions. Rather than painting a picture of what the PE teacher was like, I call this description a mosaic with pieces of various information about him that when put together attempt to portray the true image as best as possible.

During the extended data collection I witnessed evidence suggesting that Mr. Strong was a master teacher with extensive experience who enjoyed his job and over the years had developed a great PE program for his students. He appeared to be a teacher who attempted to improve his program, and thrived on introducing new curriculum, therefore his PE program changed every year. He said that the biggest change over the years has been moving away from sports focus and creating a program that is more activity-based. His goal was to provide a variety of activities that his students would find enjoyable and challenging at the same time.
Locke (1997) pointed out that the best indicator of a great PE teacher is his/her focus on trying to figure out how to serve his/her students better. During my observations Mr. Strong was consistently observed behaving in this manner. As a highly reflective practitioner, when he finished teaching a very successful lesson or a lesson that he deemed less than successful, he was already reflecting on actions that he might take to make the learning experience more successful in the future. He often mentioned to me his ideas how to change the lesson next time. He also admitted that sometimes he just liked to change the lessons for his own sake, so that he did not teach the same lessons over and over and thus maintained his enthusiasm for teaching.

**Pre-impact behaviors.** Mr. Strong was enthusiastic and it was amazing for me to watch him on his feet. Almost always he was positive, high-energy individual with a good attitude who gave his job all he had. He was always ready for the students by having the space and equipment ready, which meant he often came to school early to prepare everything for the day. The school principal sometimes told me that Mr. Strong was already there when she arrived early in the morning. He was getting the fields marked or doing other preparations such as getting the gym ready, getting equipment set up, etc. In the beginning of the day before his classes started, he communicated with other teachers letting them know where to bring the students for PE. He appeared quite busy in the mornings organizing the details of the day, where nothing was left to mere chance.

He also seemed always able to get prepared mentally. Although he sometimes mentioned frustrations or bad news in the morning before the children arrived, none of it
transpired into his teaching. Once the beginning of the first lesson was approaching he was ready to go and be fully filling his PE teacher role as best as possible.

Although he did not write extensive lesson plans, he used mental planning. According to Mr. Strong, he had the plan for the day in his head and it accounted for every minute. From time to time he used note cards on which he listed the main activities of the day. He also used note cards for his weekly planning. However, when discussing plans he reported his exact plans, the amount of time he planned to spend on each activity, the tasks he would assign the students with disabilities, students’ homework assignment, and his management plans.

**Impact behaviors / classroom management.** Mr. Strong incorporated effective classroom management strategies. He maximized students’ time on task, incorporated modified games to maximize learning. He also minimized wait time. For example, he did not waste time having students sit while he took attendance. Rather he took attendance during instant activity or during other parts of the lesson. He provided clear directions and smooth transitions between tasks. He used effective strategies for equipment distribution and dividing students into groups.

Mr. Strong acknowledged that constant monitoring and using with-it-ness made the difference between an effective lesson and a lesson in which class time is lost to excessive management. He was a strong manager of the learning environment and stopped misbehavior as soon as it was witnessed. He used timeout – withholding participation in the present activity - as the primary behavior management technique. Students, however, respected Mr. Strong and often just a stern facial expression or a simple warning from their teacher sufficed to correct a student’s off task behavior.
Mr. Strong was well respected in the school and in the school district as well, as reported in the adult participants’ interviews. The principal held Mr. Strong in high regard and only used superlatives when describing him. Although the principal did not often come to observe PE, she indicated that she fully trusted that Mr. Strong was an extraordinary specialist. She applauded him for his perfectionism when organizing any whole-school or district-wide events. During a related interview, with a big smile on her face, she said that she agreed that he was “an applied kinesiologist” as he sometimes described himself.

Mr. Strong provided students with appropriate and timely feedback. Not only did he give them relevant advice on improving their techniques and using better strategy, but he also had the ability to relate to each child individually. He had great respect for his students and followed the rule, “Give them the benefit of the doubt.” In return, he appeared well respected by his students.

To motivate his students Mr. Strong used a toolbox of strategies, mainly he provided a variety of activities and designed developmentally appropriate learning experiences. For instance, when practicing running for endurance, he used various running games in which students worked with a partner, within a larger group, using different courses inside and outside. His use of diverse learning experiences made the class more enjoyable for the students. This toolbox was of particular importance in the provision of differentiated instruction as he managed to engage all children of varied abilities and preferences in tasks that increased their overall fitness while having fun.

He also used incentives such as collecting feet (markers) for his students’ PE chain/necklace, which really motivated his learners. In the beginning of the school year
each child received a simple beaded chain. Throughout the school-year children collected
toe tokens and other awards that were placed on their chains as rewards for their PE
achievements. At times their rewards were not based on an absolute distance or time, but
rather on improvement of their individual best. Many children were also motivated to
achieve a position in the PE Hall of Fame. They tried to make a certain limit or beat a
specific score to be among those whose names were printed on the PE Hall of Fame for
that achievement.

**PE teacher characteristics.** Mr. Strong was resourceful. He established, for
instance, a district-wide equipment exchange in which all the PE teachers in the district
shared a list of equipment available in their buildings and borrowed each other’s
equipment, which provided greater variety in their curricular offerings. Further, at times
when he did not have enough funding for a piece of equipment, he found ways to acquire
this equipment through other means such as using his connection with a local university
athletics department.

Mr. Strong viewed himself not only as the PE teacher, but also as the physical
activity director in the school, a progressive perspective that demonstrated continued
professional learning and growth (Castelli & Beighle, 2007; Carson, 2012). He was in
charge of overseeing recess and tried to use all means to support and encourage
movement and active play. He established a recess rule that everyone had to walk or run
once around the building on a walking trail that he designed. In PE he taught games that
could be played at recess. Occasionally, he also spent time in PE explaining how to use
certain equipment at recess, especially when there were reports of children not behaving
well and not getting along while doing certain activities.
Mr. Strong had successfully written and received a PEP grant, also known as the Carol M. White Physical Education Program Grant. It was a federally funded grant program designed to award money to local education organizations to help them initiate, expand, or enhance their physical education programs in a way that assists their students work toward meeting state physical education standards. Mr. Strong often mentioned to me that certain equipment they had at the school was obtained from this grant money.

Receiving such substantial award for his school district only solidified his positive contribution to the PE program and further confirmed his respect in the school district. As Mr. Strong mentioned in one of the interviews, the school district superintendent has often entrusted him with leading the district-wide meeting of all PE teachers. He has been nominated for prestigious statewide PE awards and a local university has collaborated with him on various research projects. However, his attention has never been diverted from focusing on his students and providing them with the best possible PE experience.

PE teacher’s cultural competency. The PE teacher was a master teacher with professional training, extensive experience and inexorable enthusiasm. It was his dedication to his profession that made the PE program thrive. However, as for his multicultural teaching competency the results from the Multicultural Teaching Competency Scale (MTCS), it yielded lower than average scores for both the Multicultural Teaching Knowledge (MTK) subscale and the Multicultural Teachings Skill (MTS) subscale (i.e. 3.5 and 2.8 respectively).

When Harrison and his colleagues (Harrison et al., 2010) administered the MTCS to 187 PE teachers, the average score for the MTK was 4.40 (SD=1.03) and the average score for the MTS was 3.64 (SD=1.23). Further decomposition of their data found that
both the mean score for the MTK and MTS were significantly higher in teachers of color (4.80, SD=0.80 and 4.12, SD=1.09, respectively) compared to White teachers (4.25, SD=1.07 and 3.48, SD=1.24, respectively). Moreover it was discovered that there was a significant difference in the MTK scores between White teachers teaching in city schools (4.66, SE=0.22) and White teachers teaching in rural school locale (3.63, SE=0.27).

The school in this study was located in a small rural community and the PE teacher was Caucasian. Both his MTK (3.5) and MTS (2.8) scores were lower than average when compared to other PE teachers in Harrison’s study (4.40, SD=1.03 and 3.64, SD=1.23 respectively). His MTK score (3.5) was lower than average even when compared to other White PE teachers’ from rural contexts (3.63, SE=.27). His MTS score (2.8) was lower than average when compared with other White teachers (3.48, SD=1.24).

The PE teacher commented on his cultural competency in the interviews where he admitted that he had no formal training pre-service or in-service focusing on issues of cultural diversity regarding Hispanics and that all he learned about teaching Hispanics was from years of practice and consulting other teachers in his school. This finding has been consistent with research that confirms the lack of adequate training (McAllister & Irvine, 2000) and exposure to diverse teaching experiences during pre-service training (Gay, 2002), especially for teachers who have been in the profession for more than 15 years (Harrison, Carson & Burden, 2010). Such training could have a positive impact on the PE teacher’s abilities to serve the diverse student population at his school and thus increase student learning in PE.

The PE teacher said, “I haven’t been trained at all. I’ve had couple workshops on diversity. It’s more poverty versus non-poverty, or Blacks and Whites. We never really
had anything on the Hispanic culture.” When replying to the question how much he knew about the Hispanic students’ culture he said, “Not much. I am not really good on the culture.” However, he further explained how he learned the strategies that he utilized for teaching Hispanic children in his program: “Just by doing it over the years, talking to the teachers (who) had been trained on the cultural differences, asking our Hispanic liaison and just trying to learn a little bit more about it.”

The PE teacher exhibited certain features of a cross-culturally competent person as described by McAllister and Irvine (2000). He tried to learn about his students’ cultures and exhibited appreciation for the differences between people of different cultures. He clearly demonstrated his understanding that the world could be perceived differently through diverse cultural lenses and that his students came from cultures with distinct worldviews. Throughout our interactions, he never expressed a clear commitment to combating racism, prejudice or discrimination, but he said that he enjoyed teaching culturally diverse students and that it made teaching fun.

According to Cross’ (1978) and Helm’s (1984) Racial Identity Development models it is important for teachers to know how students’ racial/ethnic identity develops and how they as teachers can contribute to students’ well-being by supporting their ethnic identity development. Learning more about the implications of these theories could help Mr. Strong understands the need to embrace the responsibility to provide culturally relevant curriculum and accept more fully the decisions that other teachers from the self-contained Hispanic class made such as support of the Spanish version of written documents for Hispanic children. The following is an excerpt from one of the interviews with the PE teacher that demonstrates his rather weak support of the Hispanic-ethnicity-
focused school curriculum: “(The self-contained Hispanic class teacher) told me to give them all Hispanic versions [of written materials] automatically. I’d want them to do more. They are here. I’d rather have them do it the other way [in English]. They are here in America.”

Ladson-Billings (2009) described a culturally competent teacher as someone who (1) sees himself as an artist rather than a technician and teaching as an art rather than a technical task. The artist analogy better expresses what Mr. Strong shared about his view of his job. He said, “I just enjoy it. I really like elementary (PE). I like the way I got it set up. I’m kind of proud. I would like to show more people what I did, because I got it where I do like what I am doing. There is always fine-tuning. There might be a better way of doing something…I am hoping I have a good program.”

Further Ladson-Billings (2009) described a culturally competent teacher as someone who (2) sees himself as part of the community and teaching as giving something back to the community, and encourages students to do the same. Mr. Strong was not part of the community where the school was situated and commuted to school from a nearby bigger town. He also did not necessarily see himself as part of the local community. Yet, he did view himself as part of the school community. He was well respected by the school, the district administration and people from the local community who knew him because of his efforts to promote the PE program and physical activity beyond the gymnasium and the school.

This excerpt from one interview describes his perceptions:

I think they (other teachers) respect what I’m doing. The kids are getting a good workout and they look forward to it… They (other teachers) don’t think it’s just
playing games, that’s all we’re doing. They respect what I’m doing. They’ve seen it over the years. I’ve been here long enough too. Right there … (it) commands a little respect because I’m one of the older teachers on the staff so I think there is a respect factor just for that too.

I think it’s perceived by the community, I think the community perceives it so. The administration, they’re satisfied. Basically they’re satisfied enough they leave me alone! (Laughs) that’s the way I like it. Just let me do my thing, they don’t have any questions… because I’m trained in this field, in this skill, teaching wise. And I don’t want the administration coming in that’s not a PE person saying this is what you should be doing. I’m the one that’s been in it for 32 years, gone to college, got my degree. This is what I want to accomplish. I don’t want them telling me what to do. There are half-day workshops that we have to do once a month. They let me organize it. I do like that they that just feel confident that (Mr. Strong) is taking care of the PE program. Not just my building but the other buildings that I do have, I do think the level of PE has gone up in the last few years.

The PEP grant helped a lot… I guess we were successful - the government passed us. I’m not denying that fact (that) Dr. (XXX) helped a lot. I think everybody was just like, ‘But the way he (Mr. Strong) handled it!’ Okay. I’ve earned it.

Ladson-Billings (2009) also described a culturally competent teacher as someone who (3) believes that all students can succeed rather than expecting that failure is inevitable for some students. Although Mr. Strong sets high expectations for students in
class, he also expressed his doubts that these children have any chance to succeed in sports. This is how he explained why:

You’ve got athletic kids, but they are limited up there in how good they are.

That’s what you see also in the high school. In (name of town), high school sports have been down for so many years because these kids aren’t on traveling teams and all they do is just play each other. That’s all their experience to junior high age when they actually start playing other schools. How much ability level can we really teach these kids in general PE class, cause you’re working with the kids that can’t even bounce the ball twice. It seems like I’m spending my time so that somebody else doesn’t get frustrated, cause they’ll start screwing around and then you lose the whole class. It’s tough.

Next Ladson-Billings (2009) described a culturally competent teacher as someone who helps students make connections between their community, national, and global identities rather than as someone who homogenizes students into one “American” identity. No observations or interview narratives confirmed that Mr. Strong would attempt to provide guidance on making these connections, but rather expressed his disillusionment about these children’s and their families’ successful integration in the American society on American terms, specifically as for sport participation. Here is an excerpt from one of the interviews: “Just talking to them in general I asked if they played Little League (Baseball) this summer. I can’t remember one of them saying yes. But they tell me that they’re going to sign up for soccer.”

Finally Ladson-Billings (2009) described a culturally competent teacher as someone who sees teaching as pulling knowledge out – like mining rather than as putting
knowledge into – like banking. Mr. Strong expressed his frustration that these children do not necessarily learn and accept what he is trying to get across to them when he said, “It’s frustrating that I can’t get them to push themselves a little harder, to get the concept. ‘You’re going to be better off with this work.’ They’re almost all the same as for poverty level.”

Tritschler (2008) expressed her view of cultural competency not as an end product but rather as an ongoing process of mutually respectful interactions and partnership with students and the communities that they represent. Mr. Strong was greatly respected by the administration, his colleagues and his students. He did not have many interactions with the greater Hispanic community, though, partly because there was a language barrier.

He also portrayed genuine respect for his students and their individuality by being very sensitive to the nuances of various cultural differences. Following interview narrative can serve as a good example. Mr. Strong said, “They do tolerate the heat more and they don’t like the cold. That’s a cultural thing. I think that a (PE) teacher needs to know that, as you do gotta get the most out of them. If they see you’re working with them you get more out of them. You gotta be willing to not say, ‘Take off that jacket. It’s hot out here.’ I just leave it up to them… I might suggest, ‘You might run a little better if you take off your jacket.’ I don’t require them, I don’t tell them to take it off. A lot of teachers are harder on them… If it’s just a comfortability issue, I don’t really say too much to them.”

Timken (2005) describes a “culturally responsive and inclusive PE teacher” as someone who exhibits the following five characteristics: (a) is socioculturally conscious, (b) holds affirming attitudes toward students from diverse backgrounds, (c) embraces the
constructivist view of learning, (d) learns about students and their communities, and (e) has the commitment and skills necessary to act as an agent of change.

Socioculturally conscious PE teachers have cultural content knowledge and recognize that student behavior is influenced by culture. These teachers set high standards for achievement for all students and create a learning environment that is safe, supportive, and promotes mutual respect and caring. Further, they provide rich curriculum and instruction that helps students explore the inequities in education, society, and PA settings.

Mr. Strong recognized that student behavior was influenced by culture, however he did not necessarily possess large enough toolkit to provide culturally rich content knowledge. He admitted that over the years his expectation for achievement had lowered. Yet, there was substantial evidence suggesting that he created a safe and supportive learning environment that promoted mutual respect among students from various backgrounds. His curriculum, however, did not necessarily help students explore inequities in society.

Ladson-Billings suggests that culturally competent teachers need to be simultaneously, aware of their own beliefs and values, yet also view all students with their unique cultural characteristics as capable learners with great potential. Culturally competent teachers build on individual and cultural resources of the students, by for instance utilizing students’ native languages, or by including a variety of movement forms that represent marginalized students’ interests. Finally, culturally competent teachers have a genuine respect for all learners, and the respective cultures and communities they represent.
Mr. Strong did not express a genuine belief in his Hispanic students’ capabilities as learners with great potential. He did not utilize cultural resources other than translation of written materials into Spanish. However, as mentioned before, he did show genuine respect to all students representing various cultural backgrounds.

Teachers who embrace the constructivist view of learning help students find meaning and relevance in learning through real-life situations and applications and are more likely to be culturally competent. Using the students’ pre-existing knowledge and experiences to make sense and connect with new content, leads to greater critical thinking. Mr. Strong often provided real-life applications and employed problem-solving strategies in the process of teaching and learning (researcher’s journal).

Teachers who learn about students and their communities are better positioned to make real connections with them. This takes time and effort, yet strong relationships between teachers and students might be the very thing that keeps students engaged and in school. Being aware of personal bias and pursuing personal contact with students’ parents and community members and spending time immersed in their culture is a great avenue for developing affirming attitudes for all students.

Mr. Strong did not mention taking any extra effort beyond the school day to learn more about the Hispanic community. He also did not express that he pursued personal contact with Hispanic students’ parents and community members or spent time getting immersed in their culture. From observations of his interactions with students, it was apparent that he was able to develop genuine relationships with his Hispanic students.

To act as agents of change, first, teachers need to be aware of institutional inequalities, yet remain empathetic, hopeful, passionate, and idealistic about education
and children. Mr. Strong was a teacher who may have not perceived inequalities in education, however he was passionate and optimistic about quality education for all children. He commented on his view of education in general and the direction it is going when he said, “I don’t know what the answer is but it’s out there. And that’s what keeps you in–trying to figure it out. You gotta adapt. That’s the only way I adapted to the Spanish kids. There is an answer. How can I figure this out”? 

Although historically change in PE has been difficult, there are many new curricular and instructional approaches that can facilitate change toward equitable and meaningful PE experiences for all students. In spite of this, few of these new approaches were utilized at EES. Timken (2005) suggests that traditional approaches and curricula are inadequate and are bound to continue to foster inequalities.

A culturally competent PE teacher could be an asset in reaching all students from various backgrounds and be impactful not only on their PA related attitudes and behaviors, but also in preparing all students to be fully contributing members of an equitable global society. Although Mr. Strong exhibited some features of a culturally competent teacher, he was lacking in many aspects such as Spanish language acquisition, including connecting the Hispanic culture within the PE Curriculum.

**Quantitative Data**

Altogether, there were 92 student participants included in the quantitative data analysis. The sample was balanced as for representation by gender with 49% male and 51% female, and by grade level with 51% fourth-graders and 49% fifth-graders. Measures of body weight and height were objectively measured by the PE teacher and shared with me (the researcher). All other quantitative measures were objectively
collected using Actigraph GXT3 accelerometers that were initialized using the Actilife v.6 software.

1. **Body mass index (BMI)**

Using data collected during fitness testing height and weight measurements were used to calculate students’ body mass index (BMI). This assessment was necessary for the calculation of energy expenditure during observed physical activity as well as a proxy measure of health risk across the comparison groups of Hispanic and Non-Hispanic students. The overall mean score of all the participants’ BMI was 20.80 (SD = 5.01) with 65% falling in the category of healthy weight zone, 10% identified as overweight and 25% identified as obese. These results are similar to the national data with 35% of the sample falling in the overweight or obese category.

An ANOVA calculation revealed no significant differences by ethnicity between Hispanic (M = 20.64, SD = 3.65) and non-Hispanic (M = 21.04, SD = 5.68), and no significant differences by gender between male (M = 21.05, SD = 5.75) and female (M = 20.83, SD = 4.71) participants. A multivariate analysis of variance found no significant difference between Hispanic and non-Hispanic females F (1, 83) = 0.004, p = 0.947.

Given these findings, any differences in energy expenditure are not a result of body weight differences, but that of physical activity engagement.

2. **Caloric expenditure (Kcals)**

Body weight and age were entered into the Actilife software to calculate caloric expenditure for each student participant for each lesson. In total there were at least six observed lessons lasting at least 40 minutes. Overall, the mean score for caloric expenditure was 50.18 kcals/lesson (SD = 17.47). Across all lessons, regardless of
content, an ANOVA revealed no significant differences in caloric expenditure by ethnicity or by gender. A univariate analysis of variance demonstrated no significant difference between Hispanic and non-Hispanic energy expenditure by gender.

3. Measure of PA in metabolic equivalents (METs)

Based upon participant age, the Freedson MET cut points were used to calculate metabolic equivalents (METs) for each participant for each lesson that PA data were collected. The mean score of METs for all participants was 3.54 (SD = 0.73). Using an ANOVA, there was a significant difference in MET expenditure F (1, 74) = 3.76, p < 0.05), with non-Hispanic students having a significantly higher MET value (M = 3.60, SD = 0.52; p < 0.05) over Hispanic students (M = 3.33, SD = 0.56). It is important to note that regardless of ethnicity or lesson content, the average MET value was considered to be in the moderate range of physical activity (3<METs>6), which is considered best practice in PE (Ward, Saunders, & Pate, 2007).

Using an ANOVA, it was discovered that male students (M = 3.72, SD = 0.56) had a significantly higher MET values F (1, 74) = 2.23, p < .01 than female students (M = 3.38, SD = 0.48, p < .01) during the PE lessons selected for PA data collection. Using a univariate analysis of variance, both Hispanic (M = 3.08, SD = 0.52) and non-Hispanic females (M = 3.48, SD = 0.41) had a significantly lower MET values F (1, 72) = 9.86, p < .0001 over both Hispanic (M = 3.68, SD = 0.40) and non-Hispanic (M = 3.73, SD = 0.60) male students. While Hispanic females had a significantly lower MET value than non-Hispanic females F (1, 72) = 2.96, p < 0.05. This model accounted for 13% of the variance (R² = 0.129). Partial eta squared was equal to 0.974 and 0.120, respectively.
An ANOVA calculation found a significant difference $F (1, 74) = 6.04, p < .02$ between MET values of fourth graders ($M = 3.40, SD = 0.46$) and fifth graders ($M = 3.69, SD = 0.58$). There was no significant difference in MET values by class cohort $F (1, 68), p = 0.12$.

4. **Percent time spent engaged in sedentary behavior during PE**

The Actilife software provided an objective measure of the percentage of time, during a given lesson, spent in engaged in sedentary behaviors such as sitting or lying down. The values in this analysis largely represent the proportion (percent if multiplied by 100) of time in sedentary behaviors during PE lessons that PA data were collected. Using an ANOVA, there was a significant difference in percent of sedentary time by ethnicity $F (1, 83) = 3.96, p < 0.05$, with Hispanic students ($M = 0.38, SD = 0.09; p < 0.05$) having a significantly higher percentage of time spent in sedentary behaviors during PE class over non-Hispanic students ($M = 0.34, SD = 0.06$). There was also a significant difference in percent of time being sedentary by gender $F (1, 83) = 12.37, p < .001$, with females ($M = 0.38, SD = 0.07, p < .01$) spending a significantly higher percentage of time engaged in sedentary behaviors over their male classmates ($M = 0.32, SD = 0.07$). Using a univariate analysis of variance, both Hispanic females ($M = 0.42, SD = 0.10$) and Non-Hispanic females ($M = 0.36, SD = 0.04$) had a significantly higher percentage of time spent in sedentary behaviors over all of the males $F (1, 84) = 16.28, p < .0001$. This model accounted for 18% of the variance ($R^2 = 0.175$), with a partial eta squared (effect size) was equal to 0.96.
5. Percent time spent in PA during PE

On average, across all of the observed PE lessons the students spent 66% of the time engaging in some form of PA. More specifically, within the physical activity time, 57% was spent engaging in physical activity of moderate to vigorous intensity (MVPA), thus exceeding the recommended standard of 50% of the time spent in MVPA.

Using an ANOVA, there was no significant difference between Hispanic and non-Hispanic students in the amount of MVPA that they engaged in during the PE lessons that PA was collected. Since these students spent more than half of the lesson engaged in MVPA, there may be a ceiling effect because all students exceeding national norms.

Using an ANOVA, there was a significant difference in the amount of MVPA by gender F (1, 83) = 17.55, p < .001. It was discovered that females (M = 0.52, SD = 0.07, p < .001) spent a significantly lower percentage of time engaged in MVPA than males (M = 0.59, SD = 0.08) during the PE lessons when PA data were collected.

Using a univariate analysis of variance, both Hispanic (M = 0.47, SD = 0.10) and non-Hispanic females (M = 0.53, SD = 0.05) had a significantly lower percentage of time spent in MVPA over all of the males F (1, 84) = 21.33, p < 0.0001. This model accounted for 21% of the variance (R² = 0.214). Partial eta squared was equal to 0.21. There was no significant difference between Hispanic females and non-Hispanic females with regard to the percentage of time spent in MVPA F (1, 84) = 3.44, p = .07.

6. MVPA by lesson content

Multivariate analyses of a series of MANOVAs demonstrated significant differences between MVPA engagement by lesson content, mostly among Hispanic and
non-Hispanic male and female students. Regardless of lesson content, as previously reported males were significantly more active than females. When this idea was further decomposed, Hispanic males spent the largest percentage of time in MVPA over their classmates.

Fitness activities were coded as lessons that focused on a specific health-related fitness component (e.g., PACER assessment or cardiorespiratory endurance) for the majority of the instructional time. Among fitness activities, F (1, 54) = 0.19, p < 0.001; R² = 0.30, R² adjusted = 0.26, Hispanic male students (M = 0.62, SD = 0.15) spent significantly more instructional time in MVPA than Hispanic female students (M = 0.54, SD = 0.05). Non-Hispanic males (M = 0.60, SD = 0.07) and females (M = 0.54, SD = 0.05) did not significantly differ from these groups during fitness activities.

Lessons that focused on specific sport skills for the majority of the lesson were coded as sport activities; even if the student played a modified version of the sport such as capture the football. The MANOVA for sport activities revealed, F (1, 54) = 0.009, p <0.001, R² = 0.09, R² adjusted = 0.05, suggesting that there was a significant difference between Hispanic males (M = 0.62, SD = 0.09) and Hispanic females (M = 0.48, SD = 0.15). Further, the percentage of time for Hispanic females was significantly different from both fitness and games activities. Non-Hispanic males (M = 0.57, SD = 0.13) and females (M = 0.54, SD = 0.13) did not significantly differ from these groups during fitness activities.

Lessons that predominately spent the majority of time focused on low-organizational games such as a tag or mat ball, demonstrated similar trends with Hispanic males (M = 0.65, SD = 0.04) engaging in significantly more MVPA than Hispanic
females (M = 0.51, SD = 0.05), non-Hispanic females (M = 0.54, SD = 0.06) and non-
Hispanics males (M = 0.56, SD = 0.10), F (1, 54) = 1.12, p < 0.01, R² = 0.19, R² adjusted
= 0.14.

In summary, males were more active than females, with Hispanic males being
significantly more active than other groups of students. Hispanic females were
significantly the least active across all content areas, but especially the sport activities.
An overview of results from statistical analysis of data gained through accelerometry is
provided on page 226 (Table 1).

**Qualitative Data**

The following results are based on data gained through observations, individual
and group interviews, surveys and collection of artifacts. They represent the main five
themes describing the Hispanic students’ experiences in this PE program.

**I speak Spanish, yet in PE...** Spanish language was used by children who spoke
Spanish with their Spanish-speaking classmates; however, in PE speaking Spanish was
officially prohibited by the PE teacher, sometimes quietly tolerated and at other times
utilized by the teacher to facilitate communication with children who did not speak
English. Thus, the PE teacher and the children established and navigated a multifaceted
approach to the use of Spanish in PE.

Among the 23 Hispanic children, who participated in the group interviews, only
two reported no knowledge of Spanish language, 15 were bilingual (used both English
and Spanish with a wide spectrum of abilities) and six were only Spanish speaking
(needed to be interviewed using a Spanish translator and chose the Spanish version for
the AHIMSA survey). The PE teacher described his Hispanic students’ language abilities
this way. “Most of them speak pretty good English, enough to communicate. You always get a few that maybe don’t speak any, but it’s only like 10% of the Hispanic students that are real low efficiency.”

**Spanish language use quietly tolerated.** Based on observation notes Hispanic children from fourth grade first-hour PE classes spoke together in Spanish fairly often. This might have been a natural consequence of this PE class being comprised of a larger group of Hispanic children from the fourth grade self-contained Hispanic classroom. These children were accustomed to communicating with each other in Spanish. For instance, on Monday, October 24 during the game of continuous dodgeball three fourth-grade Hispanic girls spoke together in Spanish. They were cooperating to save each other rather than playing as individuals against each other. This was, however, happening in a far off corner in relation to the teacher’s position in the gym.

Because there were a few Hispanic children with very limited English proficiency in fifth grade, it was not unusual to hear Spanish in fifth-grade classes as well. For example, on Tuesday, December 13 in a fifth-grade PE class three Hispanic girls teamed up for a three-person pacer challenge / test. Rosalba (not a participant in the study) was explaining to Silvia (a fifth-grade girl, born in Mexico, in US for almost two years, spoke Spanish and needed assistance communicating in English) how the three-person pacer worked in Spanish. They also communicated in Spanish throughout the test.

Often Hispanic children used Spanish more freely when less closely monitored by the teacher or as part of off-task behavior. During a class that utilized stations on Monday, May 14, for instance, when two or more of the fourth-grade Hispanic children were at a station, they communicated using Spanish. On Tuesday, October 25 a fifth-
grade misbehaved in class because there was a substitute PE teacher. They did not follow
the instructions written on the board that provided information on what they should do
upon entering the gym as an instant activity. During the time they were supposed to sit
quietly and wait for the teacher to provide directions, many children were talking, some
of the six Hispanic children in Spanish.

**Spanish language supported.** The PE teacher often provided children with
written instructional materials in both English and in Spanish. *Nutritional Nuggets* was a
monthly newsletter that focused on healthy nutrition and physical activity that was sent
home with children to read with parents in their preferred language. Written tests were
also provided both in English and in Spanish. Some in class written instructions had a
Spanish version, for instance task sheets. Letters sent to parents were provided in both
languages as well. Relatedly, Mr. Strong expressed excitement about the new Spanish
version of the Fitnessgram software. Despite the great efforts of the PE teacher in this
regard, however, not all in-class signs and materials had a Spanish version.

**Spanish language banned.** Although the PE teacher often quietly tolerated the
use of Spanish in PE or purposefully ignored its use, speaking Spanish was officially not
allowed in PE. This ban had been agreed upon with the school staff. Because the PE
teacher did not speak Spanish, and thus could not control the misuse of inappropriate
language in Spanish, children were instructed to use only English in PE. This was how
the PE teacher described his feelings:

> It would be nice to know Spanish. ... It would really help. ... I really feel bad
about this that teachers have told them in PE class you’ve gotta speak English
because Mr. Strong doesn’t understand. So that’s where I wish I could (speak

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Spanish). They could be themselves a little bit more, but they know that just
generally in the lunchroom, PE, music you gotta speak English... I don’t nail them
hard with that. I usually cut them a break pretty good on it, because I do feel bad
that they can’t speak.

This ban of Spanish language usage was especially implemented when the PE
teacher could sense through the facial expressions and body language of children that
conflict or some kind of tension had occurred. The PE teacher explained his approach to
children using Spanish in PE:

I can’t have you talking about somebody, using bad words; again it’s a trust
factor. Now I do hear a lot of times they do it, and I can tell it’s not an issue. So, I
kind of turn my head a lot. It’s just the kids that have proven that I can’t trust
them. If I hear them talking or I guess body language and looks, if I think it’s not
appropriate I’ll just tell them you cannot use Spanish. And that’s what the ESL
teachers have told me, because I’ve asked them how I should handle this… And
they’ve told them that too, they’ve backed me up and said in PE or music you
can’t speak Spanish. The ones that can’t speak English, they’re of course excused
because you need to translate and stuff, but most, 90%, 95% can speak English, so
they have to use it.

**Spanish language used as a tool for overcoming the language barrier.** At times
the use of Spanish was helpful, especially with children who could not understand
English. Spanish was a useful tool in communicating basic instructions and helping these
children to be able to participate in activities and experience success. The PE teacher was
aware of the language barrier between himself and his only-Spanish-speaking students.
He explained, “I don’t talk any Spanish... It’s frustrating on my part; obviously I hadn’t done what I should have done to learn a little bit more.” Although the inability to communicate with some of the Hispanic students was frustrating, he found great joy in working with students from another culture and the constant challenge it posed to his teaching skills. During the final interview he said:

   As a teacher I encourage everyone to embrace cultural diversity. It kinda makes teaching fun... You’ve got to look at it as a challenge. I mean I have taught, when I first started teaching, all-white schools. It doesn’t seem like the challenge is quite like it is when you’re working with a diverse population... You always gotta be thinking. So it adds to the mental process, but I go through that, which I guess always kept me in...

   Mr. Strong also described the even greater language barrier between himself and the Hispanic children’s parents and the consequent lack of interaction. He explained, “The parents don’t speak near as good as English as the children do... I can’t communicate with them and they can’t communicate with me. So I just don’t have a lot of interaction with them.”

   To overcome the language barrier, Mr. Strong used visual demonstrations, and some basic Spanish expressions that he had learned. He also asked children proficient in both English and Spanish to translate and to be helpers to those who are beginning to learn English. He may also consult with the ESL classroom teachers on issues that arose. These and some of his other strategies to overcome the language barrier that he mentioned in the final interview:
I use kids to translate the general directions and the kids are more than happy to...
and sometimes during the game I’ll say ‘NO Passa’ or use other kids and say tell Ricardo he cannot pass this line and the kids are real good about it.

He also explained, however, that though it was great to have some children translate for those less proficient in English, it was challenging for them at times. He said, “They aren’t all from Mexico, so when I tell a kid to translate, the kids are trying to come up with the right word to get across to that [other] kid...”

During group interviews, Hispanic children pointed out ways that the children who did not speak English were accommodated in PE. Guillermina (a fifth-grade girl, born in Mexico, in US since she was 1 year old, spoke fluently in both English and Spanish) mentioned the time that a new only-Spanish-speaking girl Silvia started to join them for PE and how she was assigned to help Silvia (a fifth-grade girl, born in Mexico, in US for almost 2 years, spoke Spanish and needs assistance communicating in English). Although Guillermina and Silvia were not in the same class during the year of the study, Guillermina described her previous experiences with Silvia during group interviews: “Silvia, she was in my PE classes. Spanish class would come to us during the PE classes ... and so they [the students in the Spanish class] always asked me to tell her what to do.”
Although during the year of this study Silvia was integrated in an English-only fifth-grade classroom, she still needed assistance with understanding directions spoken in English during PE. This help was available to her, because there were five other bilingual classmates able to assist her and three of those where girls. Lourdes (a fifth-grade girl, born in US, spoke fluently in both English and Spanish) often talked to Silvia in Spanish explaining what to do.
Overall, classes with many Hispanic students tended to have more issues with comprehension and following general instructions in PE. Thus, in those classes, more time was spent with the teacher providing instruction, and less time with students being physically active and on task.

**Spanish Language Misused.** At times Spanish-speaking children exploited the PE teacher’s limited Spanish fluency. They sometimes claimed that they did not understand the teacher and used this as an excuse for their misbehavior. The PE teacher called it “they play Sammy Sosa on me...” and he further explained,

That’s when they throw the language barrier. They’ll claim ‘I didn’t understand’ when they’re in trouble... Now, if it’s a case where I really think they probably didn’t understand, I’ll give them a chance or two. I’ll give them a little bit more leniency because of the language barrier. But when they pull the ‘I didn’t understand’ on something that is a daily routine, they know better. They know what they’re doing when they’re flipping a kid off or cursing with them in Spanish... That’s when I’ll bring the teacher in and say ‘I know you understand what I’m saying, Luis, but Mrs. Brown is gonna also tell you in Spanish. I want to make sure we’re clear on this so that next time it happens there is no Sammy Sosa on me‘.

These were just some of the multifaceted issues connected with the use of Spanish by Hispanic children and their teacher in this PE program. Spanish was utilized, supported and quietly tolerated, but also banned and misused.
I like PE

Despite the differences between classes with many Hispanic students and classes with almost no Hispanic students, most students appeared to enjoy PE. They came into class, curious about the content of PE each day. They were excited to move, to run free, and to have fun engaging in PE activities. They often played hard exerting lot of energy; they appeared to try their best when facing new challenges in PE. Commonly they were so active that they needed to take off extra layers of clothing, take breaks, and get drinks of water. Quite often they left the gym while sweating, breathing hard, and full of emotions related to the physical activity and interactions that occurred in PE.

When asking the Hispanic students about their view of PE, they say it is fun, they move a lot, they like their PE teacher, they learn a lot and PE is either the favorite or one of their favorite subjects at school.

PE enjoyed. The PE teacher responded to the question as to whether he thought that Hispanic students enjoyed his classes: “I think they enjoy it. And yeah, I think they really do enjoy coming. They don’t want to do the exercise part, they want to do the game part, the fun part of class, but they still enjoy it.” The PE teacher further explained that student preferences are reflected in the PE curriculum, because when they do activities that they like they get very engaged, however the curriculum included a variety of activities and movement forms. He explained his perceptions of the activities that students like:

If there is some activity that they really like - it’s good and they get a lot of running, a lot of movement - I’m going to do it. That’s why we play pinball a lot, we try to get at least three or four times (a year) of pirate ball in ‘cause its
constant movement strategy. We play capture the football five or six times (a year) because they really like it. But I try to offer variety too.

Based on my observations, student opinionnaires, and group interviews, in general, the fourth and fifth grade Hispanic children in the study had favorable views toward PE. While observing the classes throughout the year, I witnessed students’ excitement when one of their favorite activities was to be played, their hard work when they were engaged, their smiles, and their positive body language. My perceptions were confirmed with children’s responses during opinionnaires and group interviews.

The first question that all children were asked during the opinionnaires inquired about how they liked PE on the day of the interview. They all gave positive responses. Most common expressions used in children’s responses were the words “good,” “fun,” “I liked it,” and “I enjoyed it.” Other expressions included “awesome,” “cool,” “great,” and “fine.” A representative statement came from Maria (a fourth-grade girl, born in Mexico, in US for one year, spoke only Spanish) who said, “I enjoyed it. I had fun.” Only two students seemed less positive when describing their perception of PE that day. Angelica (a fifth-grade girl, born in US, spoke both English and Spanish) said, “It was OK.” Pablo (a fourth-grade boy, born in Puerto Rico, in US for 5 years, spoke both English and Spanish) responded to the question “How did you like PE today?” by saying, “Not good.” He went on to explain, however, how much he liked pirateball, the game they were playing in PE that day. He said, “I like pirateball and pinball. I loved the game that we were playing now.”

**Games – best part of PE.** Both during opinionnaires and the group interviews Hispanic children specified what they liked and disliked about PE. During opinionnaires
a number of children (nine out of 23) identified the main activity—the game that was played—as what they liked most about PE on that day. Four other children pinpointed specific aspects of the game such as teamwork, scoring, getting opponents out and winning. Yet other children (six) mentioned various parts of the lesson such as the exercises in the beginning (two), rope jumping tricks (one), practicing shooting baskets (one), and the novelty aspects of the lesson (two). Four children said they liked everything about the lesson.

In group interviews, they explained that not only did they get to play their favorite games and have fun, but they also were able to socialize with others, and interrupt the monotonous sitting in the classroom. Guillermina (a fifth-grade girl, born in Mexico, in US since she was one year old, spoke fluently in both English and Spanish) provided a representative statement: “When you go to PE you have fun, fun, fun. When you go to other classes you cannot talk and you cannot have fun. You just have to be thinking and using your brain.” Javier (a fifth-grade boy, born in US, spoke fluently in both English and Spanish) added, “You are active. You aren’t just sitting raising your hand up.”

Many of the children in the interview groups pointed out that they enjoyed having choices in PE. Antonia (a fifth-grade girl, born in US, spoke only English) said, “He (PE teacher) sort of has us do whatever we want.” When asked what they would do differently if they were the PE teacher, Javier said, “Vote what games they like better.” And many of the children in his interview group elaborated on that topic. In another group a similar dynamic with discussion on the topic of having a choice started when Jose (a fourth-grade boy, born in US, spoke both English and Spanish) said, “I would let them have a choice (about) what they want to play… Let them talk, and have them do
whatever they want.” Clearly, these children enjoyed having input into the PE lesson content.

The majority of the Hispanic children indicated that the most pleasurable activities in PE were game activities. Quantitative data corroborate with these findings when indicating that during lessons focused on games engagement the highest amounts of MVPA were measured for both Hispanic males (M = 0.65, SD = 0.04) and Hispanic females (M = 0.51, SD = 0.05). Similarly the percent time spent being sedentary was lowest during low-organizational games both for Hispanic males (M=0.27, SD=0.03) and Hispanic females (M=0.38, SD=0.06).

**PE - one of favorite classes.** Both in the opinionnaires and group interviews children talked about PE as their favorite or one of their favorite school subjects. In all the group interviews they agreed that they liked Mr. Strong. The following is the conversation from one of the group interviews. When asked the question, “How do you like your PE teacher?” students replied,

- Pablo (a fourth-grade boy, born in Puerto Rico, in US for five years, spoke both English and Spanish): “Good.”
- Juan (a fourth-grade boy, born in US, spoke fluently in both English and Spanish): “He’s pretty good.”
- Jose (a fourth-grade boy, born in US, spoke both English and Spanish): “Good.”
- Mario (a fourth-grade boy, born in US, spoke both English and Spanish): “Cool. He teaches us cool games.”

**Being very active in PE.** Both in opinionnaires and in group interviews children said that they were very active in PE. This affirmation was corroborated by the
quantitative data. The students mostly used the expression “I moved a lot” or “I was active a lot.” Isabel said, “I’m sweating right now. I think I was good in exercise and I was active a lot. I did well.” In one of the group interviews Javier said, “I get really tired, sweating.” The quantitative data analysis corroborated that all students did engage in higher than average amount of PA during PE. However Hispanic girls were significantly less active than all the other children including Hispanic boys and non-Hispanic students.

Further, objectively measured physical activity data confirmed the comments by two Hispanic fifth grade girls who said they were rather moderately active and observation notes confirm that they were somewhat passive during game play on the days of the opinionnaires. Angelica (a fifth-grade girl, born in US, spoke both English and Spanish) said, “I walked half of the time. It wasn’t the hardest PE.” Based on observation notes from Monday, January 30th, Angelica was rather passive during a game of matball (modified version of kickball). She ran fairly fast when her team was kicking, but she was only standing in one spot and not contributing to her team when they were playing defense.

Similarly Guadalupe (a fourth-grade girl, born in Mexico, in US for 10 years, spoke only Spanish) admitted that she was not very active when she said, “(I moved) a little bit.” Based on observation notes from Thursday, January 26th, with a lesson focusing on basketball, although Guadalupe moved where the ball was going across the gym during game play, she only had one touch on the ball during the game, and unfortunately did not catch a pass from her teammates. She appeared to be low-skilled in basketball skills, but also rather timid and shy.
I am fairly new

Quite a few students registered for school later in the year. Some of those transit children stayed for the remainder of the year, others left within a few weeks, and even others left and then returned back to school later in the school year. At the beginning of the school year there were 47 Hispanic children in the fourth and fifth grades and at least seven of those Hispanic students registered at the beginning of the school year left the school before the end of the school year. Fourteen new Hispanic children joined these classes throughout the year, some for a short time and others until the end of the school year.

According to official district statistics, there is a high turnover rate at the school as well as in the school district. Based on the state report card ([Blinded to protect the subjects] State Board of Education, 2012) for the year of the study (2011-2012) the school’s mobility rate was over 33% and the school district had an overall mobility rate of almost 28%, this was partially due to the fact that many of the families moved as seasonal farm workers. This mobility rate was two to three times higher than the state average. Such high mobility rate poses a challenge to the school administration, teachers, and especially the children themselves.

It posed an extra challenge to Mr. Strong, as he needed to spend time reiterating the basic routines and expectations, and helping new students become acquainted with unfamiliar PE activities and games. High student mobility thus leads to lower classroom participation and more time spent in management.

It also took time to get to know new children individually and thus be able to effectively work with them, recognizing their strengths and weaknesses and finding ways
to help them, guide them, and motivate them in PE. There was a higher potential to encounter behavioral problems.

The PE teacher explained the importance of building trust and getting to know each other. He pointed to the fact that new students were often unfamiliar with the activities and games in the PE curriculum, and therefore needed to concentrate on learning the basic rules rather than focusing on strategy. Thus high mobility also led to lowering the level of learning. He commented,

I think they do trust me, the ones that I’ve had for three years. But our school is something like 25% or 30% of kids that start the school year do not finish the school year and you get new ones moving in. So you get the high turnover rate and so the new kids (pause) it’s hard especially in the fifth-grade year. They don’t know me, you can tell that. And I really don’t know... what triggers a mechanism for a kid and stuff like that. And I think my whole thing is that ... it’s a trust factor. You trust me, I trust you, just like walking down the hallway. I gotta be able to trust you, and I think the kids respond better in PE, participation and everything in the trust factor... I think the ones that I’ve had for a couple of years I think I know them fairly well. And it does make a difference in the way I teach, just because they’ve had it before and maybe I’ve only got one or two new kids in that class, I’m not gonna explain things quite as much. We might dwell a little more into strategy now because we can do that. Like during the game instead of worrying about if so and so is playing fairly or playing right, because he’s new and doesn’t know the rules. Like he’s got to concentrate on other things a little bit more.
**Language barrier.** Many of the transfer children were Hispanic children of varied levels of English proficiency. Therefore, Mr. Strong needed to know how well they understand his English instructions. He often consulted with the classroom teacher, but sometimes used his own judgment based on the reaction of the new children in PE. Being able to evaluate the new student’s understanding of the English language however was complicated due to the children’s inability to maintain appropriate behavior in the new environment. Thus, the PE teacher was often tackling many unknowns when a new child joined a class and the potential language barrier was one of them.

A rather interesting dynamic developed in a class on Thursday, May 3, when a new Hispanic girl Consvelo (not a participant in the study) joined a fourth grade class. She did not seem to understand English very well and a Hispanic boy Pablo (a fourth-grade boy, born in Puerto Rico, in US for five years, spoke both English and Spanish) was assigned to be her partner for the activity in class. However, because Pablo did not convey the correct information to her, they were both off-task. Although Pablo’s actions caused Consvelo to behave inappropriately, the teacher clearly identified the problem and did not hold Consvelo responsible.

**Increased insecurity and other behavior issues.** Having new students in PE resulted in a higher level of uncertainty in the classroom. The new child was often insecure because she/he was unfamiliar with classroom content and routines. In addition, the new student was a stranger to her/his classmates and the teacher.

Some new children exhibited less desirable behaviors. They could have been apprehensive, for example, and avoid participation. On Tuesday, November 29, a new boy Rodolfo (not a participant in the study) joined one of the fifth grade classes. He
appeared insecure and intimidated. The following week on Tuesday, December 6, however, he appeared to be more at ease and experienced great success as he had the best class score on the pacer test. Surprisingly, he was rather slow during the class on Thursday, December 8. Then on Tuesday, December 13, Rodolfo exerted himself greatly for his team during 3-person pacer test, however he did not talk much. Later that day, at the beginning of the game play a Caucasian student announced to the PE teacher that Rodolfo was probably unfamiliar with the rules of the game and would likely cross the line. Rodolfo, though, was one of the key players for his team.

On Monday, April 23, two new students Gonzalo and Gabriel joined one of the fourth grade PE classes. Gonzalo (not a participant in the study) was shy and obediently went to the back of the line when harshly scolded by his female Hispanic teammates. Interestingly, the conversations were in Spanish. On Monday, April 30, Mr. Strong took Gonzalo aside and tried to explain the rules of matball while the class was playing. He then joined his team. When kicking Gonzalo made a mistake, but was protected by the teacher. Although Gonzalo stepped off the base, which was against the rules, Mr. Strong allowed him to stay on base. The teacher defended his decision explaining that Gonzalo was new to the class. Both Rodolfo and Gonzalo appeared insecure at first, but appeared to become more relaxed and confident with time.

On occasion new children became disruptive and treated their classmates harshly. On Thursday, September 8, for example, a new student, David (not a participant in the study), joined one of the fifth grade classes. He was a year or two older than the other children in the class, and looked more like a seventh or eighth grade student. It was clear from his first day in PE that he struggled with following rules and procedures. He
marched up like a soldier heading up the line for the PE teacher. His facial and body language implied that he was pretending to be extremely compliant; however, his actions appeared unnatural and unsustainable for the entire PE class. He endured class without incident, however the PE teacher indicated he was closely monitored because of an earlier violation. In a few weeks he was gone from the school.

On Monday, April 23, the same day as Gonzalo joined the class, another Hispanic boy, Gabriel (not a participant in the study), joined one of the fourth grade classes. He became so disruptive in the beginning of class that he was sent out in the hallway for a few minutes. Although he was in class for the explanation of the game, he did not manage to follow the directions. He stepped over lines representing boundaries of the teams playing area. He clearly did not pay close attention to instructions and was more focused on misbehaving. He, like David, was also in school for a short time and then his attendance discontinued. He was at the school for only a few weeks and developed a reputation of a student who was off-task and disruptive.

Others, despite their limited English proficiency, came to class with a good attitude. They observed others and asked their Spanish-speaking classmates when in doubt; they did not demonstrate much outward frustration, although they might have experienced less success due to their unfamiliarity with the activity. They were compliant and did not appear to challenge the system.

In mid-December a new student Ricardo (a fourth-grade boy, newly arrived in US from Puerto Rico, spoke only Spanish) became a class member with quite limited knowledge of the English language. Although he started to acquire aspects of the English language, he struggled to understand instructions given in English during the remainder
of the school year. On Thursday, April 19 during a game of two-base matball, Ricardo got out because he did not know that he could not return to the base after leaving it. Mr. Strong made sure that Ricardo understood the problem and simply applied the rules of the game as it was previously explained. Although the PE teacher likely realized that Ricardo did not understand all of the instructions, the choice to enforce the rules resulted in a learning experience for Ricardo. Even though Ricardo was called out, he walked back to the line of his teammates and demonstrated a positive attitude about what happened. His body language projected that he was confident that he would not make that mistake in the future.

**Less strategy.** Newer Hispanic children usually tended to struggle to fully engage in the PE activities, and were unable to employ teamwork or game strategies. For example, on Thursday, October 20 during a fourth grade PE class, there were a few Hispanic children from the self-contained Hispanic class who were not initially sure how to play the game of prison ball, but demonstrated understanding by the end of class. A similar situation in the same class was observed on Thursday, February 2, when the lesson was related to pirateball. Several new students, some with quite limited English proficiency, did not understand the goal of the game. They were involved in the game and moving around, but they did not contribute to their teams’ winning the game.

Although Hispanic children who have joined EES recently may have understood the basic rules of the games, they were unable to integrate strategy as well as children who have been familiar with the activity longer. For instance, on Monday, April 23, during a game of two-base matball, Alberto (not a participant in the study) who was fairly new in the school continually aimed the ball into the area with many fielders despite the
teacher’s advice related to use of better strategy. Similarly, on Monday, April 30, during the game of matball Alberto consistently aimed the ball into the area where most of his teammates were moving from base to base, making it easier for their opponents to get players out. Focusing on better strategy and taking action to help his team seemed to be above and beyond his abilities at that time.

**Teacher approach.** During group interviews Hispanic children described the way in which the PE teacher accommodated new Spanish-speaking students. Jose (a fourth-grade boy, born in US, spoke both English and Spanish) mentioned that other Spanish-speaking classmates were used as translators by saying, “If they don’t speak English he (Mr. Strong) tells somebody else to explain the game.”

At other times the PE teacher assigned someone to be a helper to the new student. Antonia (a fifth-grade girl, born in US, spoke only English) talked about this when she said, “He (Mr. Strong) has someone show them what to do and stay with them most of the time.”

The PE teacher often reviewed the rules even though most students were familiar or he explained the game to the new child individually. Rosa (a fourth-grade girl, born in US, spoke only English) put it this way, “He tries to keep on track with them by telling the new student what to do, or when we are trying to play the game, he tells them how to play it.”

He also accommodated the new child by taking her/him aside; letting him/her watch first and explained the game while others were playing. Sometimes he allowed her/him to make minor violations from the rules of the game without any penalty the first time the game was played. This was observed multiple times and an example is provided
above in the section about insecure children introducing Gonzalo. The PE teacher also communicated about how he might approach any new child in class.

[He might say] ‘come over here and stand by me just for a little bit while the game is going on’…the kids know [and yell] ‘he’s out, he’s out’…[he says] ‘No, because he’s new, so we’ll cut him a break.’ And the kids are cool with it. They understood that saying ‘no he’s safe. Okay, next time you do it you’re going to be out’.

Apart from individual approach with sensitivity to each new child in helping her/him integrate in the class and join in the activities, the PE teacher also discussed the importance of establishing and keeping a routine especially for the children who might be in the school for a few weeks and then come back again later during the school year. He explained,

There is a lot of kids leaving and coming. When you start the year they go back to Texas and they might come back in 2 or 3 months, or grandpa is sick in Mexico, so they’ll go and all of a sudden 2 months later they’re back and that’s where the routine that I have is important, cause when they come back you don’t have to spend a lot of time explaining.

I am (not) like my Spanish-speaking friends

In the next section of this paper several themes are introduced which related to Hispanic students observed distinct characteristics. The themes are relate to: (1) Hispanic children’s tendency to stay together, especially girls, and (2) their unique preferences for certain activities/sports. (3) Especially girls tended to choose cooperation rather than competition. (4) Hispanic girls were often observed waiting to participate in an activity as
if they were insecure and unsure of how to engage in the lesson. (5) Hispanic students’ were open in expressing their feelings; (6) their insecurity and limited confidence in the PE setting, and (7) their tolerance for heat but not cold.

**Staying together.** Hispanic children uniquely dispersed themselves among others in the gym space. Often Hispanics sat together, chose the same workstation, and formed groups with other Hispanic children when given a choice. This trend was more prevalent among girls than boys.

In the observation notes there were at least 19 entries describing situations in which Hispanic children, when given a choice, either dispersed themselves in the space so that they stayed in close proximity with other Hispanics or joined a group with other Hispanic children. Approximately half of the entries involved only Hispanic girls and the other half involved both Hispanic girls and boys. Entries about only Hispanic boys were limited (only three). This observation was confirmed by the PE teacher. He indicated that Hispanic girls almost always pair up or form groups with other Hispanic girls, Hispanic boys, however, more typically form groups with those from other cultures. He explained,

I think just generally observing; the girls seem to stay together more. The Hispanic girls kind of cling together more in a group. So if you’ve got three (Hispanic girls) in the class they’re always together or get in a group when you ask to pair up… The boys will kind of branch out a little bit more. Boys kinda do that in general. They’ll group ability-level. So if you say grab a partner, they don’t even know what we’re gonna do yet, its ability level… Girls I think want to be with their friends… Boys wanna be successful… I noticed that the boys are little bit more cross-cultural.
The most common time that Hispanics were seen together was either at the beginning of class when they were asked to find their spots in the gym for group exercise and when instructed to choose a station of their choice. Observing Hispanics gathered in this manner was mostly observed in the first-hour fourth grade PE, which included the highest percentage of Hispanics who came from a separate classroom. Thus, it was likely a logical consequence of the school’s organization in which most fourth grade Hispanic students spent majority of their days in a separate Hispanics-only classroom and did not integrate so easily with children from other classrooms in PE. However, a similar scenario was observed in other classes with fewer Hispanics fully integrated in a regular classroom.

For instance, on Monday, January 30, in the first-hour fourth grade PE class, upon entering the gym and running their three laps as an instant activity, the children were instructed to retrieve a fitness ball and find a spot in the gym for their fitness ball exercises. In this case all of the Hispanic children were gathered in one area of the gym. Similarly, on Wednesday, May 16, in one of the fifth grade classes during free time at the end of Adventure Race, which was the main activity in PE that day, all Hispanic children except one played a version of bounce ball together. It was evident that they had played this game before either at recess or elsewhere because the teacher did not need to explain the rules.

Observations confirmed that Hispanic girls preferred to partner with or form groups with their Hispanic girlfriends. This trend was consistent across most classes both in fourth grade and fifth grade. This trend was not observed in the second-hour fourth grade PE classes because there were none or only one Hispanic girl in those classes.
An interesting scenario unfolded during the day of the Adventure Race on Wednesday, May 16, in the fourth grade first-hour PE class. Children were instructed to form groups of four, however there were five Hispanic girls in the class and so they formed a group of five. None of the girls wanted to leave the group and join another group. They only did so very reluctantly when the PE teacher directed one of them to another group.

On Tuesday, December 13, during a three-person pacer test, all three Hispanic girls in one of the fifth grade classes joined each other to form a team. This seemed to be a very logical decision, since one of the girls did not speak English very well and needed translation of the instructions. Forming such a group facilitated communication and these girls spoke Spanish all throughout the pacer test.

Preferences for activities / sports. Hispanic children showed preference for certain physical education activities. Hispanic boys seemed especially excited about soccer. During a soccer unit in the fall there were ample opportunities to watch the Hispanic children’s excitement for and full engagement in soccer, especially boys. For instance on Wednesday, September 7, all four morning PE classes were participating in a soccer game outside. Some of the Hispanic boys were the most successful players in those games, and tended to dominate the games. Many Hispanic girls were also highly engaged, although there were instances of disengaged girls who spent most of the class talking. Overall though, most of the children expressed a fondness for soccer, and some shared with me that outside of school they either go for soccer practice or they play soccer with their parents and friends.
Similarly, the Hispanic students, especially the boys, were excited to play floor hockey. During a unit of floor hockey at the beginning of February almost all of the Hispanic students seemed to be well engaged in different versions of floor hockey games. Related to basketball, however, compared to the African-American and Caucasian students in the classes, Hispanic children, especially girls, seem to be less excited and less skilled in basketball. Nevertheless, some of the more acculturated Hispanic children indicated that they liked basketball.

For instance on Monday, January 23, during a basketball unit, Maria (a fourth-grade girl, born in Mexico, in US for one year, spoke only Spanish) was very slow during the game and did not move with the team. Yet, she looked happy and excited about the game. On Thursday, January 26, due to misbehavior one of the fifth grade classes was not allowed to play a game of basketball, but rather they were given free time in which they could practice shooting baskets or work on their rope jumping skills. Some of the Hispanic girls appeared to embrace this choice. They enjoyed shooting baskets and stayed at the basketball hoop throughout the class period. Apparently they did not prefer to be part of a team game, perhaps due to their lack of skill and the pressure to be a positive contributor to their teams. They did though, seem to enjoy the chance to practice basic basketball skills.

Mr. Strong described Hispanic children’s preferences this way:

They enjoy soccer. I think that’s a cultural thing… They are fascinated by soccer. Sometimes in the morning you might see Hispanics in the soccer field and they’ll be out there playing real adults, or they’ll be doing drills and stuff. And the kids tell me on weekends they will play soccer. Soccer is a big thing. Some of the
other activities they do kind of tend to drift, not keep on task as long. I think they like floor hockey because it’s kind of like soccer. The other sports like basketball they are not real skilled at. Football skills – throwing and catching – they really don’t mind those. Those are more high activity type games, they like those. But the traditional American games like volleyball, basketball, baseball they aren’t [into]… Just talking to them in general I ask if they played Little League this summer. I can’t remember one of them saying yes. But they will tell me I’m going to sign up for soccer.

Hispanic children described their sport engagement in short individual interviews. They were asked whether they participated in sports/physical activity outside of PE. Many children mentioned more than one sport or activity. Among the 23 Hispanic children (13 girls, 10 boys) who responded to this question, six did not mention any sport or physical activity. One boy and four girls simply said they did not participate in sports, while one boy said he played videogames. Maria (a fourth-grade girl, born in Mexico, in US for one year, spoke only Spanish), one of the four girls further explained, “my stepfather doesn’t like us to go outside and only wants us to sit quietly inside.” The two most frequent replies including sports or some form of physical activity were “go outside and play” (four boys, three girls) and “play soccer” (four boys, three girls). Some of the less frequent responses included basketball (two boys, two girls), softball or baseball (one boy, two girls), football (one boy, two girls), swimming (three girls), running (one boy, one girl), exercise (one boy), volleyball (one), bowling (one), karate (one), and gymnastics (one).
**Cooperation and teamwork valued.** Hispanic children, especially girls, tended to choose cooperation over competition with others. When some of their girlfriends were on the opposite team, they tended to play less aggressively against them. For instance, on Friday, May 18, during a game of pinball, the Hispanic girls were observed playing gently when aiming at other girls who were their friends. Similarly during a game of continuous dodgeball on Monday, October 24, Hispanic girls adapted the game and changed it to their liking by protecting each other rather than playing as individuals against one another.

They appeared motivated by team tasks. They liked to challenge themselves for their teams. For instance, on Tuesday, December 13, Rodolfo (not a participant in the study), a fairly new Hispanic boy, became quite fatigued for his team to make it as long as possible during a three-person pacer test. On the other hand they expected their teammates to do their best for the team and put a lot of pressure on them especially if they were Hispanic. On the same day, December 13, some Hispanic girls on his team harshly scolded Rodolfo for making a mistake during a game of prison ball.

**Girls less active, less skilled, less ready to participate.** Hispanic girls were often among those who did not come prepared for PE and had to borrow tennis shoes and socks from the bin in the hallway. On many occasions it was observed that girls were less active compared to boys, however Hispanic girls were often especially inactive. It was evident right from the beginning of the school year. Boys dominated the games of soccer and a modified version of football game called “capture the football.” For instance, during a game of capture the football on Monday, October 3, all the Hispanic girls were quite passive and they either guarded the line or ran to get people out of jail – the two less
risky and less physically demanding tasks of the game. Only boys and one Caucasian girl
dared to run to get the footballs.

Similarly, on Wednesday, October 5, during a game of five pass, which was a
game that included football skills, all the Hispanic girls in the first-hour fourth grade PE
appeared to be low skilled and unable to be positive contributors to their teams. They did
not catch the ball well and did not make successful passes. Comparable passive behaviors
were observed in other classes as well in which some Hispanic girls simply guarded the
line in football type of games, which was mostly sedentary behavior. They appeared
hesitant to use their throwing and catching skills.

These findings are supported by the objective measurements of PA, which
showed that Hispanic girls were the least active compared to Hispanic boys and all the
non-Hispanic students. This was consistent across various established measures including
METs, percent sedentary time or time spent in MVPA.

During the PE Challenge a number of Hispanic girls were observed standing in
place throughout the activity. On Tuesday, October 11, during PE Challenge time, a
rather new Hispanic girl Jessica (not a participant in the study) was instructed at the end
of class that she was supposed to move to a new station once she had passed a challenge
at one station. Ultimately it became clear that she lacked understanding of the rules of the
PE Challenge. Such lack of understanding perhaps was a contributing factor for the lower
percentage of Hispanic children passing many of the PE challenges and becoming
medalists recognized by having their names placed on the PE Hall of Fame in the gym.

Open expression of feelings. The observed Hispanic children were extremely
open in expressing their feelings of pain and discomfort as well as excitement and joy.
On Thursday, December 8, Isabel (a fifth-grade girl, born in US, spoke both English and Spanish) complained of pain during the game of Star Wars and therefore sat out during the activity. Similarly on Thursday, January 26, Francisco (a fourth-grade boy, born in US, spoke both English and Spanish) complained of pain while playing basketball. Hispanic girls often showed discomfort during games that promoted aggressive behavior. On Tuesday, December 13, during the game of prison ball one of the fifth grade Hispanic girls, Megan (not a participant in the study), displayed real discomfort when she was a target for the ball thrown by a boy in her class.

Often in the beginning of class when children learned the lesson focus for the day they showed their excitement or disdain by verbally sharing a quick comment or through their body language by smiling or raising their arms as an expression of victory. They were often absorbed in the PE activities. They moved, they communicated with their teammates or socialized with their friends, they used strategies, and they regularly became physically exhausted. When describing their experiences in the individual and group interviews, the Hispanic children mostly had very positive comments about PE. The same expression of positive feelings could be seen on their faces during PE lessons as well. They smiled, laughed, socialized with friends, and they were quite involved in the lessons.

At times, likewise, the Hispanic children were expressive in showing their disdain for activities. They often moaned and groaned and complained to the PE teacher. That is why he said, “I get frustrated because I can’t get them on some activities to work as hard.” In cases when the Hispanic children did not favor an activity, the PE teacher used a minimum effort requirement, and explained to the students the least acceptable exertion
for the activity. Mr. Strong further discussed the challenge of motivating the Hispanic children at times.

They don’t like to work as hard, especially straight exercising – I call it body shaping. It’s hard for me to motivate them. You have a few that are going to do it. But generally they don’t like to do that. And they aren’t into running, especially when we do our one-mile run, our long run or pacers. I just don’t think they do as well as others. Everything else they do a fairly good job. But if they don’t like an activity they just don’t really try. They do like challenges, though…

**Insecurity.** On numerous occasions when a new game or activity was introduced Hispanic children appeared to be insecure because they were unsure of instructions. Commonly, however, as time passed and they became involved in the game or activity, they appeared more at ease. For instance, on Thursday, October 20, the first-hour fourth grade PE class was engaged in a game of prison ball. Some of the Hispanic children verbalized that they were not sure how to play the game, but they eventually came to understand the game and fully participated in the game. Similarly on Tuesday, August 23, in one of the fifth grade classes the lesson focus was on matball. One Hispanic girl waited on the last base for another girl to reassure her that she was supposed to run again to first base. Only after having this conversation was she confident enough to run and continue in the game.

**Heat and Cold Tolerance.** Compared to other children at the school, Hispanic children dressed with excessive clothing in warmer weather and complained of being cold when going outside in mild temperatures, as recorded in the observational notes. Mr. Strong discussed the weather intolerance during the final interview.
They don’t mind the heat. When it’s cold outside I get more shut down than when it’s 90° outside. When it’s 90° outside they still might have their jackets on… It seems like they do tolerate the heat more, and they don’t like the cold.

Such understanding of subtle differences between Hispanic children and the other children can yield as very beneficial, because by making insensitive comments or requests the teacher could easily lose their trust. However respecting their unique differences allows the PE teacher to be able to connect with these children and use appropriate words to motivate them to greater participation in PE.

**PE Schedule Inhibits Learning**

The way in which Hispanic children were unevenly dispersed in the PE classes created a slightly different experience for the children, depending on the specific PE class to which they were assigned. These differences lead to instances of inequitable learning experiences; whereby, Hispanic students had larger class sizes and more homogeneously grouped classes. Based on state regulations in Title 23 of (the state in which these data were collected) Administrative Code ([Blinded to protect the subjects] State Board of Education, 2013) the school was required to provide transitional bilingual education if there were more than 20 children who spoke Spanish and were of limited English proficiency. There were not many Hispanic children in fifth grade, so they were evenly dispersed among the four fifth grade classrooms in the school. In fourth grade, there were enough Hispanic children with limited English proficiency, so a separate Hispanics only classroom with a bilingual teacher was formed. However, these children were grouped together/integrated with children from other classes for PE and music.
This created two PE periods with a higher number of students than an average PE class as well as a higher percentage of Hispanic children. These PE classes tended to be more challenging in terms of classroom management (organization of time, equipment distribution, space management), behavior management (off task behavior, respecting others), language barriers, and steps taken in the promotion of student learning. In these classes children often spent less time in game play, more time getting organized, and frequently many PE games were played at lower strategic level compared to smaller sized classrooms with lower percentage of Hispanics with limited English proficiency.

Based on observational notes and information from the PE teacher there were an uneven number of students in different fourth grade PE classes. First-hour fourth grade PE classes were on average much bigger than the second-hour fourth grade PE classes. The ratio of the Monday/Wednesday fourth grade PE classes was approximately 22 students in the first-hour to 16 students in the second-hour PE. The Tuesday/Thursday fourth grade classes’ ratio was approximately 21 to 14 students. The class-size averages for fifth grade classes were much more similar. All four fifth grade classes’ averages were approximately 16 or 17 students per class. These averages were based on student counts from observation notes with 14 to 17 entries for each fourth grade class and 10 to 12 entries for each fifth grade class.

Based on information from the beginning of the school PE class rosters a similar trend existed with uneven class sizes in fourth grade. The fourth grade PE class rosters had originally 25 students on for both first-hour and 18 and 19 students for the second-hour PE classes. The class sizes were similar on all fifth grade PE class rosters with either 17 or 18 students in each class.
As for student diversity there were big differences in the first and second-hour fourth grade PE classes. Based on classroom rosters there were nine to 12 Hispanic students in the first-hour fourth grade PE classes and only one to three Hispanic students in the second-hour fourth grade PE classes. In fifth grade there were three to six Hispanic students in each PE class. This created a unique atmosphere in the first-hour fourth grade PE classes with higher number of students per class and higher percentage of Hispanic students with limited English proficiency.

Although the PE teacher minimized time spent in managing the class and maximized time on task, there were evident differences between the first and second-hour PE classes regarding time on task, being active, having opportunity to practice, having adequate equipment, demonstrating appropriate behavior, getting to higher levels of learning, and experiencing success. Other issues that complicated the situation included an increased language barrier, less time to provide individual feedback and close monitoring, less one-on-one interaction with the PE teacher, increased noise and having less personal space.

Based on observation notes on at least 21 occasions certain aspects of PE class were so different that it provided a unique experience for children in the first-hour compared to second-hour PE. These aspects contributing to a difference between class periods are described in the following section.

Arrival at the gym. Because the first-hour PE class was comprised of children from two different classrooms, it was common to have some of the children in the gym before the others arrived. Thus, Mr. Strong often could not proceed with the lesson as planned before all children arrived, and he had to either provide some alternative activity
in the meantime or modify the activity so that others could join in as they arrived. On
Thursday, January 26, children from the Hispanics-only class arrived five minutes before
the other class and so the teacher decided, since they were doing basketball skills that
day, that they could practice shooting baskets before the other class arrived. On
Thursday, May 10, the children from the Hispanics-only class arrived five minutes late
and since it was only a 20-minute lesson that day Mr. Strong had already started a game.
He asked the Hispanic children to join assigned teams as they were coming in. However,
these arrivals at different times complicated the PE environment and took time from
quality instruction for all the children in the classes.

*Waiting in line.* There were times when noticeably more children were waiting in
line in the first-hour PE compared to second-hour PE, especially during classes using
stations. PE Challenge was one of those activities that had five different stations set up in
the gym. On Monday, October 24, all classes began the day with at least 10 minutes of
the PE challenge. It was evident that in the class with 25 students children did not have
equal opportunity to change stations and often spent extra time waiting in line, especially
at stations that were more popular such as the climbing wall, where four students
typically waited for a turn. However, in the second-hour PE with only 16 students there
was almost no waiting, even at the climbing wall, and children had many more
opportunities to choose a station or switch between stations quickly.

Similarly on Wednesday, August 24, Mr. Strong was conducting fitness testing at
one station and had five other stations set up for children to choose from when not
involved in testing. There was clearly more waiting in line at the stations and less moving
in the first-hour PE with 25 students compared to second-hour PE with only 16 students.
Less time in game play / free play. During the weeks of fitness testing the time spent on fitness testing was much greater in the larger classes, leaving limited time to be engaged in other activity. For instance on Thursday, September 1, the PE teacher was measuring flexed arm hang – one of the FITNESGRAM® tests - while the rest of the class was exercising on their own along the fitness trail outside. Although there were no children waiting in line but rather exercised on their own, the fitness testing took more time in the first-hour PE class and so they had less time to play the game of Star Wars in the gym at the end of class. Children in the second-hour PE were finished with the fitness testing faster, and thus had much more time at the end of class to play a game.

Similarly, on Thursday, April 19, during the week of spring fitness testing, children in the first-hour PE had less time to play two-base matball at the end of class compared to children in the second-hour PE. On Tuesday, May 15, all classes were engaged in the spring Adventure Race. In groups of three children were to cover a course with stations of various challenges along the way. Again it took much longer for all the children in the first-hour PE class to finish the race, and so they had almost no time for free play at the end. Other classes that day finished the race fast and had quite a bit of time for free play on the playground equipment outside.

Less active. Not only were there times when the children in the first-hour PE spent less time in game play, but also there were times when they were less active while playing, for instance, due to larger team sizes. On Wednesday, February 15, for example, while playing modified floor hockey, children from the first-hour PE spent more time as goalkeepers rather than playing four on four in the field.
On Monday, January 23, during a basketball unit, children in each class played a full court basketball game. Because of the class size (24 students), there was always half of the class sitting out in the first-hour PE. However, the second-hour PE class was much smaller (only 16 students), and so the teacher was able to have all students on the basketball court at one time.

**(Not) enough equipment**

Although it seems probable that there could be issues with not having enough equipment for each student in a larger class, this was not so in this case. Only one occasion was lack of equipment mentioned in the observation notes. On Thursday, February 2 in the first part of each class the PE teacher had students do various partner activities with medicine balls. There were not enough medicine balls for the students in the first-hour PE class, so soccer balls were substituted. Other than that it seems that there was always enough equipment for every student, and the school was well equipped to serve children even in a much larger class.

The only other issue related to use of equipment was that at times the PE teacher introduced a piece of equipment that students could try during the time of self-guided exercise. For instance, on the same day as the medicine ball activity, February 2, the PE teacher introduced the bosu balls. There were three of those available in each class. In a large class, however, students had fewer opportunities to experience a unique piece of equipment like the bosu balls.

**Less strategy.** At times there was a big difference in use of strategy, teamwork, and getting to higher levels of learning between the first and second-hour PE class. For example, on Monday, May 7, during a game of pirate ball it seemed that each class was
playing a very different game. Students in the first-hour PE were playing at a level that barely followed the basic instructions and with little use of strategy to win the game for their teams. Students in the second-hour PE, however, mostly focused on strategy. They tried to make pacts with other teams to help their team win. They appeared to overcomplicate the game because of their focus on the outcome.

A very similar scenario was observed on Tuesday, May 8, during a similar game of pirate ball. In first-hour PE there was a lot of playing around the lines, teasing each other, with little strategizing. In the second-hour PE class, students again made pacts with other teams, trying to outsmart the rest of the class and win by using the best strategy. It was evident that there was something fundamentally different between these two classes that resulted in a very different approach to playing the same game. Simply expressed, in classes with many Hispanics often the game was only played at the level that barely followed the rules rather than using teamwork and strategy.

Less success. There were occasions when the children in the first-hour PE class did not experience the same level of success as children in the second-hour PE class. On Thursday, May 17, the PE teacher announced the results of the PE challenge activity. There was no medalist in the first-hour PE class, which means that no children from this class were able to pass at least four of the six different challenges. Only one boy came close as he passed three challenges, however, he was not one of the students from the self-contained Hispanic class. In the second-hour PE there were some medalists, meaning that there were children who were able to pass four or more of the six challenges. Thus, more children in the second-hour PE were able to experience higher levels of success.
Similarly on Wednesday, May 9, all fourth and fifth grade students participated in a class of orienteering. They had maps of the school vicinity with stops indicating where to locate as many answers as possible within a given time frame. Children worked in groups of two and had the option of choosing a Spanish version of the fill-in form. However, almost no one from the self-contained Hispanic class was able to reach the desired limit of 40 points to be announced as one of those most successful in this activity. These observations might be coincidences influenced by individual characteristics. On the other hand they might also be a logical consequence of larger class size with less opportunity to practice and receive individual feedback, along with the extra effort it takes for the Hispanic children to overcome the language barrier.

Other issues. Although the language barrier is described in the first theme section of the results above, it is important to mention that most fourth grade children with limited English proficiency were placed in these first-hour PE classes. Therefore, the PE teacher not only had to deal with the larger and more ethnically diverse student population in these classes, but he also had to overcome an increased language barrier - the fact that these children could not fully understand his instructions presented in English. The PE teacher was well aware of these challenges and attempted to incorporate various methods to help these children understand. He explained that at times when he tried to begin the lesson plan to get children moving quickly, the Hispanic children might have not understood his directions and thus were unable to fully follow his directions when he talked fast. He explained,
Sometimes I wonder too if I talk too fast at the beginning of class when I’m giving directions because I want class to get going time-wise… Sometimes I talk too fast and I think they [the Hispanic students] kinda miss a little bit on that…

Other issues that complicated the situation included more off-task behavior, less time to provide individual feedback and close monitoring, less one-on-one interactions with the PE teacher, increased noise and having less personal space in the larger classes. All these contributed to the class dynamics that resulted in a slightly different experience in the PE program for children between the first and second-hour fourth grade PE classes.

**Chapter Summary**

The results from this investigation indicate that Hispanic students in physical education at this school experienced unique issues related to language. Despite this potential inhibitor these students tended to enjoy PE. The integration of Hispanics in the school was further complicated by high mobility rate and the number of Hispanics who were fairly new in the school and who attended the school only for a short time. Hispanic children’s unique cultural preferences became apparent within the PE setting. Their PE experiences were also impacted by PE scheduling, which was influenced by school-wide policies and the approach to integration of Hispanic students.

Hispanic children represented a diverse group as for their acculturation and language abilities. This posed a great challenge to the PE teacher who did not speak Spanish, and thus he needed to find ways to navigate the language barrier between himself and his Spanish-speaking students. At times Spanish was a necessary or useful tool to communicate with those of limited English proficiency, therefore Spanish was supported by use of translation or provision of learning materials in Spanish. Other times
Spanish was misused and thus its use was banned. Often use of Spanish was not an issue and was quietly tolerated despite the general directions to speak English in PE.

Overall, Hispanic children in this school enjoyed PE. It was one of their favorite subjects at school. They were excited to engage in PE activities and they enjoyed the interaction with others. They were active, and appreciated the PE environment as a place that encouraged autonomy and challenge, and a time to socialize with friends. The dynamics of the program and the experiences of Hispanic children were also influenced by the high mobility rates and an increased percentage of Hispanic children from migrant families who attended the school for a short time. These newly arrived children posed an extra challenge to the PE teacher who tried to accommodate them and build trust. These students were often insecure or noncompliant. They were not familiar with some of the PE routines and activities. There was often a language barrier that complicated communication.

Hispanic students exhibited certain cultural characteristics that when understood by the teacher made him more sensitive towards these children. Hispanic children, especially girls, liked to stay together. They preferred certain sports and activities such as soccer rather than the most popular American sports such as baseball or basketball. They seemed to enjoy cooperation rather than competition. Especially Hispanic girls were less active, less skilled, and less ready to participate. Hispanics were open in expressing their feelings whether positive or negative, but were often insecure in the beginning of an activity.

Finally, the results suggest that the experiences of Hispanic children in the PE program were influenced by the school-wide atmosphere and policies. Hispanic students
from a self-contained Hispanic class in fourth grade experienced a slightly different PE than those integrated into regular classrooms in fifth grade. Scheduling became an important factor in providing high quality PE instruction to all children. Increased class size and diversity affected time being active, level of learning, and the experience of success.
Chapter Five: Discussion

Schools are an ideal place to address issues related to public health since 95% of children in the United States attend public schools for approximately six hours per day. Given the current sedentary lifestyle, children rely on physical education classes as one of the few opportunities to be physically active on a weekday. New recommendations from the Institute of Medicine suggest that children should be provided with 60 minutes of physical activity in and surrounding the school environment (IOM, 2013), given the many benefits stemming from regular engagement.

Concurrently, the Hispanic population in the United States is rapidly increasing, making people of Hispanic origin the nation’s largest ethnic minority constituting approximately 17% of the nation’s total population in 2012 (U.S. Census Bureau, 2013). For the first time, Hispanic students account for one quarter (25%) of public elementary school enrollment (Fry & Lopez, 2012). Presently, there is a paucity of research regarding the physical activity engagement of children in school. Even less is known about the experiences of Hispanic children during formalized instruction such as physical education.

Accordingly, the purpose of this study was to describe the PE experiences of Hispanic students regarding the cultural competence of their PE teacher and the school environment at one rural elementary school. Additionally, it was the goal of the researcher to discover what features enhance/hinder the experiences and engagement of Hispanic students in PE and to identify culturally relevant practices that could be applicable for other PE teachers in similar settings.
This chapter will discuss the significance of the main findings about the PE experiences of Hispanic children at Eastlake Elementary School* (EES) to holistically provide the reader with a rich description of a single teacher and his attempts to meet the needs of his students. Although the findings are not broadly generalizable, the reader may find broad approaches to learning that may be applicable to his/her current context. Further applications will be made in relation to the theoretical framework that guided this research. Finally, the chapter will address the limitations and implications of the study, and recommendations for future research.

This case study in a small town in midwestern United States of America allowed me, a future physical education teacher educator, to capture the experiences of a heterogeneous group of Hispanic fourth and fifth grade students. It utilized prolonged and persistent engagement and a multitude of data sources to give voice to Hispanic students and their physical education teacher, Mr. Strong. Rather than exclusively focus on the perceptions of students, this study took more encompassing approach by gathering insights from the principal, the teacher, and students over a one-year period of time. It was discovered that teacher effectiveness may not directly translate into the delivery of culturally relevant instruction or programming.

Four overarching topics stem from the results of this prolonged investigation and will be discussed below. First, the experiences of Hispanic students in PE are unique and need to be considered in provision of quality programming. Second, PE teachers traditionally considered highly effective may not be culturally competent in their delivery of quality instruction to ethnically diverse learners in today’s schools. A contextual variable of consideration when examining teacher cultural competence is the high student
mobility rate, which lowers quality of PE programming. Finally, PE teachers still face workplace issues that inhibit their ability to provide optimal instruction.

This study is not just about ethnicity, but also about gender and physical education in a rural school in a low-income community. Providing insight into issues of ethnicity, language, gender, and student mobility in relation to the delivery of quality physical education, this research is both timely and warranted. As the reader, you may discover a portion of these findings and implications that resonate with you and your context and accordingly you may apply and utilize these findings in another context.

**Hispanic Students Experiences in Physical Education**

The Hispanic students in this study represented a very diverse spectrum of Hispanic population as for their ethnic affiliation/country of origin, level of acculturation and language abilities. The PE environment was supportive of all students regardless of their race, ethnicity, gender or ability and cultural differences were acknowledged and respected. However, recognition and appreciation for their heritage was not necessarily a vital part of the PE curriculum. The fact that the PE teacher could not communicate in Spanish was a hindrance as well.

Thus, there was a language barrier between the PE teacher and some of the Hispanic students that led to the multifaceted approach to Spanish usage in PE. Although both the PE teacher and the students seemed to have no problem navigating this complex environment, there were specific strategies that the PE teacher used and the Hispanic students used that facilitated this process.

The PE teacher consulted with the administrators and the classroom teachers who knew the students better how to approach the Hispanic students regarding Spanish
language use and an official consensus was reached that they needed to use English in PE. However, based on situation the teacher was able to either enforce this rule when he deemed it necessary, to ignore the rule when the use of Spanish was a non-issue, or make an exception when dealing with a student who had very limited English language proficiency.

Although the PE teacher could not speak Spanish, he used all available resources to provide any written materials such as in-class activity sheets, written tests or letters sent to parents both in English and Spanish. For translation of English materials he used a free online translator and then he had his translated materials corrected by one of the bilingual teachers.

These practical strategies used by the PE teacher have been developed over time and proved effective in maintaining positive learning environment in PE while facilitating communication between the PE teacher and the Hispanic students and their parents. They were not established by the administration or taught by reading a textbook, but rather developed and slightly adjusted by trial and error during the practice of teaching and learning in the PE classes.

Similarly as in the study of Tabb and Joonkoo (2005) who found that functional Spanish language skills were the critical first steps enabling PE teachers’ to work more effectively with Mexican American students, the above mentioned strategies utilized by Mr. Strong were the critical first steps in becoming a culturally competent teacher.

Providing adaptations that cater to the educational needs of learners from diverse backgrounds represent integral part of culturally relevant pedagogy defined by Ladson-Billings (2001) as a way of teaching that empowers students intellectually, socially,
emotionally, and politically through the use of cultural references that impart knowledge, skills, and attitudes.

The Hispanic students also developed certain strategies to navigate this environment in regards to Spanish language use. Although they knew that speaking Spanish was not allowed in PE, they knew that they could use Spanish as long as the PE teacher did not hear it or they were not causing any trouble. However, they also learned quickly that they would get a warning if their use of Spanish was connected with off task behavior and that they would be allowed to speak as much Spanish as they wished when assigned to help another Hispanic student with very limited English proficiency or being the one who is assigned a translator to help them.

Language issues influenced the didactics of student-teacher and student-student learning experiences and inhibited comprehension. Because Mr. Strong never learned to speak Spanish, even though this clearly would have enhanced communication, there was a difficult barrier to overcome. Further, acting as he was trained to do was not enough to overcome issues related to advances in global mobility and therefore he was unable to meet the needs of today’s students. Instead, he did the best that he could with what he had to give.

For the Hispanic students in this study, the physical education experience was largely positive and led to a high engagement in physical activity. Consistent with other literature where it has been found that elementary students enjoy PE (Solmon & Carter, 1995), the Hispanic student participants in this study expressed favorable views of PE. Although there are research studies that describe various negative experiences of students
with PE, students in this research study shared simple, positive expressions regarding their experiences.

Hispanic children in this study described various aspects of PE that they liked and did not like. Similarly as in the research of Sanders and Graham (1995) who described children’s “relentless persistence for play” and dislike of repetitive activities such as stretching, the Hispanic children in this study identified the game part of the lesson as their favorite and the exercise part of the lesson as less favorite.

In their view, other favorable aspects of PE included having fun, socializing, teamwork, being able to move around, having choices, providing challenges or innovation, which are all aspects of PE lesson that have been identified as positively perceived aspects of PE by other researchers (Tjeerdsma, Rink, & Graham, 1996; Hastie & Pickwell, 1996).

The PE teacher provided students with a variety of enjoyable age-appropriate activities that kept them engaged, enthusiastic and excited. However children also spoke highly about the cognitive learning that took place and their understanding of the importance of PE for fitness. Thus it is evident that the PE teacher did not give up his curricular goals in exchange for just keeping children “busy, happy and good,” as described by Placek (1983).

Observing Hispanic students in PE the researcher found several distinct characteristics also observed by the PE teacher. They tend to stay together and form groups with other Hispanics, more so it happens among girls. Sharing the same language, similar cultural background and in some cases a separate classroom most of the day may be some of the factors contributing to this phenomenon.
Hispanic children preferred soccer to other traditional American sports such as baseball or basketball. The PE teacher tried to accommodate their interests by dedicating more time in the curriculum to soccer and other activities such as floor hockey that the Hispanic children enjoyed. A similar fondness for soccer has been found among minority and immigrant students in a study in a high school in Kansas (Grey, 1992), where the emphasis on participation in established “American” sports and the failure to accommodate their students’ unique cultural preferences perpetuated the marginal status and isolation of these minority and immigrant students. Thus considering Hispanic children’s preferences in the construction of the PE curricula as demonstrated by the PE teacher in this study may have been one means of showing genuine interest in their cultural backgrounds, helping them to identify with the school and become integrated in the school community.

Hispanic children in this study, especially girls, had a tendency to choose cooperation over competition with others. If a PE teacher is aware of this tendency, he may utilize it to motivate these children to greater engagement by providing activities that require cooperation rather than competition or providing options with variations of activities for children who prefer cooperation and those who prefer competition.

Many Hispanic girls often came unprepared and less eager to participate in the PE activities. There may be various reasons why this was the case, however it would require further research to better understand this phenomenon. It is understandable that girls in general may be more inclined to wear to school shoes that may not be proper for safe participation in PE. However, they have the option of bringing tennis shoes to school to change for PE.
Hispanic children demonstrated insecurity due to unfamiliarity with the activities. This may be partially explained by the language barrier, which often leads to partial understanding of the instructions given by the PE teacher in English. It may be exacerbated by the fact that many of the Hispanic children have joined the school community recently and so they are as a matter of fact less familiar with the activities.

This phenomenon can also be connected with their cultural heritage and living in an ethnic community that provides children with unique experiences that may not be reflected in traditional school curricula. However culturally responsive teaching acknowledges the legitimacy of the cultural heritages of different ethnic groups as worthy content to be included in formal curricula and teaches students to know and praise their own and each others’ cultural heritages (Gay, 2002), a notion that may necessitate PE teachers such as Mr. Strong to formally address with respect students’ differences in the PE setting and focus on building bridges of meaningfulness between students home and school experiences.

Hispanic children were open in expressing their feelings of discomfort and pain as well as joy and excitement and they seemed to tolerate heat but not cold. These are some of the nuances that may complicate human interaction if not understood and taken as they are. For instance, a PE teacher may misinterpret a student’s decision to wear a jacket in mild temperatures as an open expression of rebellion, while the child may just feel comfortable doing so and rather feel intimidated when instructed to do otherwise. Most Hispanics come from countries with warmer weather and so especially the children from more recent immigrant families may not have had a chance to get used to the colder weather or they may just be used to dressing up more in relatively mild temperatures.
The Social Cognitive Theory posits that a bidirectional interaction between the individual, the environment results in guided behaviors. For Hispanic and non-Hispanic students in this study it meant experiencing a positive, high paced physical education program, provided by abundantly energetic, experienced teacher. Through his eyes, he gave the best that he possibly could. Yet his efforts were not without limitations, as his evidenced teacher effectiveness did not directly transform into cultural competence.

The PE teacher did not speak Spanish, so he could not efficiently help children who had limited knowledge of the English language. Thus Hispanic children often did not understand the instructions or understood just partially. Sometimes they were assigned to help each other. However, they were often insecure in the beginning of an activity or played at a lower level, as for use of strategy.

Hispanic children constituted approximately 30% of the student population, however their cultural heritage was not necessarily reflected in the curriculum other than including an extra unit of soccer or playing more games that the PE teacher could see they like. Among the PE activities there were no games that were connected with Hispanic culture or traditions or no connections made to the rich cultural heritage of these students in PE. Although there was a clear language barrier between these students and their PE teacher, no other forms of support were provided to these individual students or the classes they were placed in for PE, as suggested by Ladson-Billings (2001) who called for instructional practices culturally responsive to the needs of student learners that would facilitate students’ academic achievement.
Cultural Competency Required for Effective Teaching in PE

Physical education teachers’ cultural competence is a notion that is complex and difficult to assess. Although there are valid tools to measure cultural teaching competency of teachers, such as the MTCS used in this study, finding meaningful guidelines that describe what a culturally competent PE teacher looks like in the day-to-day practice of teaching has been a challenge. Not only many of the tools that are used have been developed for teachers teaching other classroom subjects and not specifically for PE teachers, but also relevant pedagogy may be displayed very differently depending on the grade level of students. Some aspects of culturally competent teachers, as described in the literature, were not easily applicable to teaching PE in fourth and fifth grade classes.

The population of students in today’s United States schools and the trends that this diversity will only continue to increase requires a preparation plan for future PE teachers that will enable them to provide quality instruction to all of their students. This may entail rethinking curriculum content and including games and activities from across the globe. It may also imply that future PE teachers be required to take a course such as Spanish 101 for PE teachers, where they would learn the basic PE terminology in Spanish, and a course on Hispanic culture or other cultures represented in the schools where they plan to be teaching.

Although Hispanics are now the largest ethnic minority in the U.S., there are other ethnic, racial, and religious minorities that are represented in U.S. schools. This requires that teachers be prepared to serve diverse children with sensitivity towards their unique characteristics and cultural nuances stemming from their family backgrounds. Thus, the
ability to accommodate and provide meaningful experiences for specific groups of students becomes a crucial part of defining teacher effectiveness in physical education.

It is timely that the field of physical education would grapple with the idea that definition of effective physical education (managing class, spending 50% of the time in MVPA, etc.) may need to encompass and emphasize the ever-increasing diversity of students that participate in our schools’ PE programs. Professional pre-service and in-service training needs to provide both clear overarching guidelines but also specific practical tools for teachers how to serve their specific populations at school. Practical resources describing activities from specific cultural backgrounds and from diverse cultures from across the globe need to be further developed and promoted as vital part of PE curricula.

PE certification could include higher standards and requirements in regards to cultural competency of future PE teachers. Physical education teacher education programs need to work on strategies how to best develop cultural competence in future PE teachers, including opportunities to practice teaching PE to students from diverse settings and coursework that helps develop understanding of, appreciation of and intercultural sensitivity for diverse ethnic and racial groups in the U.S. in meaningful ways (Burden, et al., 2004; DeSensi, 1995; Hodge, 2003). School officials need to be educated on the importance of hiring PE teachers that can effectively serve the diverse student population at their school, for instance by establishing certification with specialization in serving Hispanic students. Quality in-service training need to be further developed and promoted among practitioners.
Challenges with new students / high mobility rate. Student mobility, defined as making a school enrollment change at a time not required by the grade structure of the school system, has been found to have a negative effect on school performance (Ingersoll et al., 1989; Heinlein & Shinn, 2000), including lower test scores (Texas Department of Education, 1997), decreased classroom participation (Gruman et al., 2008), increased risk of behavior problems (Tucker et al., 1998), or lower educational attainment (South et al., 2007).

For elementary-age students making such unscheduled school change represents a dramatic environmental shift that may lead to decreased sense of commitment to and sense of belonging at school (Seidman & French, 1997). Further, it may have particularly harmful effects on academic performance because it disrupts the acquisition of the critical building blocks on which later learning is based (Kerbow, 1996).

However research has shown that not all highly mobile children suffer negative consequences (Tucker et al., 1998). Among the factors that protect mobile children from harm following a school change is social support from family, peers and a teacher (Hagan et al., 1996; Felner et al., 2002; Gruman et al., 2008). Particularly significant effects on academic motivation, attitude, and engagement in the school environment at this age have student–teacher relationships when characterized as supportive, close, or caring (Birch & Ladd, 1997). Children’s perceptions of teacher support have been found to have positive influence on children’s classroom participation and positive attitude towards school (Gruman et al., 2008).

This research study was conducted in a school with higher than average mobility rate. Many of the mobile children were Hispanic children with varying English language...
abilities and acculturation level, however not many of them participated in the study due to their transient status in the school. Most of the findings thus are based on other children’s, the PE teacher’s perceptions and on observations.

The unique findings of this study indicate that Hispanic transfer students in PE pose an extra challenge for the PE teacher who needs to spend time getting to know them, reiterating basic routines and explaining PE activities that other students are familiar with. The situation is often complicated by the need to also overcome the language barrier between the PE teacher and these students.

Similarly as in other research this study found that new students are often insecure and have more behavioral problems (Tucker et al., 1998) and that they do not reach the same level of learning and performance in PE as other students due to their gaps in learning the basic skills and knowledge necessary to get to higher levels of performance (Kerbow, 1996).

The PE teacher in this study employed various strategies to accommodate Spanish-speaking transfer students, such as using others as translators or helpers to the new student, taking the new child aside and explaining the activity while others are playing, or providing extra provisions for the new student during game play by allowing minor violations without penalty the first time they play a new game. All these strategies could be considered as part of the desirable social support that can mitigate the transition of the new student (Gruman et al., 2008).

Student mobility does not only impact individual students who are changing schools, but it has deep consequences for the schools these students attend and for the educational system in general (Kerbow, 1996). The PE teacher in this study admitted that
the high turnover rate changes the atmosphere of the learning environment by lowering the ability to trust each other and to get to higher levels of learning, such as focus on strategy rather than basic rules of PE activities.

**Contextual Inhibitors**

This study took place in a town and school that has been going through rapid increase of Hispanic population, which meant that new adjustments needed to be made every year. This impacted scheduling through the recent establishment of Hispanics only classrooms taught by bilingual teachers and integration of Hispanic children with other classes for a portion of the day.

Many Hispanic children were placed for PE in classes with higher than average number of students and increased diversity. This impacted their time being active, level of learning, and the experience of success. This decision made by the administration may have served the purpose of integrating Hispanic children for a portion of the day, however it slightly hampered the quality of the PE program delivery.

It seems that physical education is still a school subject that is not as highly valued as other subjects and thus even in this study the PE teacher had to deal with the fact that children were combined into larger than average classes, in a few instances. Although there are many initiatives that promote increase of physical activity during the school day and the importance of quality physical education for children’s health and establishment of healthy life style, schools may still be making choices that are not in favor of quality physical education provision.

Schools may have other agendas that seem more important such as high scores on standardized tests of achievement that do not include physical education. The
administration may not realize the importance of providing optimal conditions for PE curriculum delivery and enough time to be physically active during the school day, as children often do not participate in regular physical activity before or after school but rather lead sedentary lifestyles influenced by development of technology.

Results in light of theoretical framework

In order to explore from a theoretical perspective Hispanic student participants’ perceptions of their own experiences and the contextual factors within an elementary school physical education setting that influence these experiences, Social Cognitive Theory (Bandura, 1986) and Critical Race Theory (Ladson-Billings & Tate, 1995) were chosen to ground the investigation.

Social Cognitive Theory (SCT) represents a commonly used framework, which emphasizes the fact that learning occurs in a social context and it explains human functioning as a product of a continuous interaction between cognitive, behavioral, and contextual factors. Social Cognitive Theory tenets were utilized throughout this research as reminders of the complexity of the relationships between three sets of variables including 1) personal characteristics and cognition of the participants, 2) PA behaviors of students and teacher actions in PE, and 3) the structured environment of the PE program, the school, local community and the greater society.

For instance, learning in physical education (PE) was shaped by factors within the school environment, including the school's approach to integration or scheduling. For most Hispanic children in fourth grade who were placed in a self-contained Hispanic classroom this meant being integrated for PE with another class and thus having a higher student to teacher ratio than the school average and more issues with overcoming the
language barrier and cultural differences. However the PE teacher has managed to create an inviting learning environment that resulted in Hispanic students’ enjoyment of PE and participation.

At the same time, learning was affected by students' own thoughts and self-beliefs and their interpretation of the school and PE class context. As SCT posits they had the ability to influence their own behavior and the environment through the use of symbols, forethought, vicarious experiences, self-reflection and self-regulation (Bandura, 1986).

SCT assumes that humans can learn through observation by utilizing symbols. This observational learning is mediated by attention, retention, production and motivation and thus requires students' engagement in each of the four sub-processes. However this engagement may have been complicated for Hispanic children, especially those with minimal command of the English language. They often had to rely on other means of communication rather than verbal.

Their limited command of the English language may have had a negative effect on their attention, because not understanding the teacher's description they may have not been able to focus their observation on the most valuable information of the modeled event. Retention of information may have been hindered because not even the essential features of the modeled activities, such as the main cues describing a motor skill, were provided in Spanish, and the concepts to be learned were not provided culturally relevant meaning.

Production processes may have been limited, first of all by students' partial understanding how to do things, but also by their fewer opportunities for practice. Nevertheless the PE teacher was very good in providing effective feedback. Though the
PE teacher was very good in motivating students by using time out, providing incentives such as toe tokens, or modeling enthusiasm, he seemed to still have a problem motivating Hispanic children at times, especially girls.

As SCT posits both the Hispanic children and the PE teacher also had the ability to influence their own behavior and the environment based on their own self-efficacy, which can be defined as one’s belief on one’s ability to succeed in specific situations. Individuals pursue activities and situations in which they feel competent and avoid situations where they doubt their capability to be successful (Bandura 1993, 1997). Thus both teacher and student self-efficacy is a concept that has immense implications for teaching and learning that takes place in schools.

Describing the PE teacher’ sense of efficacy using the eight dimensions of teacher efficacy development identified by Ashton (1984), he would be considered a high efficacy teacher. Based on interviews first, he believed his work was important and meaningful and that he had positive impact on his students. Second, he had rather positive expectations for student behavior and achievement. Third, he took responsibility for student learning and always looked for strategies how to make changes to do things even better to facilitate success. Fourth, he planned for student learning. Fifth, he provided very positive comments about his teaching, about himself as a teacher and his students. Sixth, he did not always have a sense of control over his student learning. Seventh, he seemed to be in tune with children's expectations and goals for PE. Lastly, he did not allow children to have much say in decision-making regarding learning in PE, accept in lessons providing choice.
However there seemed to be a discrepancy in his comments about teaching. He expressed his lower confidence for motivating Hispanic children especially girls to participate, be active and enjoy physical education. He had a sense of language barrier between him and his Hispanic students with limited English proficiency. He also expressed his limited understanding of Hispanic students’ culture. All these aspects contributed to his lower self-efficacy to teach Hispanic children. Nevertheless in general he could be described as a Lifer (Henninger, 2007) - a teacher with high sense of efficacy who was committed to teaching, enthusiastic for his work, believed that he was making a difference and did not get discouraged by various workplace setbacks.

Student self-efficacy - self-belief about their capability - has been found to play an essential role in student motivation to learn (Zimmerman, 2000) and to predict their performance in various subjects including PE (Chase, 2001). Self-efficacy is based on performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal (Bandura, 1977a).

Although there was no specific measure used to evaluate students' self-efficacy in PE, this concept is discussed on a hypothetical level. At times the PE teacher's ability to provide activities with various levels of difficulty allowed students of lower skill level to experience success. However at other times it was the Hispanic students especially those of lower English language ability that experienced lower level of success. This repeated experience of failure lowered their mastery expectations, which became a realistic basis for lower self-efficacy.

Vicarious experiences are not a good source of efficacy. In this case it may have been complicated and rather poor source of efficacy for Hispanic students. Viewing
others of different ethnicity or gender perform difficult tasks could not serve as a good source of efficacy, because they could not serve as models to identify with for many of the Hispanic students. Verbal persuasion may have been complicated by the Hispanic students’ limited understanding of the English language.

Emotional arousal may have accompanied the Hispanic students’ lower experience of success by making them feel tense and agitated. This resulting lower self-efficacy may explain why Hispanics students especially girls were found to be less active and less ready to participate in the activities in their PE classes. This goes hand in hand with the finding that self-efficacy plays a key role in sustained engagement in PA among school-aged children (Dishman, Saunders, Motl, Dowda, & Pate, 2009). Thus teachers can affect student self-efficacy by what they do and say, especially by providing the experience of success, models that students can identify with, providing clear description of tasks, effective feedback positive atmosphere where students can have experience positive emotions that they associate with their participation in physical activity (Margolis & McCabe, 2006; Fencl, & Scheel, 2005).

Critical Race Theory (CRT) focuses on the experiences of people of color/minority and aims to challenge the dominant discourses in various fields including education by drawing on the experiences of those that belong to particular minority group. CRT in education focuses on the voice theme represented by the stories and experiences of students of color/ minority, which provide a tool for illuminating issues of inequity in education. The experiences of Hispanic students in and perceptions about PE were the primary focus of this research.
CRT is based on a perspective that racism is normal, not aberrant in US society and that racial incidents happen all the time. They are what Gloria Ladson-Billings calls the daily cuts that include every-day experiences of people of color in this racialized society. Considering the results of this study in light of critical race theory the basic question that can be asked is: Did being Hispanic bring about disadvantages in this educational setting? And the answer is: Yes, surely it did.

For many of the Hispanic students the school considered them as LEP (limited English proficient) and did not provide PE instruction in Spanish, their mother tongue, a language that they could easily understand. This led to many instances of miscommunication / inability to understand and follow instructions, lower level of learning and perceived marginalization.

For many other Hispanics who might have been able to communicate in English the official ban of using Spanish in PE sent a clear message that their language was secondary and it was necessary for them to be able to use English to succeed in school. There was even greater language barrier between the PE teacher and his Hispanic students’ parents, therefore these parents had an extra obstacle to overcome in establishing a personal relationship with the PE teacher.

Other than including an extra unit of soccer, the PE curriculum did not reflect the rich cultural heritage of its participants from various cultural backgrounds including Hispanic students. Although the curriculum was innovative and used various effective teaching methods, it did not include games or activities that would represent the unique cultural backgrounds of its participants. In addition, Hispanics, especially girls, were
often less familiar with and less skilled in some traditional American sports and games activities.

Therefore Hispanic students often experienced lower level of success compared to their non-Hispanic counterparts, reached lower level of learning and due to scheduling had less opportunity to practice. Based on data from accelerometry, they were less active and exerted lower levels of energy during their PE classes. Although Hispanic students expressed rather positive view of their PE experience overall, there seemed to be little evidence that the program exploited the cultural capital of the Hispanic students and their communities.

This approach was consistent with the traditional deficit view of Hispanic communities, which blames the student families/communities for lower school success/achievement. It ignored the community cultural wealth abundant in these communities, including their linguistic skills, familial or social capital (Yosso, 2006c). This approach not only failed to empower the Hispanic students and their families, but rather contributed to the perpetual marginalization of Hispanic students in the school and thus in the US society (Gillborn, 2009).

The following narrative serves as a counterstory to the discourses that legitimize the common practices in PE programs like this one. Although written as a reconstruction of the main findings by the researcher, it is written in first person to enhance the impression on the reader by considering the potential impact these realities might have on the collective experience of Hispanic children in this particular PE program.

*There are many Hispanic children in my school like me. However we are different in many ways. Some of us were born here in US, while others were born in other*
countries, like Mexico or Puerto Rico. Most of us speak both Spanish and English, but some cannot really communicate well in English. So we help each other by translating for those who do not understand English. However in general we know English better than most of our parents do.

Our PE teacher does not speak Spanish, so we all need to use English in PE. When our parents come to school they cannot talk with the PE teacher, they just smile and greet each other. Except when instructed to help someone who speaks no English, speaking Spanish is not allowed in our PE class, because the teacher would not be able to tell if we are saying something inappropriate. We still use Spanish at times, but we are smart about it—we do so when the teacher is far away and we make sure that we do not cause any trouble. However, some Hispanic kids are not always so careful and so some of us get in trouble for that.

We all love PE, because we get to move a lot and play fun games. Although we are really good in soccer compared to the rest of the class we are not that great in basketball and baseball. Often we do not know many of the activities that the other kids know well from doing them before. We do not get to be put on the Hall of Fame in the gym that often. For instance none of the Hispanic kids in my class made the list in Orienteering or in PE challenge.

Many new Hispanic students came to this school only recently and there are some that will probably leave the school within the next few weeks, because their parents came here for seasonal farm work. They cannot play the games in PE well because they are just learning the basic rules. Mr. Strong has to spend a lot of time explaining things and teaching them what the rest of the class already knows.
As for us Hispanic girls, we do not move as much as others. We like to stay together with our Hispanic friends. If we come to school in nice stylish shoes we have to change into sneakers for PE. At times we are put in really uncomfortable situations in games like continuous dodgeball when we are to play against our best friends. We do not like to compete or be a target in a game like pinball.

Our class is divided into two halves and we have to join another class for PE. There are so many kids that sometimes we have to wait in line for a long time to get our turn or when we all play a game we might hardly ever get to touch the ball. The gym is packed and there is a lot of noise. Sometimes the kids from the other class come late so we have to wait on them before we can start the game.

Although there are many Hispanic children in our PE class, we never get to play games from Spanish speaking countries. Our PE teacher is great, but he does not know much about our culture. He cannot teach us games that our parents and grandparents used to play when they were young. Although the other kids seem to be fine, we do not like to go out in the cold. We are not used to it.

Overall we like school. I wonder though why is there no Hispanic teacher in our school? And why not too many of us Hispanics are in the gifted program? Why do we have to learn English but the teachers do not have to learn any Spanish? We are part of the school and the US society. Does anyone in the school care about our rich cultural heritage, where we come from and who we are?

Limitations

The researcher recognizes that some students may have withheld their true perceptions of their experiences in PE for fear of how they might be perceived if they do
so and the adult participants may have tried to portray a better image of their school. Scholars, however, agree that when the interviewer is not associated with the institution study participants may be open to share their true perceptions. Despite repeated assurances that their responses would be kept confidential, the study participants may have avoided bringing up sensitive issues.

Additionally, the researcher’s limited knowledge of the Spanish language was a hindrance and did not allow the researcher to be able to understand all the conversations taking place in Spanish during observations. Although a Spanish translator was used when interviewing the Hispanic children with limited English proficiency, valuable pieces of information may have been lost in the translation.

Finally, Hispanic children from families of migrant farm workers that attended school only for short periods of time were not among the participants of the study, as the researcher was unable to get their parents’ consent and include them in the interviews within the short time they attended school. Therefore, observations, teacher interviews and other Hispanic students’ reports were accepted as the primary sources of data pertaining to these migrant children.

Implications for practice

Physical education teacher education should provide opportunities for preservice teachers to develop their professional dispositions in relation to culture and understand the difference between superficial and genuine attempts at enacting culturally relevant pedagogy. It is imperative that pre-service PE teachers are required to take a course on cultural sensitivity as part of their required coursework and certification. Further, targeted professional development needs to be provided to practicing teachers about culturally
relevant pedagogy, which is grounded in authentic nature of what PE teachers experience in the gym on a daily basis.

A public platform could be created where PE teachers could share their experiences and resources regarding teaching Hispanic children in PE. Considering that one quarter of the public school enrollment are Hispanic children, PE teachers would greatly benefit from Spanish language course with focus on PE terminology. In schools catering to children from families of migrant workers provide training to teachers how to support transit students and highlight the importance of showing genuine care and understanding to these children.

Schools and their students would benefit from conducting regular evaluation of their policies and practices in regards to cultural competency and equal opportunity even in subjects like PE. When scheduling, despite efforts to integrate children of various backgrounds, to provide quality PE instruction maintain a similar class size as in regular classrooms or provide extra time or extra support especially when combining children with diverse language abilities.

Provide environment that motivates Hispanic girls to engage by providing activities that utilize cooperation rather than competition. Consider Hispanic students’ preferences in the construction of the PE curriculum. As a PE teacher, include activities and games in PE that are connected with Hispanic children’s rich cultural heritage and use every opportunity to show to these children that you are genuinely interested in their cultural background.
**Recommendations for future research**

Although the research on effective teaching of Hispanic students in PE is scarce and there is a vast area of an untapped territory for investigations, future studies may focus on ways how to motivate Hispanic children, especially girls, to be active in PE and what factors inhibit their engagement. Other investigations could interview Hispanic migrant students about their experiences with PE and explore strategies for maximizing social support of Hispanic transit students in PE that is so crucial for their successful school transition.

Research should also examine what strategies do successful PE teachers of Hispanic students utilize in their teaching, what hinders the quality of their PE programs and what support do they need. Finally, examining the effectiveness of available training on PE teacher cultural competency/sensitivity and its impact on teachers’ practices in PE is timely and warranted.
## Tables

Table 2. Descriptive Statistics of Student Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>All n = 92</th>
<th>Females n = 46</th>
<th>Males n = 46</th>
<th>Hispanic n = 23</th>
<th>Non-Hispanic n = 69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td></td>
<td>10.05 (0.56)</td>
<td>10.04 (0.49)</td>
<td>10.05 (0.62)</td>
<td>10.10 (0.57)</td>
<td>10.03 (0.55)</td>
</tr>
<tr>
<td>Language</td>
<td>2.71 (0.57)</td>
<td>2.67 (0.66)</td>
<td>2.76 (0.48)</td>
<td>1.83 (0.57)(^1)</td>
<td>3.00 (0.00)</td>
</tr>
<tr>
<td>Assimilation</td>
<td>6.65 (2.61)</td>
<td>6.39 (2.79)</td>
<td>6.93 (2.41)</td>
<td>2.32 (2.00)(^1)</td>
<td>8.00 (0.00)</td>
</tr>
<tr>
<td>BMI (Kg/m(^2))</td>
<td>20.80 (5.01)</td>
<td>20.83 (4.71)</td>
<td>21.05 (5.75)</td>
<td>20.64 (3.65)</td>
<td>21.04 (5.68)</td>
</tr>
<tr>
<td>Mile time (mins)</td>
<td>12.10 (2.61)</td>
<td>12.63 (2.42)(^2)</td>
<td>11.55 (2.74)</td>
<td>12.04 (2.38)</td>
<td>12.12 (2.72)</td>
</tr>
<tr>
<td>Energy Exp. (kcal/lesson)</td>
<td>50.18 (17.47)</td>
<td>48.13 (25.63)</td>
<td>52.25 (29.48)</td>
<td>46.18 (23.31)</td>
<td>51.28 (28.63)</td>
</tr>
<tr>
<td>METs</td>
<td>3.54 (0.73)</td>
<td>3.38 (0.48)(^2)</td>
<td>3.72 (0.56)</td>
<td>3.33 (0.56)(^1)</td>
<td>3.60 (0.52)</td>
</tr>
<tr>
<td>SED (%)</td>
<td>0.38 (0.07)(^2)</td>
<td>0.32 (0.07)</td>
<td>0.38 (0.09)(^1)</td>
<td>0.34 (0.06)</td>
<td></td>
</tr>
<tr>
<td>MVPA (%)</td>
<td>0.52 (0.07)(^2)</td>
<td>0.59 (0.08)</td>
<td>0.53 (0.10)</td>
<td>0.56 (0.07)</td>
<td></td>
</tr>
</tbody>
</table>

Note: M = mean; SD = standard deviation; Kg = Kilograms; m = meters; mins = minutes; kcal = kilocalories; METs = metabolic equivalent

\(^1\) Hispanics were significantly different from Non-Hispanics p < .05

\(^2\) Males were significantly different from females p < .05
Total number of students enrolled = 160
Number with consent/assent = 92
Hispanic = 23

Non-participant observations/lessons = 170
PA data (accelerometry) collection days (lessons) = 26 (52)
Hispanic study participants only
  • AHIMSA Survey
  • Group interviews
  • Opinionnaires

Physical Education Teacher = 1
Principal = 1

• Formal Interviews
• Informal interviews
• SCCOC Survey
• MTCS Survey
• Collection of artifacts

Teacher

• Formal Interview
• SCCOC Survey

Principal

Non-participant observations/lessons = 170
References


176


Appendix A

Elementary School Physical Education Research Study

Parent Consent

January 19, 2011

Dear Parent:

We are from the Department of Kinesiology and Community Health at the University of Illinois and would like to include your child in a research project conducted by Veronika Sanogo, a graduate student, led by associate professor Dr. Amelia Woods, Responsible Project Investigator. The purpose of this study is to describe students’ experiences in physical education.

If your child takes part in this project, he/she will be asked to (a) let us observe her/him in physical education, (b) use his/her physical activity data collected from accelerometers worn in physical education, (c) use his/her fitness testing data obtained from PE teacher’s records, (d) if selected take part in an informal group interview lasting approximately 40 minutes, and (e) if selected take part in an individual interview lasting approximately 15 minutes. All interviews will be tape recorded and later transcribed. All interview questions will be kept in the school office for you to review if you wish.

Your child's participation in this project is completely voluntary. Your decision concerning whether or not to participate will not affect your child’s physical education experience. Your child may discontinue participation at any time without affecting his/her grades at school. There are minimal foreseeable risks from participating in this project. Your child may feel uncomfortable being observed or answering interview questions, in which case he/she may choose not to be observed or interviewed on a specific day or not to answer specific questions. Your child may also feel uncomfortable wearing an accelerometer, which is a small box (2 x 1 x 0.5 inches) attached to the waistline, smaller than a 9V battery. It is very light like a small box of dental floss. It does not hurt to wear an accelerometer and your child will only be asked to put it on at the beginning of class and take it off at the end of class. It measures how physically active your child is during physical education. We will not have a problem if your child chooses not to wear the accelerometer on any given day. There will be no monetary compensation for your child’s participation.

The information that is obtained during this research project will be kept strictly confidential. Any sharing or publication of the research results will not identify any of the participants by name. Only the three researchers of the study will have access to the data.

On the next page of this letter, please indicate whether you do or do not want your child to participate in this project. Please indicate whether you agree that your child will be audiotaped during the interview. If not, he/she will not be able to participate in the group interview. Please fill out and sign the second page of this Consent Form and return to the investigators via the PE teacher. Please keep the first page of this form for your records. We look forward to working with your child. Your child will be contributing very valuable information that may lead to improved understanding of issues involved in Hispanic students’ participation in physical education and positively impact today's practices.

If you have any questions about the research at any time, please call or write Veronika Sanogo (phone: 333-9030 or e-mail: vsanogo2@illinois.edu), Dr. Amelia Woods (phone: 333-9602 or e-mail: amywoods@illinois.edu), Department of Kinesiology and Community Health, Freer Hall, University of Illinois, 906 S. Goodwin Avenue, Urbana, IL 61801. If you desire additional information about your rights as a participant, please feel free to contact the UIUC Institutional Review Board Office at 217-333-2670 or irb@illinois.edu. Collect calls will be accepted if you...
identify yourself as a parent of a study participant. Thank you for your time and considering this letter.

Sincerely,

______________________ _________________
Veronika Sanogo Amelia Woods

Do you agree to have your son/daughter be a participant in the research project?

☐ YES ☐ NO

Do you agree to have your son/daughter be interviewed in the research project?

☐ YES ☐ NO

Do you agree to have your son/daughter be audiotaped during this interview?

☐ YES ☐ NO

Do you agree to have the UIUC researchers collect results of PE tests of your son/daughter from the school and to use those results for research purposes?

☐ YES ☐ NO

Do you agree to have the UIUC researchers collect physical activity data from accelerometers used in PE class and to use those results for research purposes?

☐ YES ☐ NO

___________________________ _________________
Printed Name of Parent Printed Name of Child

___________________________ _________________
Signature of Parent Date
Estudio caso de educación física en la escuela primaria
Consentimiento del padre y/o madre
19 de enero de 2011

Estimado padre y/o madre:

Somos del departamento de kinesiología y salud de la comunidad de la Universidad de Illinois y quisiéramos incluir a su niño en el proyecto de investigación arriba mencionado conducido por Veronika Sanogo, estudiante graduada, dirigida por la profesora asociada Dr. Amelia Woods, quien es el investigador responsable del proyecto. El propósito de este estudio es describir experiencias de los estudiantes en la educación física.

Si su niño participa en este proyecto, le será pedido (a) que nos deje observarla/lo en la clase de educación física, (b) que nos permita utilizar sus datos de la actividad física recogidos en los acelerómetros usados en la clase de educación física, (c) que nos permita que usemos sus datos de la prueba de aptitud obtenidos de los expedientes del profesor del PE, (d) si fuera seleccionado, que participe en una entrevista informal de grupo que durará aproximadamente 40 minutos, y (e) si fuera seleccionado, que participe en una entrevista individual que durará aproximadamente 15 minutos. Todas las entrevistas serán grabadas y transcribidas más adelante. Para su información y conveniencia, copia de todas las preguntas de la entrevista serán mantenidas en la oficina de la escuela para que las revise si así lo desea.

La participación de su niño en este proyecto es totalmente voluntaria. El que usted decida si su hijo/a puede participar o no participar no afectará la experiencia en la clase de educación física de su niño/a. Su niño/a puede descontinuar la participación en cualquier momento sin afectar sus notas en la escuela. Los riesgos previsibles son mínimos al participar en este proyecto. Si su niño/a se sintiere incómodo/a con las preguntas de la entrevista o sea observado o el contestar, en este caso, puede elegir no ser observado/a o no ser entrevistado/a en cualquier momento o no contestar preguntas específicas. Su niño puede también sentirse incómodo usando un acelerómetro, que es una caja pequeña (2 x 1 x 0.5 avanza a poquitos) unido al waistline, más pequeña que una batería 9V. Es muy ligero como una caja pequeña de seda dental. No lastima para usar un acelerómetro y pedirán su niño solamente ponerlo encendido al principio de la clase y tomarlo en el extremo de la clase. Mide cómo físicamente es activo su niño está durante la educación física. Si no tiene un problema si su niño elige no usar el acelerómetro en cualquier día dado. No habrá remuneración monetaria por la participación de su niño/a.

La información que se obtenga durante este proyecto de investigación será mantenida totalmente confidencial. El compartir o la publicación de los resultados de la investigación no identificará a los participantes por nombre. Solamente los tres investigadores del estudio tendrán acceso a los datos.

En la página siguiente de esta carta, indique por favor si usted permite o no permite que su niño/a participe en este proyecto. Indique por favor si usted acepta que su niño/a sea grabado (audio) durante la entrevista. Si no, él/ella no podrá participar en la entrevista del grupo. Complete por favor y firme la segunda página de esta forma del consentimiento y devuelva a los investigadores vía el profesor (maestro/a) de EF. Guarde los por favor la primera página de esta forma para sus expedientes. Esperamos poder trabajar con su niño/a. Su niño/a contribuirá información valiosa que puede ayudarnos a comprender asuntos que puedan ayudar a mejorar la participación de los estudiantes hispanos en la educación física y afectar positivamente las prácticas de hoy.

Si usted tiene cualquier pregunta sobre la investigación en cualquier momento, por favor, llame o escriba a Veronika Sanogo (teléfono: 333-9030 o E-mail: vsanogo2@illinois.edu), o la Dra. Amelia Woods (teléfono: 333-9602 o E-mail: amywoods@illinois.edu), Departamento de Kinesiología y Salud de la Comunidad, Freer Hall, Universidad de Illinois, 906 S. Goodwin Ave, Urbana, IL 61801. Si usted desea información adicional sobre sus derechos como participante, por favor síntese libre de ponerse en contacto con la Oficina Institucional del Comité Examinador de UIUC en el 217-333-2670 o irb@illinois.edu. Las llamadas “collect” o con cargos a nuestro número, serán aceptadas si usted se identifica como padre o madre de un participante del estudio. Gracias por su tiempo y por considerar esta carta.

Sinceramente,

______________________  ____________________
Veronika Sanogo           Amelia Woods

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¿Usted acuerda hacer que su hijo/hija sea un participante en el proyecto de investigación?

☐ SÍ    ☐ NO

¿Usted acuerda hacer su hijo/hija entrevistar con en el proyecto de investigación?

☐ SÍ    ☐ NO

¿Usted acuerda hacer que su hijo/hija sea grabada en audio durante esta entrevista?

☐ SÍ    ☐ NO

Usted acuerda tener ¿los investigadores de UIUC recogen resultados de las pruebas del PE de su hijo/hija de la escuela y utilizar esos resultados para los propósitos de la investigación?

☐ SÍ    ☐ NO

Usted acuerda tener ¿los investigadores de UIUC recogen datos físicos de la actividad de los acelerómetros usados en clase del PE y utilizar esos resultados para los propósitos de la investigación?

☐ SÍ    ☐ NO

___________________________    _______________________
Nombre impreso del padre o madre    Nombre impreso del niño

___________________________    _______________________
Firma del padre o madre    Fecha
Child Assent

Hispanic Students in Physical Education: Case Study of An Elementary School Teacher

Research Procedure: Once parental written consent has been attained, additional oral consent will be attained from each of the child participants for observations, interviews and using test results. The following script will be read to the child prior to including them in the research project.

Script: Hello, my name is Veronika Sanogo and I am from the University of Illinois. I want to tell you what we are going to be doing in this project. Although your parents already said that it is OK for you to be part of this project, I also want to make sure that it is okay with you.

Observations
For a few days, I will sit in your physical education class. I will watch what you do. I am not going to grade you. You can do what you normally do and I will make notes about it.

Group and individual interviews
In a few weeks, I will come again and ask you some questions. I will want to know how you like school and physical education. You will say your answers out loud into a tape recorder. If you want to you can go to the school office and see all the questions I will be asking.

Observations with oral opinionnaires
I will come a few more times to see what you do in PE class. At the end of the class, I will ask you to answer a few questions about PE that day.

Test data
I will take your fitnessgram test results from your PE teacher to see how fit you are. I will also ask you to wear these small boxes. They are called accelerometers. They measure how much you move during PE. You will put them on your waist at the beginning of class and take them off at the end. They are very light and it is easy to put them on and take them off.

Do you have any questions about this project? Remember it is your choice to participate. If you don’t feel comfortable or if you don’t want to do something, you can always ask me to stop.

Would you like to be part of this project?
YES      NO

Is it OK with you that during the interview I will record your answers into a tape recorder?
YES      NO

Participant’s name: ____________________ Date: _______________
Researcher’s name: ____________________ Date: _______________
Asentimiento del niño

Estudiantes hispánicos en la educación física: Estudio de caso de un profesor de la escuela primaria

Procedimiento de la investigación: Una vez logrado el consentimiento escrito de los padres, se le pedirá, adicionalmente, el consentimiento oral a cada uno de los niños participantes de las observaciones, las entrevistas y resultados de prueba. El siguiente texto será leído al niño antes de incluirlos en el proyecto de investigación.

Texto:
Hola, mi nombre es Veronika Sanogo y soy de la Universidad de Illinois. Quiero contarte lo que vamos a hacer en este proyecto. Aunque tus padres dijeron que está bien que seas parte de este proyecto, también quiero asegurarme que está bien contigo.

Observaciones
Hoy me sentaré en tu clase de educación física. Miraré lo que haces. No voy a evaluarte. Puedes hacer lo que haces normalmente y haré notas sobre ello.

Entrevistas de grupo e individuales
En algunas semanas, vendré otra vez y te haré algunas preguntas. Quisiera saber si te gusta la escuela y la educación física. Me dirás tus respuestas y las grabaremos en un registrador de voz. Si deseas, puedes ir a la oficina de la escuela y ver todas las preguntas que haré.

Observaciones con los opinionarios orales
Vendré algunas veces más para ver lo que haces durante la clase de EF. Al final de la clase, te pediré que contestes algunas preguntas sobre EF ese día.

Datos de prueba
Tomaré tus resultados de la prueba del fitnessgram de tu maestro/a de EF para ver (cuán en forma estás). También pediré que usted use estas cajas pequeñas. Se llaman los acelerómetros. Miden cuánto usted se mueve durante el PE. Usted los pondrá en su cintura al principio de la clase y los tomará en el extremo. Son muy ligeros y es fácil ponerlos encendido y quitarlos.

¿Tienes alguna pregunta sobre este proyecto? Recuerda que es tu opción participar. Si no te sientes cómodo/a o si no deseas hacer algo, siempre puedes pedirme que no continúe.

¿Te gustaría ser parte de este proyecto?
Sí  NO  [Circule la respuesta verbal del participante].

¿Está bien para ti si durante la entrevista grabo tus respuestas con un registrador de voz?
Sí  NO  [Circule la respuesta verbal del participante].

Nombre del participante: ______________________________  Fecha: __________________
Nombre del investigador: _____________________________  Fecha: ________________
Appendix B

Hispanic Students in Physical Education: Case Study of An Elementary School Teacher

Teacher Consent

You are being invited to participate in the above-titled research project that is being conducted by Veronika Sanogo, a graduate student, led by Dr. Amelia Woods, Responsible Project Investigator and Associate Professor in the Department of Kinesiology and Community Health at the University of Illinois. The purpose of this study is to describe students’ experiences in physical education.

If you agree to participate, you will be asked to (a) take part in two informal interviews lasting approximately one hour each that will be tape recorded and later transcribed; (b) fill out a survey about your multicultural teaching competency; (c) fill out a survey about the cultural competency of the school; (d) let the researcher observe your physical education classes, specifically your interactions with the Hispanic students recruited for the study; (e) allow the researcher to collect physical activity data of your students by wearing accelerometers during physical education; (f) provide data from the study participants’ fitness testing and d) provide documents or other artifacts used in your physical education lesson planning, which will be used in description of the PE program in this study.

There are minimal foreseeable risks from participating in this project. You may feel uncomfortable being observed or answering interview questions, in which case you may choose not to be observed on a specific day or not to answer specific questions. You also may discontinue participation in the project at any time without prejudice. Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you would otherwise be entitled. You understand that you will receive no monetary compensation for your participation.

By participating in the study you will be contributing very valuable information that may lead to improved understanding of issues involved in Hispanic students participation in physical education and positively impact today’s practices and approaches to these students.

The materials from this study will be used primarily for research presentations and publication in professional journals. Any information that is obtained in connection with this study and that can be identified with you will remain confidential. Published reports and research presentations will not identify the school and its location and will describe the school as “a rural elementary school in the Midwest”. As interview tapes are transcribed, your name will be transcribed using a fictitious name. The only document with your name will be this signed consent form. Only the three researchers of the study will have access to the data.

If you have any questions about the research at any time, please call or write Veronika Sanogo (phone: 333-9030 or e-mail: vsanogo2@illinois.edu), Dr. Amelia Woods (phone: 333-9602 or e-mail: amywoods@illinois.edu), Department of Kinesiology and Community Health, Freer Hall, University of Illinois, 906 S. Goodwin Avenue, Urbana, IL 61801. If you desire additional information about your rights as a participant, please feel free to contact the UIUC Institutional Review Board Office at 217-333-2670 or irb@illinois.edu. Collect calls will be accepted if you identify yourself as a study participant. You will be given a copy of this form for your records.

Please circle one option for EACH of the following statements:

I am willing / I am not willing to be interviewed
I am willing / I am not willing to be audiotaped
I am willing / I am not willing to be observed
I am willing / I am not willing to provide artifacts
I am willing / I am not willing to fill out surveys

Primary Investigator’s Signature

Participant’s Signature

Date

Date

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Hispanic Students in Physical Education: Case Study of An Elementary School Teacher
Principal’s Consent

You are being invited to participate in the above-titled research project that is being conducted by Veronika Sanogo, a graduate student, led by Dr. Amelia Woods, Responsible Project Investigator and Associate Professor in the Department of Kinesiology and Community Health at the University of Illinois. The purpose of this study is to describe the physical education experiences of Hispanic elementary school children.

If you agree to participate, you will be asked to (a) take part in one informal interview lasting approximately one hour that will be tape recorded and later transcribed; and (b) complete the School-wide Cultural Competence Observation Checklist (SCCOC). The topics of the interview relate to your experience and training for the role of a school principal and current practices and issues related to educating Hispanic students at your school. The SCCOC is a tool designed for school leaders to assess strengths and needs related to their school’s cultural competence. It examines policies, programs, and practices through observations rated on a Likert-type scale from one (never) to five (always) in these domains: school vision, curriculum, student interaction and leadership, teachers, teaching and learning, parent and community outreach, conflict management, and assessment. The SCCOC contains an additional column asking you to note evidence or documentation supporting your observation.

There are minimal foreseeable risks from participating in this project. You may feel uncomfortable answering interview questions, in which case you may choose not to answer specific questions. You also may discontinue participation in the project at any time without prejudice. Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you would otherwise be entitled. You understand that you will receive no monetary compensation for your participation.

By participating in the study you will be contributing very valuable information that may lead to improved understanding of issues involved in Hispanic students participation in physical education and positively impact today’s practices and approaches to these students.

The materials from this study will be used primarily for research presentations and publication in professional journals. Published reports and research presentations will not identify the school and its location and will describe the school as “a rural elementary school in the Midwest”. Any information that is obtained in connection with this study and that can be identified with you will remain confidential. As interview tapes are transcribed, your name will be transcribed using a fictitious name. The only document with your name will be this signed consent form. Only the three researchers of the study will have access to the data.

If you have any questions about the research at any time, please contact Veronika Sanogo (e-mail: vsanogo2@illinois.edu), or Dr. Amelia Woods (phone: 333-9602 or e-mail: amywoods@illinois.edu), Department of Kinesiology and Community Health, Freer Hall, University of Illinois, 906 S. Goodwin Avenue, Urbana, IL 61801. If you desire additional information about your rights as a participant, please feel free to contact the UIUC Institutional Review Board Office at 217-333-2670 or irb@illinois.edu. Collect calls will be accepted if you identify yourself as a study participant. You will be given a copy of this form for your records.

Please circle one option of the following statements:
I am willing / I am not willing to be interviewed. I agree / I do not agree to be audiotaped.
I am willing / I am not willing to fill out a survey and provide evidence supporting my responses.

Primary Investigator’s Signature

Participant’s Signature

Date

Date
Appendix C

Data Collection Overview (2011-2012)

Observations
Group 1 - 5th grade classes that have PE on Mo and Wed
Group 2 - 5th grade classes that have PE on Tue and Thu
Group 3 - 4th grade classes that have PE on Mo and Wed
Group 4 - 4th grade classes that have PE on Tue and Thu

8/18 Groups 1, 2, 3 & 4 – Introduction, rules and routines
8/23 Groups 2 & 4 – Fitness, Matball
8/24 Groups 1 & 3 – Fitness, FitnessGram sit & reach test, stations
8/29 Groups 1 & 3 – Fitness, FitnessGram sit-ups test, Dodgeball
9/1 Groups 2 & 4 - FitnessGram flexed-arm hang, fitness trail, Star Wars Game
9/7 Groups 1 & 3 – Fitness, Soccer
9/8 Groups 2 & 4 - Fitness, Soccer
9/19 Groups 1 & 3 – PE challenge, Hoop it up
9/21 Groups 2 & 4 – One-mile run, Soccer
9/26 Groups 1 & 3 – Revision for a test, Matball (Group 3) / Capture the football (Gr 1)
10/11 Groups 2 & 4 – Fitness, PE challenge, 5-pass
12/15 Groups 2 & 4 – Fitness, Mystery Maze, Santa’s Sleigh, Prisonball (Gr2) / Dodgeball (Gr 4)
5/21 Groups 1, 2, 3 & 4 – Game Day
Observations also on all the accelerometry dates and other data collection dates

Interviews
Interview with PE Teacher 8/25 and 6/19
Interview with Principal 8/29

Accelerometry
Group 1 (Mo/Wed 5th grade)
9/28–PE challenge, Capture the football
10/3–Capture the football
10/5–Fitness trail, 5-pass
10/12–Preparation for body walk, Free time
10/17–Training for a mile, Capture the football
10/24 –PE challenge, Continuous dodgeball

Group 2 (Tu/Th 5th grade)
10/20 –Fitness, Mazemaster, Prisonball
10/25 –PE challenge
11/29 –Volleyball
12/6 –Pacer and Matball
12/8 –Fitness, Jetties and Invaders
12/13 –Three-man pacer, Prisonball
Oral Opinionnaires
1/23 Group 1 & 3 – Fitness, Basketball
1/26 Group 2 & 4 – Fitness, Basketball
1/30 Group 1 & 3 – Fitness, Matball
2/2 Groups 2 & 4 – Fitness, Capture the fotball
2/9 Groups 2 & 4 – Fitness, Floor hockey
2/15 Groups 1 & 3 – Fitness, Floor hockey

Group Interviews
2/29 & 3/15

Accelorometry
Group 3 (Mo/Wed 4th grade)
4/23 – FitnessGram sit &reach test, 2-base Matball
4/30 – PE challenge, Matball
5/2 – Partner-Mile Race & Prisonball (1st class), 2-men Pacer & Prisonball
   (2nd class different – it started raining outside)
5/7 – PE challenge, Pirateball
5/16 – Adventure Race, free time at the playground at the end
+ The rest of accelerometry are on days with adjusted schedule
5/9 Orienteering
5/10 Pinball (Friday schedule – only 20 minutes PE classes)
5/14 PE Challenge in 1st class (only 25 minutes until 9:15 and then concert), free
   basketball shooting in 2nd class (only 25 minutes after concert starting at 9:50)

Group 4 (Tu/Th 4th grade)
4/19 – Fitness Gram flexed arm hang test, 2-base Matball
5/3 – Partner-Mile Race & Prisonball
5/8 – PE challenge, Pirateball
5/15 – Adventure Race, free time at the playground at the end
5/17 – PE challenge, Kickball
+ 5/18 – Pinball (Friday – only 20-minute PE)

FitnessGram Data
August – September (Fall 2011) and April (Spring 2012) all 4th and 5th grade classes

AHIMSA
February - All Hispanic children study participants (23)

SCCOC
PE teacher & Principal

MTCS
PE teacher
Appendix D

HISPANIC STUDENTS IN PHYSICAL EDUCATION:
CASE STUDY OF AN ELEMENTARY SCHOOL TEACHER

INTERVIEW GUIDE
Initial Teacher Interview

Interviewer:
My name is Veronika Sanogo and I am a graduate student at the University of Illinois. I am interested in talking with you today about your PE teaching experiences and practices. I also would like to ask you to share with me any materials or documents that you use or create as part of your long-term planning, preparation and teaching of individual lessons and activities. This will allow me to provide a detailed description of your practices when I later write a report about this research study. It is well-known that quality lesson planning and delivery is an important feature of high-quality programs and may influence student engagement and learning.

I would like to assure you that your responses will not be seen by anyone outside of the research team (that is me, Dr. Castelli and Dr. Woods). I will be audio-taping this interview and then I will type your responses and return them to you to check for accuracy.

So, today just do your best to answer the questions and be as honest as possible. If you do not want to answer a question because it makes you feel uncomfortable just let me know and we can move on to the next question. Based upon your answers this interview will likely take just about an hour to complete.

Icebreakers:
1. Tell me something about your background like, when and where were you educated, when and where did you begin teaching? What are some things that changed since then and how did you become the teacher that you are today?
2. How would you describe your teaching philosophy? What do you believe is the best way to reach your students? What “works”?

Teaching PE:
3. What has been your motivation for teaching PE for ____ years?
4. How confident are you in your teaching and your ability to facilitate learning in all your students including those from various backgrounds and family situations? What specifically about teaching gives you the most confidence?
5. How much do you collaborate with other teachers or school personnel and describe in what ways?
6. Please, describe your PE curriculum and its construction. How do you plan and prepare your lessons? Can I have a copy of your long-term plans or any other materials that you use in planning and delivering your curriculum?
7. What things do you do to facilitate success among your students? Do you have specific strategies that work for different groups of students?
8. In general, how do you handle off task behaviors? What is your strategy for behavior management and discipline?
Students issues:
9. How would you describe your students? What are their characteristics and how do they behave in PE?
10. How much do your students learn and what is their participation and engagement in PE like?
11. How much do your students enjoy your classes? What activities from the curriculum do your students like the most and does this differ for different students?
12. What are your frustrations in working with your students? How do you cope with these frustrations and what do you do to tackle them?
13. How well do you know your students and how does this knowledge influence your teaching? Please, provide examples.
14. If you would be in an ideal situation and could structure PE according to your imagination so that all your students can get the most benefit, what would you do? What are some things that would make your students’ PE experience even better and lead to greater participation, get them more active and fit and overall physically educated?

School issues and beyond:
15. How is the PE program perceived in the school by administrators, teachers and students? How are you respected by your colleagues?
16. What role do you believe parents play in the success of students? How would you describe the kinds of relationships you’ve had with parents of your students you’ve taught. How do you go about establishing and maintaining it? Do you provide parents with information about the PE program? Can they provide you with feedback and do they anyhow contribute to the PE program?
17. What do you do to increase physical activity engagement of your students?
18. I have heard you say that you view yourself more than just a PE teacher, but also as the school PA director. Can you talk more about that and explain to me what it means and what do you do in your school in this respect?
19. What type of cross-cultural competence training if any have you had that helped you with teaching students of various backgrounds or how did you learn to deal with your minority students? What training would you like to have?
20. If you could revamp PE teacher education so that PE teachers would be better prepared and more effective what changes would you make? What would best help to prepare them for teaching at a school like yours? If you were to give a lecture about teaching PE to future teachers, what would you tell them?

Is there anything that you would like to add to the interview about your PE teaching experience that I did not ask about or that you thought would be good to mention?
Appendix E

TEACHER BELIEFS INVENTORY SCORING PROCEDURE

Spanierman, Oh, Heppner, Neville, Mobley, Wright, Dillon, & Navarro (in press).
The Multicultural Teaching Competency Scale (MTCS): Development and initial validation. Manuscript in press at Urban Education.

1=Strongly Disagree
2=Moderately Disagree
3= Slightly Disagree
4= Slightly Agree
5= Moderately Agree
6=Strongly Agree

1. ___ I plan many activities to celebrate diverse cultural practices in my classroom.

2. ___ I understand the various communication styles among different racial and ethnic minority students in my classroom.

3. ___ I consult regularly with other teachers or administrators to help me understand multicultural issues related to instruction.

4. ___ I have a clear understanding of culturally responsive pedagogy.

5. ___ I often include examples of the experiences and perspectives of racial and ethnic groups during my classroom lessons.

6. ___ I plan school events to increase students’ knowledge about cultural experiences of various racial and ethnic groups.

7. ___ I am knowledgeable about racial and ethnic identity theories.

8. ___ My curricula integrate topics and events from racial and ethnic minority populations.

9. ___ I am knowledgeable of how historical experiences of various racial and ethnic minority groups may affect students’ learning.

10. ___ I make changes within the general school environment so racial and ethnic minority students will have an equal opportunity for success.

11. ___ I am knowledgeable about the particular teaching strategies that affirm the racial and ethnic identities of all students.

12. ___ I rarely examine the instructional materials I use in the classroom for racial and ethnic bias.

13. ___ I integrate the cultural values and lifestyles of racial and ethnic minority groups into my teaching.

14. ___ I am knowledgeable about the various community resources within the city that I teach.

15. ___ I often promote diversity by the behaviors I exhibit.

16. ___ I establish strong, supportive relationships with racial and ethnic minority parents.

Item #12, which is bolded above, is reverse scored such that 6 = 1, 5 = 2, 4 = 3, 3 = 4, 2 = 5, 1 = 6. Higher scores indicate greater levels of multicultural teaching competency.

Factor 1: Multicultural Teaching Skill consists of the following 10 items: 1, 3, 5, 6, 8, 10, 12, 13, 15, 16

Factor 2: Multicultural Teaching Knowledge consists of the following 6 items: 2, 4, 7, 9, 11, and 14

For more information please contact Lisa Spanierman
Appendix F

School Principal Interview Guide

Interviewer:
My name is Veronika Sanogo and I am a graduate student at the University of Illinois. I am interested in talking to you today about your school and specifically about the environment and strategies that you utilize to enhance Hispanic students’ school experiences and learning. I will be audiotaping this interview and then I will type your responses and return them to you so you can confirm its accuracy. If you do not want to answer a question, please let me know and we can move on to the next question. To make this research project meaningful I would like to ask you to be honest in your responses. Based upon your answers this interview will likely take just about 30 minutes to complete.

Icebreakers:
1. How long have you been the principal at this school?
2. What education do you have and how did you become the principal that you are today?
3. How would you describe your school and your work as the principal?
4. Please describe the student population of your school and the ways its composition influences teaching and other school related practices.
5. How is the PE program perceived in your school? How would you rate the PE teacher?

Hispanic students:
6. How many Hispanic students are enrolled in your school and what are they like? How much do they speak Spanish? How many of them are LEP? How else are they different from the rest of the students?
7. How well are Hispanic students integrated in the school setting and how much do they enjoy school? How are they perceived and what is the consensus about how to approach them? How do you perceive them and what is your attitude towards them and their families?
8. How does your Hispanic students’ achievement rate compare to other students? Why do you think that is the case?
9. What do you do to facilitate success among all your students? What are some things you specifically do to help your Hispanic students? (ESL classes, etc.)
10. What type of cross-cultural competence training if any have you and the teachers in the school had? How did you learn to deal with your Hispanic students? What training would you like to have?
11. What are some of your frustrations in working with teachers, students and their families? Do you have unique frustrations related to educating Hispanic students? How do you cope with these frustrations and what do you do to tackle them?
12. If you would be in an ideal situation and could structure the school according to your imagination (no budgetary restrictions) so that all your students (including
Hispanics) can get the most benefit, what would you do? What are some things that would specifically address the needs of Hispanic students?

13. If you were to give a lecture about teaching Hispanic students to future teachers in their teacher education programs, what would you tell them? What are some things that teachers should know about Hispanic students? How should they prepare for teaching them?

Is there anything that you would like to add to the interview about your job as a principal and educating Hispanic students that I did not ask about or that you thought would be good to mention?

Interviewer:
Thank you for taking the time to share your insights with me. I will send you a copy of the transcribed interview within the next few days so you can read it over and correct any of your responses if you like. I hope to use your responses to make recommendations to educators how to work with Hispanic students.
Appendix G

THE SCHOOL-WIDE CULTURAL COMPETENCE OBSERVATION CHECKLIST

<table>
<thead>
<tr>
<th>Observation Area/Domain and Criteria</th>
<th>Scale</th>
<th>Evidence/Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Vision/Mission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 There is a school Mission Statement or Vision Statement that includes a stated commitment to diversity and/or global citizenry.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td><strong>Curriculum</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Literature selections in the curriculum reflect a variety of cultural perspectives (classrooms and library).</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3 Global perspectives are integrated into curricula at all grade levels (world history and geography, culture studies, languages).</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4 Linguistic and content objectives are addressed for second language learners.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

Confidential
© Bustamante and Nelson, 2007. The School-Wide Cultural Competence Observation Checklist. All rights reserved.
### Student Interaction and Leadership

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Racial/ethnic representation in advanced placement classes, honors classes, and gifted programs is balanced.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Youth “voice” is considered in decision-making by regularly meeting with randomly selected groups of students to obtain feedback.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>There is a variety of student leadership opportunities for all students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Students of different groups integrate socially outside of the classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>There are identified support programs to promote achievement and retention of lower achieving groups.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Students are involved in community service and service learning activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>There is a program in place to facilitate the adaptation of NEW students into the school and classroom.</td>
<td>1</td>
<td>2</td>
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### Teachers

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<tr>
<td>12</td>
<td>Teachers representing diverse groups are actively recruited by the principal and the district.</td>
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<td>13</td>
<td>New teachers are formally inducted through orientations and structured mentoring and support programs.</td>
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<tr>
<td>14</td>
<td>Teachers team vertically and horizontally according to individual strengths, leadership abilities, and interests.</td>
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<tr>
<td>15</td>
<td>Efforts are made to consciously integrate diverse teacher teams.</td>
<td></td>
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<tr>
<td>16</td>
<td>Professional development is offered that addresses:</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>a) race/ethnicity/nationality</td>
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<td></td>
<td>b) sexual orientation</td>
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<td></td>
<td>c) special needs</td>
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<td></td>
<td>d) language and dialect</td>
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<tr>
<td>17</td>
<td>Informal teacher leadership roles are recognized.</td>
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<td></td>
<td>Professional development is focused and long term.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Teaching and Learning</td>
<td>Instruction is differentiated to address students with special needs, while challenging all students.</td>
<td>1 2 3 4 5</td>
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<td></td>
<td>Researched strategies that account for various learning styles are used in classrooms.</td>
<td>1 2 3 4 5</td>
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<tr>
<td></td>
<td>Connections are made to students’ culture and prior knowledge.</td>
<td>1 2 3 4 5</td>
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<tr>
<td></td>
<td>Teaching strategies accommodate the needs of culturally and linguistically diverse learners using a variety of grouping strategies, hands-on activities, visuals, oral language development, reading/writing workshops, etc.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Parents and Outer Community</td>
<td>Community outreach programs regularly survey the perspectives of various local community constituency and stakeholder groups, including parents.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>24</td>
<td>Parent involvement programs exist for all culture groups.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>25</td>
<td>National and global ties are established through partnerships with similar organizations.</td>
<td>1 2 3 4 5</td>
<td></td>
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</tr>
<tr>
<td>26</td>
<td>The electronic community is realized and utilized for relationship building and sourcing best practices.</td>
<td>1 2 3 4 5</td>
<td></td>
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</table>

**Conflict Management**

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<tbody>
<tr>
<td>27</td>
<td>The inevitability of intercultural conflict is recognized by peer mediation programs and/or other proactive approaches to conflict resolution.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>28</td>
<td>Practices to ensure classroom and school safety for all are in place (e.g. including systems for addressing bullying or developing positive student relations).</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Assessments**

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<tr>
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<tbody>
<tr>
<td>29</td>
<td>Authentic student assessments are used to complement standardized tests.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>30</td>
<td>Formative and summative program evaluations are conducted to ensure continual improvement.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>---</td>
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<td>---------</td>
</tr>
<tr>
<td>31</td>
<td>Teachers and administrators are evaluated by various constituency groups (other teachers, students, colleagues, self, supervisor, etc.).</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>32</td>
<td>Organizational traditions are examined periodically to check for exclusive/inclusive practices.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>33</td>
<td>Celebrations reflect various cultures and introduce the community to new cultures. Representation at events and celebrations is diverse.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**General Observations:**
Appendix H

Adaptation of the Acculturation, Habits, and Interests Multicultural Scale for Adolescents (AHIMSA).

1. Please tell us about some of your choices when it comes to different activities (For each of the following items, please check the appropriate box)

<table>
<thead>
<tr>
<th>Statement</th>
<th>The United States</th>
<th>The country my family is from</th>
<th>Both</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m most comfortable being with people from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My best friends are from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The people I fit in with best are from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My favorite music is from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My favorite TV shows are from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The holidays I celebrate are from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The food I eat at home is from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The way I do things and the way I think about things are from…</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</tr>
</tbody>
</table>

2. Were you born in the United States? (Please check one box)

□ YES

3. If you were not born in the U.S., how long have you lived in the U.S.?

Years________ Months_______

4. What country is your family originally from? (Please check one box)

□ Mexico
□ Cuba
□ Salvador
□ Puerto Rico
□ Guatemala
□ Other country (please name)________
1. Por favor mencione cuales son algunas de sus decisiones en cuanto a actividades diferentes. (Por cada comentario, seleccione la caja apropiada).

<table>
<thead>
<tr>
<th>Comentario</th>
<th>Los Estados Unidos</th>
<th>El País del cual mis padres nacieron</th>
<th>Ambos</th>
<th>Ninguno</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estoy más cómodo con gente de...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Mis mejores amigos son...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>La gente con la que mejor encajo son de...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Mi música preferida es de...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Mi programa favorito en la televisión es...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Las festividades que celebro son de...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>La comida que como es de...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Las cosas que hago y la manera que pienso sobre las cosas son de...</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

2. Nació usted en los Estados Unidos? (Por favor selección una caja)

☐ Si

3. Si usted no nació en los Estados Unidos, cuánto tiempo ha vivido en los Estados Unidos.

Años________ Meses________

4. De qué país es su originalmente su familia? (Por favor seleccione una caja)

☐ México ☐ Cuba ☐ El Salvador

☐ Puerto Rico ☐ Guatemala ☐ Otro país (favor nombre)________
Appendix I

HISPANIC STUDENTS IN PHYSICAL EDUCATION:
CASE STUDY OF AN ELEMENTARY SCHOOL TEACHER

INTERVIEW GUIDE
Children group interview

Interviewer:
My name is Veronika Sanogo and I am a student at the University of Illinois. I am from … and I like….Today I here to talk to you about your experiences in school and especially physical education. I will be audiotaping this interview. Is it OK with each of you? I do this so that I can type what you say, because I might not remember all that you tell me. Please do your best to answer the questions. If you do not want to answer a question because it makes you feel uncomfortable just let me know and we can move on to the next question. I will try to do my best to keep our conversation safe and I would like to ask you to keep all that is said here and not talk about it with your friends. However, I cannot guarantee that everyone will be honest and not share what they hear with someone else.
How comfortable are you in using only English for this interview? If you need to switch to Spanish just let me know and “XXX” will translate for us.

Icebreakers:
1. What languages do you speak and which one of them do you feel most comfortable speaking? What language do you speak at home with your parents / siblings / other relatives / friends?
2. How long have you been learning English and where? How well do you understand your teachers and your classmates when they speak English?
3. How long have you lived in this town and how long have you been at this school?

School:
4. How do you like your school? What is it like to be a student here? What are your teachers like? How do you get along with your classmates and how do they get along with you? Who are your friends at school and why?
5. What was it like when you first came to this school? What do you remember about the first day?
6. What is your favorite school subject?

Physical education:
7. What is PE like? How is it different from other subjects? What do you learn in PE? (sports, games, fitness, PA, nutrition, wellness, behavior, etc…) What are PE and the activities that you do in PE good for?
8. What are some things that you learned in PE and are able to do elsewhere? (at recess, at home, outside in the playground, etc.) How did you learn it? (Did the teacher help you by telling you or showing you how to do it, did your classmates help you or did you just practice, practice, and practice until you knew how to do it?)
9. What makes PE fun / enjoyable and what are some things that are not fun about PE? What are some difficulties / problems that you have had in PE?
10. How well can you do all the activities in PE? How good are you at sports, exercising and playing games in PE?
11. How do you get along with others in PE?
12. How active are you during PE? What things help you to be most active?
13. How do you like your PE teacher? How does he help you be successful in PE? What does he do for students like you (who speak Spanish / are new in the school)? What / who else helps you to be successful in PE?
14. Imagine that you were the PE teacher. What would PE be like? What sports, games, or exercises would you do? How would it be different from the PE that you have now?

Is there anything else that you would like to tell me about your experiences with PE?

Interviewer:
Thank you for taking the time to share your stories with me. I hope to use your responses to make recommendations to physical education teachers who work with Hispanic students like you.

**Sample Oral Opinionnaire Questions**

(Short interview on the way out of the gym)

1. How did you like PE today? What did you enjoy / did you not enjoy the most and why?
2. How much did you participate and what did you learn? How well did you behave today?
3. How did the teacher help you learn and be successful? What / who else helped you to do well today?
4. How active were you today during class? Why?
5. (Comments on specific situations observed and request for explanation).
Appendix J

Final Teacher Interview

Interviewer:
Now I have seen a lot from your work, how you do things, what it is like in your PE classes and how are the Hispanic students responding to you. From the interviews both with you and with them I have learned that…
I am interested in talking with you today about some of the issues that I noticed and I will ask you to provide me with your outlook on these. I will be audio-taping this interview and then I will type it and return it to you to check for accuracy. If you do not want to answer a question because it makes you feel uncomfortable just let me know and we can move on to the next question. Based upon your answers this interview will likely take just about an hour to complete.

Icebreakers:
1. How has your school year been so far and what do you expect for the rest of the year?
2. How long have you been teaching Hispanic students?
3. How well can you design lessons that engage all of your students, including Hispanics?

Hispanic students in PE:
4. Can you think of any characteristics that Hispanic students as a group bring to PE?
5. How many Hispanic students are enrolled in your PE classes and what are they like? How much do they speak Spanish? How many of them are LEP? How else are they different from the rest of the students?
6. Do you speak Spanish? (If he says yes, I will greet him in Spanish, and wait for a response.)
7. How much do your Hispanic students enjoy your classes? How much do they learn?
8. What is their participation and engagement in PE like? Have you observed any differences between Hispanic and other students’ participation and engagement in PE and PA and if yes can you describe in what ways are they different? What do you perceive as the main reason why this is so?
9. How much of the traditional American sports/games from the curriculum do the Hispanic students know? What activities do they like most? Does this differ from your other students? How do you respond to your students’ preferences? How is it reflected in your curriculum?
10. How well are the Hispanic students integrated into the PE setting? What kinds of things have you done that have facilitated success of Hispanic students in PE? What are some things you do to help them? I have heard you mention that you use Spanish, can you please describe how?
11. What are your joys and frustrations unique to working with Hispanic students? How do you cope with your frustrations and what do you do to tackle them?
12. How do you handle discipline? Are there special things that teachers of Hispanic students should know about discipline?

13. If you would be in an ideal situation and could structure PE according to your imagination so that all your students (including Hispanics) can get the most benefit, what would you do? What are some things that would make your Hispanic students’ PE experience even better and lead to greater participation, get them more active and fit and overall physically educated?

School issues and beyond:
14. What role do you believe parents play in the success of Hispanic students? How would you describe the kinds of relationships you’ve had with parents of Hispanic students you’ve taught.

15. Can you describe the position of Hispanic students in the school? How are they perceived and what is the consensus about how to approach them? What is your attitude towards them?

16. How did you learn what you know about teaching Hispanic children (pre-service or in-service teacher training, contact with Hispanic families)?

17. How can you influence the physical activity engagement of Hispanic students?

18. How do you handle the possible mismatch between what you want to teach and what you have to teach (for example equipment, facilities)? How do you handle the possible mismatch between what you want to teach and what the administration (principal, superintendent) wants you to teach (curricular mandates, philosophies)?

19. How do you think the schooling experience of the minority students you teach differs from that of white students in middle-class communities?

20. If you could revamp PE teacher education so that PE teachers would be more effective with Hispanic students, what changes would you make? What are some things that PE teachers should know about Hispanic students? How should they prepare for teaching them? If you were to give a lecture about teaching Hispanic students to future PE teachers, what would you tell them?

Is there anything that you would like to add to the interview about your teaching and Hispanic students that I did not ask about or that you thought would be good to mention?

Interviewer:
Thank you for taking the time to share your insights with me. I will send you a copy of the transcribed interview within the next few days so you can read it over and correct any of your responses if you like.
Appendix K

Terminology

*Acculturation* is the process of adaptation of immigrants in the host society. It has been found that a combination of ethnic and national identity promotes the best adaptation (Phinney, Horenczyk, Liebkind, & Vedder, 2001). Thus acculturation is no longer seen as a linear process of giving up one’s culture of origin and assimilating into the new host culture. Rather it is considered a bidimensional or in some cases multidimensional construct, with national and ethnic identity representing two main aspects that are conceptually distinct and can independently vary according to the context within which acculturation takes place (Rivera, 2008). Thus, an individual may be seen as able to retain the culture of origin while also adapting to the new host culture.

This two-dimensional model of acculturation suggests that both the relationship with the traditional or ethnic culture and that with the new or dominant culture, play important roles in the process. Using this two-dimensional model, Berry (1980, 2003) has suggested that there are four possible outcomes of the acculturation process: assimilation (movement toward the dominant culture), integration (synthesis of the two cultures), rejection (reaffirmation of the traditional culture), or marginalization (alienation from both cultures). Research supports the view that a bicultural or integrated identity is associated with higher levels of overall well-being whereas pressure to assimilate and give up one’s sense of ethnicity may result in greater problems with adaptation among immigrants (Phinney et al., 2001).

*Emergent ethnicity* is a term widely used to refer to ethnicity and ethnically based ascription (Yancey, Ericksen, & Juliani, 1976), which is dependent upon the situation of a group and its need for survival in the larger structure of the society rather than common
foreign heritage. Being a descendant of an immigrant does not necessarily make an individual an ethnic in America. Rather than a constant ascribed trait that is inherited from the past, ethnicity should be regarded as a continuous variable with a different degree of manifestation or as a result of a process which continues to unfold in the course of history. For instance, the history between the United States and Mexico can help explain the emergent ethnic identities of people who are immigrants or descendants of people from Mexico.

*Ethnic identity* refers to one’s conception of themselves along the ethnic lines and it is closely related with the issue of ethnic boundaries, which determine who is a member and who is not. An individual develops an ethnic identity through a process of social ascription as well as self-labeling and is changeable. As the individual moves through daily life, ethnicity can change according to different situations and audiences. The individual carries a portfolio of ethnic identities that are used according to a specific circumstance. A child from a family that immigrated to U.S. from Mexico can identify themselves as Hispanic on a survey, Mexican when talking about his or her culture to other Americans, Mexican-American when talking to children who arrived from Mexico recently and American when visiting with his Mexican grandparents. This produces a layering of situational levels of ethnic identities (Nagel, 1994). Multiple patterns of situational ethnic identification can be found in many ethnic communities. Thus, ethnicity is a composite of self-perception as well as the views held by others about one’s ethnic identity.

Various distinctions in ethnic identity can be found among students from one ethnic group in a single school. Matute-Bianchi (1986) found these five distinct ethnic
identities among students of Mexican origin in one high school in California: Mexicans, Mexican-oriented, Mexican Americans, Chicanos and Cholos. However, these labels might also be restrictive and fail to express the complexities of the lived experience of the individuals described, especially if we consider the multiple facets of transnational migration within the context of the global economic, cultural and political processes. Sanchez (2001) points out some of the nuances of such terms as Chicana, Mexicana, or Latina and her own coming to terms with these as a descendant of transmigrants from Mexico.

Ethnicity refers to the common heritage of a particular group of people, which may occur despite racial difference. Immigrants constitute a major source of ethnic groups in U.S. by forming social groups with shared history, sense of identity, geography, and cultural roots. For example, many Puerto Ricans represent various blends of White, Red, and/or Black races and yet they refer to themselves collectively as Boricuas. Despite color differences, Puerto Ricans form an ethnic group that shares common culture - language, history, ancestry, national origin, religion, music, food, customs, and others.

Immigration is defined as an entry of foreign nationals into a country with the purpose of establishing permanent residency. In research studies focusing on health and well-being, immigrant status is usually defined on the basis of an individual’s country of birth when studying adults. In research of children’s health, immigrant status is often defined by using both the child’s and the parents’ nativity, as parental characteristics are critical in shaping and influencing a child’s health and well-being. Typically, immigrant children are categorized as: a) foreign-born children with both immigrant parents (first generation), b) foreign-born children with both immigrant parents who came to U.S.
when very young and so have very limited if any recollection of their country of origin (one-and-half generation), c) U.S.-born children with both or one immigrant parent (second generation), or d) U.S.-born children with both US-born parents (third and higher generation).

Thus, a child born in Mexico would be considered first-generation immigrant to U.S.; a child born in the U.S. to one or both parents born in Mexico would be considered a second-generation immigrant; and a child born in the U.S. to both US-born parents would be considered third and higher generation immigrant.

Invention of ethnicity refers to the dynamic process of construction, formation, innovation, recreation, and restoration of ethnicity that takes place within a specific time and place in the history. Research has shown that the immigrant cultures do not remain constant, but rather undergo cultural change (Conzen & Gerber, 1992). Immigrants actively define their identities through negotiation with other groups within the dominant culture. These interactions constitute the main components of an ethnic group formation and definition.

Minority is a group of people that is smaller in number than the rest of the larger population. Additionally, its members have racial, ethnic, political, religious, linguistic or other features different from those of the rest of the population (Skutnabh-Kangas & Phillipson, 1994). Yet, minority is not only a smaller group of people than the majority, but also as defined by Coakley (2004) socially identifiable collection of people who “suffer disadvantages at the hands of others who call them inferior or unworthy and have the power to affect their lives negatively” (p. 285). In many cities across the U.S. there is a minority-majority ratio, in which no single ethnic group makes up more than 50% of
the population. However, this does not apply to rural communities such as the one selected for this study. Rural communities often have a majority-minority make up resulting in inequities. Today’s mobility rates make communities census data an inadequate representation of the real ever-changing make-up of the population.

*Symbolic ethnicity* (Gans, 1979) is a term used to describe a widespread third and fourth generations’ ethnic “revival”, a phenomenon providing greater visibility of today’s ethnics due to upward mobility. Gans argues that in these later generations people are less interested in their ethnic cultures and organizations, and their seemingly greater allegiance to the culture and country of the immigrant generation is rather nostalgic. They are more concerned with maintaining their ethnic identity than the practice of cultural functions (Gans, 1992; Waters, 1990). This feeling of ethnic identity can be expressed by using ethnic symbols abstracted from the original culture. Thus symbolic ethnicity, though considered as a new way of being ethnic, seems to constitute just another point in the trend of moving along the straight-line assimilation theory rather than an ethnic return or revival.

*Transnationalism* is a new approach to study migration and immigrant communities. In a broad sense, transnationalism relates to the growing number of people having homes in two countries, speaking two languages and making living through continuous regular contacts across national borders. This phenomenon is linked with modern technological advances such as air transport, long-distance telephone, fax or electronic mail that facilitate new distinct forms of immigrant adaptation (Portes, Guarnizo, & Landolt, 1999). Transnational activities are comprised of different economic, political, social, and cultural enterprises ranging from import-export
businesses, rise of a class of binational professionals, to the campaigns of home country politicians among their expatriates (Portes et al., 1999). Transnationalizing is one of the more recent features in the transformation of ethnic identity in the Mexican communities (Gutierrez, 1999).

Today’s immigrants are best understood as transmigrants who depend on multiple and constant interconnections across international borders identifying themselves with more than one nation-state (Glick Schiller, Basch, & Blanc, 1995). Even common people may now settle abroad and yet sustain significant ties with their place of origin. These ties may be strengthened or loosened according to a particular context, thus transnationalism represents a very dynamic process (Al-Ali, Black, & Koser, 2001). Consequently, there is a consensus among scholars today that migration cannot be studied solely from the host-country perspective, but that there is a need to consider the relationship between transnational practices and immigrant incorporation in the host society. Transnational migration studies are a newly emerging interdisciplinary field, seeking to describe and analyze this dynamic process in the economics, politics, the social, the cultural, and the religious arena (Levitt & Jaworsky, 2007).