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What do we measure? : understanding how leadership measures the benefits of after-school physical activities in the continuation school setting

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What Do We Measure? Understanding How Leadership Measures the Benefits of After-School Physical Activities in the Continuation School Setting

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Education in Educational Leadership by Erik Richard Conklin

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2011
The Dissertation of Erik Richard Conklin is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

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Chair

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

During the 11 months of writing this dissertation my reason for researching this topic came into clear relief. I attended five funerals for people under the age of 17; all these deaths except one were completely preventable. The purpose of this research is to work toward a world where we can prevent another mother keening because her child wasn’t connected to anyone and disappeared from existence because they felt they had no other options.
“You can talk culture all you want; if the kid doesn’t have any way to manifest it, or way to act on it, you don’t have any way to measure it or even be able to say ‘yes, they’re really connected.’”

-Continuation high school principal

“These kids are not malfunctioning widgets, but living, breathing souls, who need to be cared for and not ‘serviced’! What does it take for school leaders to understand that the kids are overeating, failing, etc., because no one gives a f--- about them personally, and we’ve stripped everything out of the school day that made a loving, morally soaring connection, and showed that we do care?”

-Continuation high school teacher

“Keep (the after-school athletic program) open for us; it really does help us. It really helps; it really keeps us motivated, keeps us active, instead of having us just go out to the streets and do whatever we want. We actually want to stay after school and play. We really want to stay after school!”

-Continuation high school student
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Pops, enjoy the retirement; you earned it!
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ABSTRACT OF THE DISSERTATION

What Do We Measure? Understanding How Leadership Measures the Benefits of After-School Physical Activities in the Continuation School Setting

by

Erik Richard Conklin

Doctor of Education in Educational Leadership

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

Professor Carolyn Huie Hofstetter, Chair

The purpose of this exploratory and descriptive qualitative study was to understand the data used by teachers and administrators to determine the benefits of time spent in after-school athletics and exercise programs on the academic performance of students in three continuation high schools in California. Using student focus group interviews, teacher and staff interviews, and document analysis, this study seeks to understand the nature of after-school athletics and exercise programs in these schools, how they meet the needs of these students, and the role of administrators and teachers in leading these
programs and tracking how these programs may benefit students academically as well as physically. Key findings include a relationship between funding and increased teacher investment of providing after-school activities, as well as a positive relationship between adults who are on campus all day and the social-emotional investment and connection of the students to the school and their own learning. Key data sources are generally not systemically used to measure growth in behavior, investment, or academic growth, despite myriad sources of data for analysis. Students report feeling more invested in school when it seems adults through the day are caring about them by checking on their progress, even if useful data is not systematically used. Implications of this study span across leadership, practitioner, and policy considerations; research constructs; and theoretical concepts. Key factors to consider when implementing an effective program include financial support, facility considerations, preexisting physical resources, staff knowledge and interest, and an understanding of the importance of the program. Recommendations include conducting pre- and post-engagement surveys, tracking changes in grades, credit acquisition, and behavior, maintaining funding for after-school physical education programs for typically low-socioeconomic status students, recruiting facilitators who are also teachers on continuation school campuses during the regular school hours, using existing data sources to guide decisions, and reconsidering theoretical frameworks to better understand the student-in-context as an individual with agency to pursue healthy relationships with adults via mentoring frameworks for interactions which will facilitate resiliency and positive health habits.
CHAPTER 1: INTRODUCTION

In an era of increasing pressure to pass high-stakes tests, to learn more than any previous groups, and to be successful in school during an economic period of hardship unprecedented in the past two generations, students who struggle in the traditional academic arena need alternate paths to achieve their high school education (Austin, Dixon, Bailey, & Berliner, 2008). Some states, including California, provide alternative programs; in fact, the California Education Code mandates that high school districts provide an alternative to the conventional path to achieve a high school diploma (California Department of Education, 2009). These programs vary in function, but are held to the same standards of achievement as their conventional school counterparts. The terms traditional, comprehensive, and conventional refer to the form of education in which the majority of high school students are enrolled in the United States. The variety of terms presented here are due to their collective use in the current literature. Alternative programs are unconventional and may include court schools, independent study centers, home study, hospital visitations, magnet schools, and continuation schools. Continuation schools are one type of alternative education program, which ideally serve as an educational safety net for students who fall behind on credits earned toward graduation.

The marked growth in the number of students utilizing alternative education programs in the United States is something leaders and policymakers need to consider when crafting policy to which all students will be held accountable. In 1993-1994 there were 2,606 public alternative schools in the United States, 3,850 in 1997-1998, and in the 2000-2001 school year the number skyrocketed to 10,900 (Lehr, Lanners, & Lang, 2003). Not all U.S. states provide continuation schools. In California, the Education Code
specifically mandates these opportunities (California Department of Education, 2009). Here a continuation school is a high school setting structured to address the individual needs of students who have fallen behind in their progress toward graduation. California is one of six states with legislation mandating specifics in the areas of enrollment criteria, funding sources, curricular matters, staffing, and students with disabilities (Lehr et al.). Each district chooses how and when these schools meet, but there is a minimum of 15 student/teacher contact hours each week, which allows for students to attend to family matters, job commitments, or whatever life events prevent them from being successful at the conventional schools (California Department of Education). There are 521 continuation schools in California (Perez, Johnson, & Kirby, 2008). Due to the transient nature of many of these students, the exact population size is impossible to definitively measure. The number of enrolled students attending alternative education programs in California is approximately 414,000, of which 115,000 attend continuation schools (Perez et al.).

These students can enroll of their own volition, be referred by the conventional school counseling staff, or be mandated by the court systems or district administrative team to transfer due to behavior issues or lack of academic progress (Perez et al., 2008). Many students are referred due to concerns that they will not graduate on time and may need a smaller school setting. The referral process differs for each school district, but common methods include counselor screening for credit deficiencies, administrative team meetings to discuss students who appear to be struggling, and parent meetings to involve the family in the decision. Further, a smaller school and lower teacher/student ratio
allows for staff members to focus more individualized attention on students than what is normally possible at comprehensive high schools. Not all of these aspects are present in all districts, nor do districts utilize all of these aspects.

*Understanding the Special Needs of Continuation School Students*

Continuation high school students differ from traditional high school students, as they have not developed the resiliency to physically, socially, or emotionally overcome life’s obstacles and problems and continue progressing academically in the traditional comprehensive high school setting (Mancini & Huebner, 2004; Perez et al., 2008; Worrell, 1996). Additionally, continuation school students typically lack good physical health, carry excess weight, and have low general fitness levels, which can lead to low self-esteem and a lower sense of self-efficacy (Kubik, Lytle, & Fulkerson, 2004). A high percentage of continuation high school students appear to lack basic needs for health as agreed upon by physicians, researchers, and government agencies that provide nutrition information (Centers for Disease Control and Prevention, 2008a).

Applicable to most people, these guidelines accurately inform us what our physical goals should be regarding both performance and body composition. Public health literature points out that most Americans are not in the physical shape necessary to avoid diabetes, chronic back pain, knee and hip injuries, heart attack, and other preventable maladies (Centers for Disease Control and Prevention, 2008a; Torgan, 2002; Mokdad et al., 2003). Students in California continuation schools are no different, as these health issues are not limited to adults (WestEd, 2008). A study showing increases in
the rate of obesity among adults calls to attention the need to address basic health issues (Mokdad et al.).

Between 1985 and 2007 the population percentage considered obese in the United States rose from 15% to 25% (Centers for Disease Control and Prevention, 2008c). A person’s physical condition is related to many ailments, including heart disease and sleep apnea, a sleeping disorder that affects adults as well as students (Torgan, 2002). Studies from across a range of participant ages support the importance of physical health and its presence in students who perform well at school (grades, behavior, social connections, etc.) and maintain a healthy body image (Carlson et al., 2008; Martin & Chalmers, 2007; Kubik et al., 2004). Unhealthy children who miss school because of preventable maladies can develop into adults who miss work and are less productive due to those same unhealthy factors (Baker, Sigmon, & Nugent, 2001; Centers for Disease Control and Prevention, 2008a; Chubb & Moe, 2005). If this problem is addressed at a young age, there is potential to transform the adult population into a healthier and more productive group.

Recently, funding to stem idle time and promote health in students was provided by the 21st Century After School Safety and Enrichment for Teens Program (21st Century/ASSETS) grant. This federal grant is distributed to the state department of education and then on to the county office of education, from where it is sent to participating districts to rent or purchase equipment, hire teachers to offer after-school programs, or hire outside vendors to provide activities. The goal of this funding is to provide for before- and after-school programs aiming to improve academic achievement,
reinforce and complement the academic program, and provide family literacy and educational development services (California Department of Education, 2010). Not all districts participate in this grant process; the sites participating in this study all receive this funding. This was unknown to the researcher until the data gathering had begun.

**Theoretical Framework**

Abraham Maslow’s (1943) genesis work on human needs and fulfillment indicates that meeting basic physiological needs for safety and health are foundational and critical to life. Since many students in continuation high schools come from families that often struggle to meet basic needs, it is critical to explore programs that may help students meet minimum physical health requirements. A person’s state of physical health plays a vital role in his or her capacity to perform, think, and act to his/her greatest potential as productive members of society within their nested environments (Maslow). Children cannot simultaneously think about their lack of food, warmth, or safety and still perform their best in the academic setting (Rueda, 2008).

Urie Bronfenbrenner (1979) is another researcher who helped clarify the influences on the individual in pursuit of future success in the face of challenges. According to his theory of the nested environmental structure, Bronfenbrenner posits that an individual is surrounded and influenced by concentric rings of environmental contexts, each one overlapping and influencing the others. The individual is at the core of the decision-making process of life, but understanding the decisions to be made is limited by concepts the individual has been exposed to by environmental influences.
Bonnie Benard (2004) promotes the concept of affirming and building positive aspects to buttress individuals against negative events and situations. Benard suggests that by building these positive aspects, the effects of negative occurrences and environmental influences can be minimized. These conceptual frameworks provide a foundation for this research. As noted earlier, Maslow’s theory focuses on the basic physical and emotional needs of individuals (e.g., shelter, food) that are particularly profound for students enrolled in continuation schools. Bronfenbrenner places these individual needs within a broader context of ecological influences, such as the family, school, and community and, in this study, after-school exercise programs. Research on risk and resilience factors, examined by numerous scholars and summarized by Benard, presents how programs and staff can potentially address the risk factors commonly associated with continuation school students and perhaps facilitate their resiliency through developing possible relationships with teachers and program staff and through protective health behaviors. Collectively, these frameworks provide different perspectives of the complexity of factors and types of supports associated with fostering the success of continuation school students in this study. The confluence of these three theories can be found in the educational setting of the continuation schools, particularly in the problem of which is the catalyst for this study.

Statement of the Problem

The catalyst for this study is the lack of access to physical activity by students from low-socioeconomic status (SES) schools, combined with the high percentage of low-SES students enrolled in continuation schools. Many states provide alternative
education programs. One type of alternative education program in California is the continuation school model. The conventional manner in which the majority of American students are educated doesn’t work for every child; students in California who fall into this category have the option of attending a continuation school. The physical health dynamics of these students is markedly poorer than their conventional school counterparts, as many continuation school students are typically from low-income and minority families (Perez et al., 2008; Rueda, 2008). Some continuation schools provide physical activities after school, but no one has investigated what activities are offered, or what data are used to determine the effectiveness of the programs’ stated goals.

*Rationale for the Study*

Studies focusing on this group of students and their health issues are sparse. Continuation high schools have a higher percentage of low-SES students than the conventional high schools (Perez et al., 2008). Students who are second-language learners, from minority groups, or from families with lower parent education levels enroll at continuation schools in higher proportions than at conventional high schools (Perez et al.). For the purpose of this study, the term *at risk* refers to a condition of existence wherein a student is not exhibiting resiliency skills in order to maintain a healthy progress toward graduation, or behavior that is physically or mentally unhealthy or maladaptive. These student groups are also at risk for having lower health awareness, lower opportunity rates for participation in organized sports, and lower opportunity for meeting their health care needs (Kubik et al., 2004). A state-mandated health inquiry census, the *California Healthy Kids Survey* (CHKS), is given each year to high school students. The
CHKS report for 2004-2006 illustrates the difference between the percentage of comprehensive high school students who report changing where they lived two or more times each year (7%) and the same reporting period of continuation school students (17%) (WestEd, 2008). These numbers suggest a relationship between mobility and lack of academic success (EdSource, 2008).

These facts suggest that after-school programs for continuation high school students may be as important as those provided for students enrolled in traditional high schools, if not more so. The involvement of these particular students in after-school activities—be it working, volunteering, participating in sports, or some other productive pursuit—is of the utmost importance. Keeping students healthy, invested in their own health and growth, and involved and interested in earning a high school diploma is crucial for the continuation school population. However, very little information is known about the types of after-school programs available at continuation high schools, particularly programs that might address students’ physical needs. Providing high school exercise programs serves to educate the students (Carlson et al., 2008), keep them productively invested in an activity (Belshaw, & Kritsonis, 2007; Mancini & Huebner, 2004), and helps make them healthier. More benefits may or may not be realized, but few studies directly investigate these programs at continuation schools. In this study’s research, no studies were found that directly addressed the role of after-school exercise programs in continuation school contexts. Further, no studies have been conducted that focus on these specific needs of continuation school students and how they might be addressed.
Purpose of the Study

Understanding the benefits of students who are engaging in activities to help them become healthy citizens of the world can be seen as in everyone’s best interest. The purpose of this study was to: (1) gather information to help researchers understand the various activities that continuation schools are hosting in their after-school exercise programs; (2) understand the benefits to the academic, behavioral, and social aspects of the students involved; and (3) understand how sites measure these benefits. This study helps fill the gap in the literature about after-school exercise or sports programs offered by continuation high schools, their potential positive effects on continuation high school students’ academic and behavioral outcomes, and how this is measured.

Research Questions

The study addresses the following questions:

1) What is the nature of after-school exercise programs in California continuation high schools?

2) What factors—from the perspective of site leaders, facilitators, and student participants—affect the type of after-school exercise programs offered and level of implementation (e.g., school context, needs of students, resources available)?

3) In what ways do after-school exercise programs address the specific needs of continuation school students according to site administrators, program facilitators, and student participants?

4) How do administrators and teachers use data or evidence to develop or implement their exercise programs?
Overview of the Methods

The research methodology uses an exploratory and descriptive case study design based on interviews to understand the after-school physical activity program and related benefits at three selected school sites in three different school districts. This methodology was selected because little is known about the nature of students at continuation schools, as well as the sparse amount known about what types of after-school exercise programs exist in these contexts, how they operate, what types of social and academic effects are created by participating in such programs, and how potential effects are measured in continuation schools.

Creswell and Plano Clark (2007) help us understand that qualitative studies can shine a light on the nuances of situations “in a natural setting that is inductive and establishes themes” (p. 37). The reporting of the discovered data in this manner can include the voice of the students, the facilitators, and the site-level decision makers, helping the researcher be reflective of the complexity of the situation (Creswell & Plano Clark). Vygotsky (1978) posits the words people use to tell their stories can be a window to their awareness of experience. The context of these individual experiences, the descriptions, explanations of experience, and the awareness the individuals have regarding these experiences are accessed via interviews in order for researchers to understand the meaning behind the activities and behaviors (Miles & Huberman, 1994; Seidman, 2006).

After researching the literature and interview protocols used to obtain data regarding physical activity programs, the first phase involved utilizing an interview
instrument, which provided information from adults at these schools regarding student participation in the after-school physical activity programs on three campuses during the 2009-2010 academic year. This phase included interviewing the principal and an activity facilitator at each site. This in-depth study of after-school programs at three sites in three different districts was designed to learn how programs are structured, what role facilitators and site leaders play, if their data indicates the programs may be meeting student needs, and how principals and facilitators perceive and measure the effects of these programs on students. Documents from the sites were analyzed to further understand the depth and breadth of data used in making program-related decisions.

The second phase involved the programs’ participants. Students who participate in the after-school physical activity programs were interviewed in a focus group format to better understand their perceptions and needs. After these two interview phases, the recordings were transcribed in order to examine them thoroughly for themes and patterns.

The third phase was a cross-comparative analysis of the interview data utilizing grounded theory to answer the research questions. Comparing the responses from students, facilitators, and administrators helped determine if decisions are made with a voice from the participants. Superimposing the interview data with the theoretical framework literature helped distill the important services these schools are providing, as well as what the school leadership is missing in terms of strategy to engage all students. The analysis of this data will then help investigators and practitioners understand the next step for best serving the at-risk students.
Significance of the Study

By understanding how programs are developed and structured, as well as what leadership support is needed to help continuation school students be successful, critical data are provided in the conclusion that can inform both policy and practice. The student interview data will help provide before and after participation information about the students’ perspective of their participation and investment in the school. The administrator and facilitator interviews address questions that will help document both (1) what is needed to provide a high-quality after-school program, and (2) how teachers and site administrators measure the participants’ progress. The document analysis provides a window into the quantitative data regarding programmatic decisions, production of work, and student behavior changes. The significance of this study can be seen from a variety of stakeholder perspectives—from school boards, site leaders, district level leaders, teachers, parents, community members, and elected officials. All stakeholders interested in the well-being of the community can make better decisions when they understand the importance of physical health and the opportunity for at-risk students to participate in these activities.

Organization of the Study

Chapter 1 discusses the area of research, the basic population and their functioning at the continuation school, and the statement of the problem and the societal significance of that problem. It concludes with a presentation of the research questions and methodology. Chapter 2 presents a review of the relevant literature considered when researching this topic. This review includes the history of continuation schools, their
mission and ways of operating, the theoretical framework that directs the study, culture on school campuses and its significance, and studies that review physical exercise including the positive effects of exercise on elementary, middle, high school, college, international, and special populations. Chapter 3 explains the methodology used in this study and the rationale for utilizing this methodology. This chapter includes the rationale and explanation of the design of the document review, description of the interviews, and the selection rationale for participants and schools involved. Chapter 4 presents the findings of the studies, including a comparison of findings among the three study sites. Finally, Chapter 5 presents the conclusions of the researcher, implications for theory and leadership practice, and recommendations for both researchers and practitioners.
CHAPTER 2: LITERATURE REVIEW

This study examines after-school programs in continuation schools, including why they exist, how they operate, their potential benefits, and how sites understand and measure these potential benefits. It ties together several pertinent areas of research. The literature review provides a description and information about continuation schools, as well as their population in California. This is followed by a description of students in continuation schools and the unique, and oftentimes exacerbated, health and academic issues that they contend with, and how after-school programs may address these issues. Research on continuation schools is limited; information and studies regarding after-school physical activity programs in continuation schools is virtually nonexistent. Therefore, this review also draws on related research on health programs from other educational sectors and student populations. A broad view of data-driven decision-making is also presented to help inform the study and to provide insights on how organizations may use data to inform their decision-making. Finally, three theoretical frameworks are explained to provide insight on how to examine after-school programs for at-risk students within school settings. The reviewed literature discusses the influence of health and exercise on the academic success of students and the application of that knowledge to the continuation school student.

California Continuation Schools

California State Educational Code mandates alternative education programs for students at risk of not completing their education through the 12th grade (EdSource, 2008). Alternative education takes many forms and is the route many students need in order to finish their compulsory education. Typically, the alternative education setting
provides students with a smaller student-teacher ratio, which enables the teacher to provide more personalized service and attention to these students. Programs to meet these students’ needs vary, as would be expected, since the challenges faced by students who don’t progress in the regular setting also vary. Some schools meet with students weekly to check up; others provide daily brief meeting time. Still other programs offer a full morning of instruction or independent study, followed by afternoon employment for students, and some programs follow a schedule typical of traditional schools. In other words, alternative education programs are allowed a great deal of flexibility in scheduling to meet student needs (California Department of Education, 2009). Furthermore, students may be schooled at home, some at teen pregnancy school sites, and some in hospital rooms. California continuation schools are one type of alternative education, a phrase for this study that refers to any type of educational program outside of the traditional high school setting, and these are the focus on this review.

Little is known about the state of continuation school students in California or nationally, including their social and academic needs. Most available information is primarily descriptive and anecdotal in form. For example, Perez, Johnson, and Kirby (2008) provide a descriptive analysis of the continuation school setting. In the 2007-2008 academic year more than 10% of California’s K-12 students attended some type of alternative education program (EdSource, 2008). According to these researchers, alternative education programs in California serve approximately 414,000 students, with continuation schools representing 115,000 of those students and the remainder enrolled in court schools, independent study programs, and community day schools. Perez and
colleagues also report that their research suggests one-on-one relationships help continuation school students achieve academically. Many of these schools also provide parenting or life skills coursework and courses through the local community colleges, which is another way to personalize the curriculum.

California continuation schools are one type of alternative education program, which addresses the dropout problem in school districts. When students have a deficit of a certain number of academic credits, they either decide or are mandated to leave the comprehensive high school and enter into a continuation school to earn credits to close the deficit. In California, each district must have a continuing education resource for students who need these services for a wide variety of reasons, either due to student behavior or circumstances outside the control of the student. Some of these continuation schools are housed on comprehensive school campuses while others have their own campus.

**Continuation School Student Population**

Continuation school students are generally labeled *at-risk*. At-risk is a broad and nonspecific term used to describe a variety of student types; meaning these students can be at risk of violent behavior from themselves or others. At-risk may also indicate a high likelihood of maladaptive behaviors, academic shortcomings, personality disorders, or other psychological harm (Tidwell & Garrett, 1994). Rueda (2008) describes the social and resource context for many students as having little access to reading materials, few examples of adults reading, and few role models in the schools who reflect the culture
from where the student derives. These students generally have multiple indicators of being at risk of failing school or performing lower than their peers.

Tidwell and Garrett (1994) explain that at-risk youth require “the careful identification of both predisposing conditions and negative outcomes” (p. 445).

Combining the analysis of Rueda (2008) and the research by Tidwell and Garrett reveals a pattern of poverty, racial classification, and living conditions that all relate to the at-risk student’s involvement in the alternative education setting—illustrating the relationship between financial status, race, and at-risk status. Tidwell and Garrett also describe the at-risk students as groups who share some common childhood experiences, personality traits, and conditions, such as attitudes and behaviors, which can indicate a high likelihood of a “self-fulfilling cycle of deviance” (p. 445).

Even if deviance is not the outcome, at-risk youth certainly may not perform in school as well as their peers. Perez, Johnson, and Kirby (2008) provide the graduation rate for White (78%), Black (57%), and Hispanic (60%) students in the state of California for all schools. Although graduation rates are not available for continuation schools in California, it is likely that their graduation rates are substantially lower than comprehensive schools given the mobility rate of the population served by these schools. Additionally, students served by continuation schools are those most likely to have a credit deficit, so it is not surprising that continuation schools would have a lower graduation rate compared to traditional schools; they also serve a higher percentage of students from low-income and diverse backgrounds who are on the verge of becoming dropouts. For the purpose of this paper, at-risk youth in the continuation high school
setting will be defined as grade 10-12 students (based on chronological age of approximately 15-18 years old) who have not performed as well as their peers for a variety of reasons. Understanding attendance and health realities, as well as the context of the individual in their life circumstances is the beginning of connecting those students to their learning.

Attendance and Health Issues

To understand the state of health of the students enrolled in continuation schools, knowledge of the student population and the logistical space they occupy in the school system is a prerequisite. The 521 continuation high schools operating in California have no standardized method of operating aside from minimum contact hours, which are 15 hours per week (Perez et al., 2008). The state does not mandate meeting times, days of week, or the duration of individual classes, but does mandate a minimum number of hours for each subject, including physical education. The curriculum and graduation requirements are the same as a comprehensive high school, but how these requirements are met is generally left to the discretion of district leadership. State-mandated minimum contact hours and credential requirements are common parameters, but the application of those guidelines can be different in each school and even different at two schools within the same district (Perez et al.). While appearing contradictory, the strength of this dynamic situation is the ability to customize the school environment to each community depending on the specific community’s needs.

Due to the constant ebb and flow of enrollment in the continuation schools, exact numbers for student enrollment are uncertain; the transient nature of some of the families
whose children need the services offered by continuation schools makes an exact accounting almost impossible (EdSource, 2008). Two ways of measuring the enrollment are through the Alternative Schools Accountability Model (ASAM) or through the California Basic Educational Data System (CBEDS) census given each October. These two data repositories place the total enrollment between 68,371 and 116,551 (EdSource). A wide span of students lies between those two numbers, which begins to illustrate the difficulty continuation school staff face when being held accountable for student success. Because of the requirements for keeping students on rosters until certain criteria are met and the chronically truant students can be dropped from the school, students are often still enrolled at a school but have moved out of the district without reporting their removal, which makes accurate accounting nearly impossible (EdSource). It would seem that any research done in continuation schools should acknowledge this aspect of reality in order to fully understand the complex nature of this population.

A state-mandated health inquiry census, the California Healthy Kids Survey (CHKS), is given each year to high school students. The CHKS report for 2004-2006 illustrates the difference between the percentage of comprehensive high school students who report changing where they lived two or more times each year (7%) and the same reporting period of the continuation school students (17%) (WestEd, 2008). These numbers suggest a relationship between mobility and lack of academic success (EdSource, 2008). It is interesting to note that although the continuation schools in California are forced to deal with myriad problems their students bring to school each day, the passing rate for the California High School Exit Exam remains comparable to the
comprehensive high schools (EdSource). This statistic suggests there is some factor, or factors, about continuation schools, which is effective in supporting this special population of students.

Little empirical research regarding continuation schools and their specific functions exists and is mostly in the form of state and federal government information publications. In the databases searched outside of the government data systems, research articles predominately focused on suicide, violence, drug use, and treatments for substance avoidance and cessation (Ames et al., 2007; Burkett, 1977; Galaif, Chou, Sussman, & Dent, 1998; Sussman, Skara, DeCalice, Hofman, & Dent, 2005). The evidence available suggests that students in continuation schools have higher dropout rates, lower attendance (Perez et al., 2008), poorer health habits, and more high-risk behavior (WestEd, 2007) than students in traditional schools (EdSource, 2008).

**Positive Relationship Between Good Physical Health and Student Achievement**

One aspect of student involvement in school is physical health. A study showing increases in the rate of adult obesity calls to attention the need to address basic health issues (Mokdad et al., 2003). Between 1985 and 2007 the population percentage considered obese rose from 15% to 25% (Centers for Disease Control and Prevention, 2008c). The physical condition of people has been shown to have a relationship with many ailments. Torgan (2002) describes many of these relationships, including heart disease and sleep apnea, a sleeping disorder that can affect adults as well as students. Studies from across a range of participant ages support the importance of physical health
and its presence in successful students (Carlson et al., 2008; Kubik et al., 2004; Martin & Chalmers, 2007).

What primarily separates students who attend continuation high schools from the rest of the general student population is their lack of resiliency to overcome negative forces in their lives to continue progressing academically in the traditional comprehensive high school setting (Worrell, 1996). Additionally, these students typically lack good physical health, carry excess weight, and have low general fitness levels (Kubik et al., 2004). A high percentage of continuation school students appear to not meet basic guidelines for health as agreed upon by physicians, researchers, and government agencies that provide nutrition information (Centers for Disease Control and Prevention, 2008a). Applicable to most people, these guidelines establish, with a great deal of accuracy, what a person’s physical goals should be regarding both performance and body composition.

Public health literature clearly points out that most Americans are not in the physical condition necessary to avoid diabetes, chronic back pain, knee and hip injuries, heart attack, and other preventable maladies (Centers for Disease Control and Prevention, 2008a). Students in the California continuation schools are no different, as these health issues are not limited to adults (WestEd, 2008). Unhealthy children who miss school because of preventable maladies can develop into adults who miss work and are less productive due to those same factors (Baker et al., 2001; Center for Disease Control and Prevention; Chubb & Moe, 2005). If this problem is addressed at a young age, there is a potential to transform the adult population into a healthier and more productive group.
Similar to the general population, many students who attend continuation schools fall typically lower than the “healthy” standard (Centers for Disease Control and Prevention, 2008b). Based on the observations of the students’ health, in the 2002-2003 academic year some teachers and a coach at a continuation school in southern California developed a program on campus to help students understand what good health and nutrition look and feel like (Maggos, 2007). This non-peer reviewed report suggested a positive effect on attitudes, grades, and relationships with other students and staff. This intervention had several aspects and was not merely classroom discussions and conceptual understandings, but included hands-on workouts with an adult who was fit and healthy, a salad bar in the cafeteria, and ongoing informal conversations about healthy foods. A study of this program suggested a relationship between participation in the program and positive academic achievement by participating students (Maggos). No other studies have looked at this interaction in the continuation school setting.

*Exercise and Academic Achievement in Elementary and Middle Schools.*

Unfortunately, few studies focus on students in continuation schools in California and none look at the potential effects of after-school programs on students in continuation schools. Due to the structure of educational policy and funding in the United States, the states retain authority regarding curriculum, staffing, finance, and law. All states differ in their approach to alternative education. Because of this, the research focuses specifically on California continuation schools, but includes outside those the area for the physical activity literature review. Thus, this review of the literature regarding academic benefits of physical health includes special student populations, as well as younger, middle, and
older students to inform district leadership that continuation school students would also benefit from what students in all other age groups are experiencing.

Physical health and activity and the relationship to academics has been studied in the entire spectrum of academic levels and in many countries (Carlson et al., 2008; Crosnoe, 2006; Irandoust & Karlsson, 2002). Literature from a variety of countries suggests that regardless of age or grade, physical exercise benefits academic performance. Relevant information surfaces from several studies focused on elementary school students and the potential academic benefits of physical exercise. In a quantitative study focusing on the special population of autistic children, Nicholson (2008) found a positive relationship between regular jogging and academic achievement in four autistic children. Nicholson used the independent variable of time spent jogging each day and the dependent variable of time spent actively engaged in academics, as defined by Shapiro’s (2004) Behavioral Observation of Students in Schools (BOSS). A behavioral baseline was established via observations and then compared with changes observed after implementation of daily jogging. The jogging intervention was implemented in a multiple baseline pattern to establish when different changes took place. The increased time spent actively engaged on academic tasks correlated to the implementation of jogging for all participants. The strength of this study was the baseline measurement and the standardization of the observations. Baseline data are important in understanding the real change after an intervention has been applied, a useful data collection facet important to both student health improvement and academic achievement.
At the younger end of the age spectrum, a quantitative longitudinal study focused on kindergarten students through six years of intervention and found there was a positive relationship between physical activity and academic benefit (Carlson et al., 2008). In this study three aspects kept the focus specific: (1) standardized tests given once per year through the sixth year, (2) a cohort design was used to measure against other groups, and (3) the sample was representative from a racial and gender consideration. Carlson et al. do not mention socioeconomic considerations of participants, leaving an opening for further studies to determine if economic factors can negatively influence academic success even when students increase physical exercise. Another advance on this study would be to focus on a larger population size.

Crosnoe (2006) confirms the findings from Carlson et al. (2008), but on a larger scale. Utilizing nationally representative data obtained from the National Center for Education Statistics (NCES), a sample (N= 14,901) was analyzed by considering immigration status, race, math achievement test scores, reading achievement test scores, body mass index (BMI), and mental health. Crosnoe established a clear relationship between poor physical health and poor academic achievement. The data regarding poor health and poor academic achievement was particularly illustrated by the Latino immigrant families’ data. This information was not commented on in-depth by the researchers, other than to say it is an area for future researchers to distill why this group is more affected by this relationship between health and achievement. Since California continuation school students serve significant proportions of Latino students, the findings
from this study are particularly relevant and suggest a need to investigate participation levels by ethnicity in any physical exercise program assessment.

Another elementary school study (Tremarche, Robinson, & Graham, 2007) focused on determining if a relationship existed between increased physical education and higher achievement on a standardized test of English language arts (ELA) and mathematics for fourth graders. The study focused on two racially and socioeconomically comparable schools. The independent variable was time participating in physical education classes as the control school maintained 28 hours of physical education per year and the experimental school doubled that number of hours, providing students with 56 hours. The study found that there was a clear positive relationship between increased hours of physical exercise and performance on the ELA test. The mathematics test was not found to have a statistically significant increase in the experimental group.

At the middle school level, fitness levels were associated with higher grades in a study conducted by Coe, Pivarnik, Womack, Reeves, and Malina (2006). The researchers of this study focused on 600 sixth-grade students who were more physically healthy than the average student at the school. They came to their conclusion by comparing the vigorous exercise program of the 600 sixth-grade students to the less-active control group. The group participating in the more vigorous activity earned approximately 10% higher core class scores when compared to the rest of the students. An additional study set in the middle school grade level found that the California Physical Fitness Test (PFT) results were statistically significantly correlated to scores on the Stanford Achievement Test (SAT/9) and the California Achievement Test, Sixth Edition (CAT/6) (Grissom,
This was different from the findings by Coe et al. in that no control group was used by Grissom, but nuanced degrees of accomplishment on the PFT were determined to have a relationship with nuanced degrees of achievement on the standardized tests; the better one performed on the physical tests, the better one performed on the academic test. Another aspect of the study’s findings relevant to this review is the relationship being valid for two subgroup measurements: 1) parent schooling level achieved, and 2) free and reduced-price lunch program involvement. The subgroups of low-SES students, as measured by parents who had achieved a lower formal academic level and students enrolled in the national school lunch program (NSLP), reflected positive relationships of physical performance on the PFT and results on the SAT/9 and CAT/6 tests. However, the results for the lower SES subgroups reflected a slightly lower correlation between the two measurements. It is unclear from this study why the lower SES subgroup did not realize as significant positive results as the other groups, which is an apparent gap in the literature.

Abeyta, McGowan, Papa, and Russo (2007) conducted a survey of middle-school age students with a different focus. In their study, the students’ perception of the relationship between physical activity and academic performance was measured. A survey was conducted with 100 students responding out of a possible 140 survey requests. In addition, data were collected on standardized reading comprehension and vocabulary test scores. Of those responses, 30 individuals were on the focus, half having academic classes after physical activity and half not. Although these analyzed numbers are low, the information gleaned from this survey provides interesting data. After
analyzing the survey’s data, the authors conclude that no significant difference was present in a) attitude toward their academic achievement, or b) their academic achievement as reflected on the two tests. One explanation for this is the benefits of student participation may not be immediately realized; therefore, consistent and long-term measurement may be needed. Another explanation is that such small numbers of participants may not yield accurate results, especially when contrasted with other studies that find positive relationships and use higher numbers of participants.

*Exercise and Academic Achievement in High Schools*

Although little was found on physical exercise and academic achievement in the continuation high schools, studies were found that focused on traditional, comprehensive high schools. One study focused upon three aspects of this dynamic in the African American community (Jordan, 1999). The three different aspects measured were the relationship between athletic participation and self-evaluative factors, the relationship between participation in physical activities and grade point average (GPA), and the specific results for African American students. Utilizing the National Educational Longitudinal Study of 1988 (NELS: 88) and a longitudinal study conducted by the U.S. Department of Education (1996), Jordan included data that controlled for type of high school, including both public and private, as well as ensuring that all regions and community types were included. The independent variable was the degree of involvement in physical activity. The dependent variables of academic achievement included GPA and a standardized test given in 10th grade. The study revealed two interesting findings: (1) the positive relationship between physical exercise and academic achievement as
measured by GPA and the standardized test, and (2) a clear consistency of that relationship, regardless of racial/ethnic group. When considering Rueda’s (2008) data, which showed a higher percentage of continuation school students are minority groups, Jordan’s research becomes more significant in suggesting the need to investigate the types of physical exercise programs offered to continuation students.

Two other studies anchored in the traditional high school population focused on physical activity and academic achievement in Iceland. Irandoust and Karlsson (2002) used a theory to guide their research that was not found in any other study researched for this paper. Drawing upon an economic theory of learning based on a utility maximization approach, Irandoust and Karlsson looked at a student’s preference of time spent on certain activities and their grades to determine if a positive relationship existed between the two. The participants were 161 students who were surveyed and their academic records researched to discover their academic history as well as their present grade status. The independent variable was the number of hours spent participating in physical activity. Their comparison showed a positive relationship between participating in physical activity of up to 6 hours per week and higher grades earned. They also found a negative effect if the time spent on physical activity is more than 6 hours.

The second quantitative study from Iceland analyzed cross-sectional survey data from 5,810 Icelandic students in the 9th and 10th grades (Sigfusdottir, Kristjansson, & Allegrante, 2007). This participation number represents approximately 78% of the total population of this age group in Iceland (Sigfusdottir et al.). The method for this survey was to have teachers in all Iceland schools distribute the survey, oversee the completion,
and collect the surveys after students had sealed them in envelopes. Teachers were instructed to avoid having names or other identifying marks on the surveys to ensure total anonymity. The strengths of this research design are access to such a large population and anonymity. With anonymity, participants may possibly feel more open to honesty. The survey included self-reporting of grades, height and weight, dietary habits, and physical activity.

Although this survey design can provide much data for a large group, the weakness in the method is the participants’ self-reporting, which can be less accurate for a variety of reasons, including subjective definitions of terms, interpretations of questions asked, and the importance placed on accuracy while participating in the survey; these potential weaknesses are discussed by the authors of the study. The findings established a positive relationship among healthy body mass index, physical exercise, and academic grades. However, the researchers also found that this relationship was overshadowed by the negative relationship among parental education, student absenteeism, and academic achievement. Rueda’s (2008) data highlights the importance of finding activities that make students want to come to school, with the goal of making their parents’ participation in school irrelevant to the student’s success.

Not all studies reach the same conclusion. Counter to the majority, a quantitative study utilizing a standardized test and a norm-referenced physical fitness test was administered over the course of the 2000-2001 academic year (Martin & Chalmers, 2007). Although this study tested 5,847 students, it was only implemented in one city. The researchers determined “that only 3.6% of the variance in academic performance
could be explained by physical fitness” (p.1). Although Turbow (1985), via a quantitative study utilizing a survey that involved 891 college students at California State University, Fullerton, determined that there is a positive relationship between moderate aerobic exercise and cumulative grade point average, there was a negative relationship established between vigorous exercise (exercise for more than 7 hours a week) and cumulative grade point average.

This phenomenon was also found in the research conducted by Irandoust and Karlsson (2002) in Iceland; the difference between the two student groups was one hour and years in school. Whereas Turbow’s study indicates a negative relationship with participating in exercise of more than 7 hours a week in college students, Irandoust and Karlsson found more than 6 hours a week showed a negative relationship with high school students. Regardless of the exact time, a clear relationship has been established in two different countries with two different age groups, between excessive exercise and lower grades. The conclusion reached by Martin and Chalmers (2007) is significantly the minority view in the literature, but is supported by Turbow’s findings if one uses her definition of vigorous exercise. Since we do not have common definitions we cannot argue emphatically that Martin and Chalmers have clear support from Turbow’s findings. Perhaps these findings would change if the definition of vigorous were changed to mean intensity, but not an increase in time spent on the physical activity.

Although not much literature concerned itself directly with the target population of continuation school students, several aspects of the research have implications for this population. The findings by Rueda (2008) illustrate the typical at-risk student’s
demographics, which include lower health level, less access to resources, and a higher percentage of absences. A high percentage of the continuation school population in California is considered at-risk (Perez et al., 2008; Tidwell & Garrett, 1994; WestEd, 2007) and studies have established a relationship among increased participation in physical activity, improved health, and higher academic achievement; even when considering other family and demographic factors such as race, immigration status, and parental educational level (Crosnoe, 2006; Jordan, 1999; Sigfusdottir et al., 2007), increased physical activity has been established to have a positive relationship with higher test scores and grade point average.

Data-Driven Decision Making (DDDM)

Some fluency in data-driven decision making (DDDM) is also needed to investigate the after-school physical activity programs. The multiple aspects of engaging the continuation school students in after-school physical activity programs call for measuring change, but how this change occurs, by whom, and under what conditions remains unknown. Additionally, what data is used, who uses the data, and who gets access to this data is also unknown. In order for continuation school students to understand their positive growth, some measurement device or habit is needed. In recent years, DDDM has been emphasized in the educational field due to the accountability factors interwoven in the No Child Left Behind legislation (U.S. Department of Education, 2010). DDDM is a way of looking at systems and deciding what information is best to weigh when determining what course of action to take. In education, DDDM can be defined as referring to “teachers, principals, and administrators systematically
collecting and analyzing various types of data, including input, process, outcome, and satisfaction data, to guide a range of decisions to help improve the success of students and the school” (Marsh, Pane, & Hamilton, 2006). Although this definition appears straightforward on a quick read, the values that are interwoven with this process are clear when analyzed deeper. Areas arise that need clarification by the stakeholders, which include determining what types of data are significant and are used toward improving the success of the school. Another area for discussion is to determine what success looks like to different stakeholders. For example, what if the data that is determined to indicate academic success differs from what is determined to indicate success toward the students’ personal growth? Research shows us there is more than one way to have a system that is centered on achievement and performance (Datnow, Park, & Wolstetter, 2007). How do the stakeholders negotiate this gap in needs? In traditional schools these may be areas of inquiry quickly answered by a consensus of the stakeholders. However, the continuation high schools are not traditional schools; they are the special response to students who did not experience success other places. Research also indicates urban schools that have made significant progress use student assessment data to guide instruction (Sharkey & Murnane, 2006), and only data which is synthesized into practice, thought about, and prioritized as well as solutions judged on merit and used to improve the data results become actionable (Marsh et al.).

A culture of trust is crucial to move to a culture of appropriate data use, which is a key aspect of a performance-driven school system (Datnow et al., 2007). Various stakeholders include students, parents, teachers, parole officers, counselors, case-
management workers for social services such as group homes, school district management, and state and federal management officials. Data used by these different stakeholders differs due to their roles and the reason for their involvement with the students. Creating a culture of trust regarding DDDM starts with getting to know the situation or people involved and understanding that different levels of the system need different data to utilize (Coburn & Talbert, 2006). Trust can begin to be built by the site and district leadership understanding the data and presenting it in a way that the staff can see and understand it, and by creating an environment where the educators are the main hub of data consumption and distribution (Earl & Fullan, 2003). This process begins with the leaders processing and understanding these steps.

As one of several key stakeholders, leaders need to provide feedback in a short period of time in order for teachers to make use of data (Marsh et al., 2006). Some leaders use powerful data in efficient, effective ways, while some have less effective ways of utilizing measurement indicators, which they call “data”—that term, again, used without being fully defined. As the purpose of the leadership is to “guide, direct, assess, and support teaching and learning” (Knapp, Copland, & Swinnerton, 2007), leaders need to know what good data use looks like. Wayman and Cho (2008) discuss the crucial importance of the site principal for any implementation of data analysis. The preparation, collection, and use of data are crucial in a feedback system (Datnow et al., 2007; Stiggins & Chappuis, 2006; Wayman & Cho, 2007). Therefore, school leadership needs to both check data and observe what is happening in the classroom to determine if the master plan is unfolding effectively; the importance of this is well documented by Thorn (2002).
The school leadership must include all levels of decision-making, because there are major tensions between national/state policy and local control, immediate feedback and long-term measurement, and what is desired as best for students and what is politically possible (Earl & Fullan, 2003; Knapp et al.).

The more comfortable leaders become with data use and presentation, the more comfortable the teachers and facilitators will become; therefore, the more comfortable the students can become. When students are comfortable with data, are active in their reflection of progress, and when assessments are commonplace and provide rich information regarding student success and growth needs (Stiggins, 2006; Stiggins & Chappuis, 2006), then the schools can operate a higher level of reflective and productive activity as a whole. The missing piece after these considerations is a framework for structuring the analysis of data.

*Theoretical Framework*

Three theoretical frameworks were selected as at their confluence they lay the conceptual foundation for this study. Although individually they provide a lens through which one better may understand a facet of an individual person, the special context of the continuation school and student environment mandates a more complex manner of observing. Hence, three independent, but interwoven, theoretical frameworks are needed to better understand the richness of the continuation school student participating in after-school physical activities.

First, Abraham Maslow’s (1943) genesis work on human needs and fulfillment indicates that meeting basic physiological needs for safety and health are foundational
and critical to life. Maslow was selected as a foundation for this study due to the basic needs he presents as a foundation for success. Since many students in continuation high schools come from families that often struggle to meet basic needs, it is critical to explore programs that may help students meet minimum physical health needs. Although not all states mandate continuation education, all states have students at risk of not attaining their high school diploma. Maslow’s Hierarchy of Needs framework (Figure 1) indicates in the general society, the foundation of a self-actualized person is the physiological. If the foundation is weak, we can expect the top of the development framework to be weak as well. The foundation of physiological health (air, water, food, and sleep) is followed by a sense of safety (feeling secure in physical and mental stability), a sense of belonging or social needs (connection to a group or other individuals), self-esteem (feeling secure in one’s strengths and understanding areas for growth), and finally self-actualization (having the capacity to help others and seek truth, justice, and wisdom) (Maslow).
A person’s state of physical health plays a vital role in their capacity to perform, think, and act to their greatest potential as a productive member of society. Maslow’s (1943) theory asserts children cannot simultaneously think about their lack of food, warmth, or safety and still perform their best in the academic setting. Although Maslow’s hierarchy is the genesis theory to understanding and approach research into the world of the at-risk youth, it is not rich enough to be complete unto itself because the vertical structure of Maslow’s theory doesn’t take into account enough recognition for the contextual nuances of the situation in which the individual exists.
Second, Urie Bronfenbrenner (1979) posited that people do not live and grow in a vacuum; understanding the ecological context in which they grow and live is crucial to understanding people. Bronfenbrenner conducted field research in cultural contexts, which led to an appreciation for human beings’ “capacity to adapt to, tolerate, and especially create the ecologies” where they live and work (p. xiii). Bronfenbrenner was selected as the second theoretical model due to the context of continuation school students, which often hinders their success in the academic setting. He conceived a theoretical model wherein the growing individual was nested within concentric circles, each of which represented a sphere of influence in the individual’s life. Bronfenbrenner stressed that the reality of the individual’s perception of the environment is the most important factor. This theory is known as the ecological nested environmental influence (Figure 2), and is another theory that informs how one must look at the at-risk student.

Figure 2: Bronfenbrenner’s Nested Environmental Influence Structure
Although Bronfenbrenner utilized the framework of the nested environment to help understand factors that influence the individual person, his writing informs this study through the presentation of the relationship framework itself.

Finally, another researcher who helps us understand the individual resiliency in a given context has studied resiliency and several different protective factors that support resiliency in individuals, particularly students. This is crucial because the students at the continuation schools have typically not developed resiliency skills, which might have better facilitated their success at the traditional comprehensive high schools. Bonnie Benard (2004) promotes the concept of affirming and building positive aspects to buttress individuals against negative events and situations. Benard suggests that by building these positive aspects, the effects of negative occurrences and environmental influences can be minimized. This theory, which begins with basic needs of the individual, as does Maslow’s (1943), incorporates Bronfenbrenner’s (1979) framework of context, but also promotes the idea for potential change in the individual. Benard suggests proactive development of many healthy aspects of individuals is the most effective and efficient approach to develop resiliency.

Summary

This review of the literature indicates that the lack of good health, school preparedness, and general lack of resiliency necessitate different avenues to success for the at-risk student than for students at the comprehensive high schools. The themes that arise from the review of the literature are: (a) students who are enrolled at the continuation high schools are typically racial/ethnic minorities with low parental
achievement in school; (b) students from a wide range of age groups and populations benefit academically when they are physically healthy; (c) physical training is, at minimum, not detracting from the at-risk students’ academic success; (d) very little research has been conducted in the continuation schools regarding data use guiding physical activity and academic achievement; and (e) although many surveys exist for traditional educational settings, no one has inventoried what happens at the 521 California Continuation Schools in regard to after-school physical fitness programs.

The literature suggests that vigorous physical activity of up to 6 hours per week for continuation school student populations would have a positive relationship to academic achievement. Although little information exists that is obtained directly from this population of students, research involving special populations and a wide range of ages both provide ample data to justify research directly involving continuation school students. Understanding the history of this special student population is crucial in determining what will be used to determine successful education. The inequality that stems from economic factors must be addressed to help connect the at-risk students to their learning.

Further, the limited research on continuation school students has not been examined within conceptual frameworks that may provide insights into the numerous contextual factors that may influence student behavior and achievement. The theoretical works of Maslow (1943), Bronfenbrenner (1979), and Benard (2004) can help in this regard by giving researchers, leaders, and policy makers more information from a
conceptual vantage point to understand the complexity of creating a successful program to capture the interest and investment of these at-risk students.

Areas for Future Research

The literature is fairly sparse regarding information about what works well for positive results in continuation schools. What is missing from the literature regarding after-school exercise programs is: (a) what type of after-school physical training programs are offered, (b) data determining if there is an apparent relationship between these programs and the rate of academic success or engagement of participating students compared to the school average, and (c) data determining how continuation schools measure the success of these programs. Although the California Education Code mandates continuation schools for each high school or unified school district, as well as a minimum number of in-school physical education classes, there is no mandate for after-school programs consisting of physical health information sessions or exercise. The aspect that researchers examining this group would want to focus upon is the after-school involvement.

Although exercise was seen as having a positive relationship with academic achievement, most of the studies focused upon in-school exercise programs. Determining whether such programs exist on each campus, as well as investigating the potential correlation between such programs and academic success, seems the logical next step for research. Future studies are needed to distill the effective components of these successful programs that may flourish despite utilizing minimum financial resources. The area to be explored is discovering whether health and sports activities positively influence at-risk
students succeeding academically in the California continuation high schools, and what
data are used to determine success. If there is a positive relationship between these two
items, researchers can further investigate which programs are most effective with this
special group of students. Practitioners could then direct their energies to promoting those
programs, which may yield positive results with more continuation school students, and
may even influence what activities are promoted with little or no money for the
comprehensive school students—which may prevent them from later becoming
continuation school students.
CHAPTER 3: METHODOLOGY

Continuation high school students differ from students who maintain attendance at a traditional high school in a very significant way: continuation high school students have not developed the resiliency to overcome whatever is happening in their lives to continue progressing academically in the traditional comprehensive high school setting (Worrell, 1996). Additionally, the literature points out continuation school students typically lack good physical health, carry excess weight, have low general fitness levels, and can lack basic needs for health maintenance (Centers for Disease Control and Prevention, 2008a; Kubik et al., 2004). Continuation high schools have both a higher percentage of low-socioeconomic status students and have a higher mobility rate than their conventional school counterparts (WestEd, 2007), factors often associated with lower academic success (EdSource, 2008).

Little is known about students in continuation schools, the continuation schools themselves, and how they operate—and even less about afterschool programs at these schools that address students’ physical needs. The goal of high school exercise programs is to educate students about how to care for their bodies (Carlson et al., 2008), keep them productively invested in an activity (Belshaw & Kritsonis, 2007; Mancini & Huebner, 2004), and help them to become healthier. This study helps fill the gap in the research literature about after-school exercise or sports programs offered by continuation high schools and their potential effects on students’ academic and behavioral outcomes. It also helps provide insights into how after-school program staff members and teams use data to inform their decision-making within this context.
Purpose of the Study and Research Questions

The purpose of this study was to determine if and how data are gathered and used by teachers and administrators to measure the effects of after-school exercise programs on the performance of students in three continuation high schools in California, what factors are present in the decision-making aspects of these programs, what is considered in the planning and implementation, and determine what benefits students realized from participating. This study answers four research questions:

1) What is the nature of after-school exercise programs in California continuation high schools?

2) What factors—from the perspective of site leaders, facilitators, and student participants—affect the type of after-school exercise programs offered and level of implementation (e.g., school context, needs of students, resources available)?

3) In what ways do after-school exercise programs address the specific needs of continuation school students according to site administrators, program facilitators, and student participants?

4) How do administrators and teachers use data or evidence to develop or implement their exercise programs?

This study intended to yield information for educational leaders and practitioners regarding the process of data used for students enrolled in continuation schools, the special needs of this student population, and what training staff and administrators might need in order to better understand how to best serve this at-risk student group. Schools of education, as well as policy makers and other stakeholders, can benefit from better
understanding these students and realizing what factors might have been present earlier in their school career to have prevented them from becoming labeled *at-risk* students in the first place.

*General Research Design and Rationale*

This research study used an exploratory and descriptive case study design. Creswell and Plano Clark (2007) state that qualitative studies can shine a light on the nuances of situations “in a natural setting that is inductive and establishes themes” (p. 37), while Yin (2003) adds that case studies are appropriate when asking “how” and “why” (p. 5) questions, but researchers have no control over the behavioral events. The appropriateness of an exploratory and descriptive design is furthered confirmed by Yin’s description of the two requisite criteria: (1) investigating a phenomena in a real life setting, and (2) when the context and the phenomena do not have a clear demarcation line. The reporting of the discovered data can include the voice of the students, the facilitators, and the site-level decision makers, helping the researcher to be mindful and reflective of the complexity of the situation (Creswell & Plano Clark). Vygotsky (1978) adds to our understanding that the words people use to tell their stories can be a window to their awareness of experience. The context of these individual experiences, the descriptions, explanations of experience, and the awareness the individuals have regarding these experiences are accessed via interviews in order for researchers to understand the meaning behind the activities and behaviors (Miles and Huberman, 1994; Seidman, 2006). Additionally, the research design included an analysis of the data using grounded theory.
theory allows the researcher to code significant pieces of data based in a set of themes, then add or collapse themes based on the organic experience of finding new, more significant themes (Glaser & Strauss, 1967). Grbich (2007) explains this is particularly applicable when there is little information known about the phenomena being studied and “when there is a need for new theoretical explanations built on previous knowledge” (p. 70). The after-school physical activities, the participants, the facilitators, and the leadership decisions are all interconnected; therefore, this approach seemed most appropriate.

Data Collection Sites

Study sites were selected based on the following criteria: physical accessibility to the researcher, initial verbal permission for the researcher to conduct research on the site, and a similar demographic representation regarding test scores, racial group representation, and the existence of a voluntary after-school physical activity program. All three participating schools are located in north San Diego County, California; are continuation schools; have been accredited by the Western Association of Schools and Colleges; and have a single administrative leader (principal).

The first site is Seaside Continuation School\(^1\). In the most current measurable year (2008-2009 school year) Seaside has a student population of 212, with 60% Hispanic or Latino; 20% White; 12% African American; 2% each of Pacific Islander, American

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\(^1\) Pseudonyms are used for all schools to protect confidentiality.
Indian, Filipino, and Asian; and 53% male. Seaside has a truancy rate of 54%, 4 expulsions, and 99 suspensions.

The second site of the study is Oak Continuation High School. Oak has a total student population of 115, with 72% Hispanic or Latino, 22% White, 4% American Indian, 1% of both African American and Pacific Islander, and 56% male. Oak has a truancy rate of 122%, 5 expulsions, and 104 suspensions.

The third study site is Other View Continuation High School. Other View has a total student population of 253, with 81% Hispanic or Latino, 9% White, 4% American Indian, 3% African American, 2% Pacific Islander, 0.5% of both Filipino and Asian, and 57% male. Other View has a truancy rate of 101%, 4 expulsions, and 90 suspensions.

Table 1 illustrates the similarities and differences among the study sites.

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2 Demographic data terms are acquired from the California Department of Education.

3 Due to the constant enrollment and dropout patterns, a truancy rate of more than 100% is possible.
Table 1: Demographic Profile of the Study Sites.

<table>
<thead>
<tr>
<th></th>
<th>Seaside School</th>
<th>Oak School</th>
<th>Other View School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Population</td>
<td>212</td>
<td>115</td>
<td>253</td>
</tr>
<tr>
<td>Hispanic</td>
<td>60 %</td>
<td>72 %</td>
<td>81 %</td>
</tr>
<tr>
<td>White</td>
<td>20 %</td>
<td>22 %</td>
<td>9 %</td>
</tr>
<tr>
<td>American Indian</td>
<td>2 %</td>
<td>4 %</td>
<td>4%</td>
</tr>
<tr>
<td>African American</td>
<td>12 %</td>
<td>1 %</td>
<td>3 %</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>2 %</td>
<td>1 %</td>
<td>2 %</td>
</tr>
<tr>
<td>Male</td>
<td>53 %</td>
<td>56 %</td>
<td>57 %</td>
</tr>
<tr>
<td>Female</td>
<td>47 %</td>
<td>44 %</td>
<td>43 %</td>
</tr>
<tr>
<td>Truancy Rate</td>
<td>54 %</td>
<td>122 %</td>
<td>101 %</td>
</tr>
<tr>
<td>Expulsions</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Suspensions</td>
<td>99</td>
<td>104</td>
<td>90</td>
</tr>
</tbody>
</table>

Participants

The site leader (principal) and a program facilitator (either a teacher or other facilitator of the program) were interviewed at each of the three sites after agreeing to participate and signing the Consent to Participate in Research form (Appendix D). The facilitator was a person suggested by the site administrator during the initial site...
administrator interview. A minimum of two key staff persons at each site (six total) were individually interviewed using the activity facilitator interview protocol (Appendix A) to understand both the flow of decision making from site leadership to facilitator, as well as the data system used to inform decisions.

Next, student participants at each site were asked to participate in a focus group at their school site to discuss their after-school experience, using the focus group interview protocol (Appendix B). All students who participated in the after-school physical activities were invited to participate in the focus group interviews. Volunteers were selected based on the highest participation rate if there were more than nine student participant volunteers at a site. If more than six to nine volunteered and provided both signed parental consent (Appendix F) and student assent forms (Appendix E), a group was constructed to best represent the existing school demographics based on race, socioeconomic status, and gender of each individual school. This information was collected by school administration and provided to the researcher with no individually identifiable labels. When not possible, samples of convenience were utilized. An acceptable total number of student participants for the interviews were 18-36. Researchers who have written extensively on both qualitative studies and grounded theory (Glaser & Strauss, 1967; Douglas, 1976) specifically explain a saturation point arises in interview analysis (Glaser & Strauss) at 25 participants (Douglas, 1985), which is under the total (29) involved in this study. A saturation point is reached when data begin to be repeated by participants, with no new data revealed. Additionally, any
documents obtained by the researcher to help illuminate the DDDM aspect of the study were provided by the site administrators.

**Data Collection Instrumentation**

Staff and student interview protocols were developed using an appreciative inquiry framework (Preskill & Catsambas, 2006). The staff interview instrument (Appendix A) examined the nature of the after-school physical activity programs in order to elicit what the three levels of stakeholders value in the implementation, as well as helped to discover how decisions are made regarding what is specifically offered. The instrument is semi-structured with specific questions, but clarifying questions stemming from the initial set of questions and responses did arise.

The interview protocols were purposively designed to align with each other to maximize participant responses about common issues. For example, to examine student connectedness, a question on the administrator interview (Q3: “Do you think the students participating in the exercise program are more connected to the school than students who are not participating? Why do you think this?”) has a parallel structure to a similar question from the student interview protocol (Q6: “Do you think you are more connected to the school than students are not participating? Why do you think this?”). The answers sometimes led to more related questions, which are not presently included in either protocol. Operating from a grounded theory vantage point, the new information and resulting questions proved to be valuable as well. The instrument was designed to provide data, which was then compared vertically up the decision-making chain, as well as across
the different campus settings. This data was used to generate case studies of the after-
school programs and their operations at each school.

Pilot Study

A pilot study was conducted in spring 2009. Two principals and one student were
interviewed utilizing an iteration of the interview protocol. Although illuminating
information was gathered from the transcriptions, repetitive questions were discovered.
Combining some questions and the deletion of one more succinctly, yet completely,
gathered interview data that would further enable answering the four research questions.
The resulting interview protocol is Appendix A. All participants took 30 to 45 minutes to
interview. The information gathered from the adult participants in the pilot study is
illuminating enough to justify integrating it into the findings in the study with the other
data.

Data Collection Procedures

Data were collected at the three sites of study. The data included digital
recordings of interview sessions, as well as document collection. Interviews took place at
the convenience of the participating schools’ site supervisors and students. Interviews
were digitally recorded and were conducted with the after-school exercise program
facilitators, teachers, administrators, and support staff on the campuses to determine their
perceptions of the support, means of measuring benefits, and benefits of the after-school
physical activities program. The interview data were recorded digitally and transcribed in
Microsoft Word. The goal was to interview a representative group of staff and students
involved with the after-school exercise programs to determine the calibration of student
needs when compared with services offered, and how this comparison is measured and used to inform decisions.

Using a semi-structured interview protocol (Appendix B), interviews that ran 30-90 minutes long were conducted on the participating campuses by arranging a mutually agreed upon time and place on campus. The interviews were digitally recorded and the participants were able to opt out of the interviews at any time. In addition, any digital recordings of the requesting participant could have been erased if requested by that participant. Students participating in the after-school physical activity programs were asked to volunteer for a focus group interview session (Appendix B). Volunteers were asked to commit to one 30-to-90-minute-long session to do focus group interview participation in place of one session physical activity. This time was outside the instructional school hours and was completed during one session of the after-school activity programs. There was one exception to this schedule: The principal of Seaside school requested the student interviews take place during lunchtime on a regular school day. All interviews took place at the convenience of the students and staff. Since the researcher has a teaching credential in the state, the site staff left and the interviews were conducted with the students and researcher in the rooms.

Documents and student records based on a list of students who participated in the interviews were gathered by school site staff and provided to the researcher. Additionally, documents and records of staff decisions and meetings were gathered by school site staff and provided to the researcher. Documents included policy and procedure memorandums, minutes from meetings, policy and procedure handbooks, and other information that
helped the researcher understand decisions made regarding the delivery of these after-
school physical activity programs. No individual or confidential student information or
names were obtained at any point of the research by the researcher or on his behalf.

Data Analysis

Interview data were coded using patterns anchored in the theories presented in the
literature review. Specifically, these patterns focused on themes based on Maslow’s
(1948) hierarchy such as health, well-being, feeling part of a group, etc.; on
Bronfenbrenner’s (1979) nested context model, which focuses on the individual in their
context; and on Benard’s (2004) set of skills, which help buttress resiliency. Although
Maslow, Bronfenbrenner, and Benard do not specifically outline coding themes or
instructions, the theories they provide guided the coding procedure. Glaserian grounded
theory, which utilizes open coding and compares incidents to emerging concepts “in
order to enable the development of new theoretical explanations” (Grbich, 2007, p. 72),
was used in order to uncover the nuanced relationships among the many facets of the
after-school physical activity phenomena. Themes anchored in the theoretical framework
were initially used, then developed into new, emergent themes. Glaser (1992) explains
that researchers should code and analyze in order to allow the researcher to finally
present their “complex theory of a complex world” (p. 71). However, a Straussian three-
phase coding system (Grbich) was used to organize the data. Codes were assigned to
important passages in the interview transcriptions, and then new themes were uncovered
as new significant codes emerged. Once the codes from these passages were identified, a
comparison from administrator to facilitator and then to student participant was made to
identify common themes, student needs not yet addressed, and data used to make
decisions.

Miles and Huberman (1994) and Yin (2003) suggest this methodology. In the
interview transcriptions, passages and words were sought that provided information to
assist in arriving at answers to the four research questions. This included individual
words, as well as phrases and key terms that were found in multiple participants’
interview responses. Cross-comparative analysis was used to determine if the needs of
the students were met. Specifically, cross-comparative analysis was utilized to look at all
the responses from one group, and compare them to the responses of the other two groups
in order to determine if the decisions and activities offered were congruent with the needs
of the students (Glaser & Strauss, 1967). This comparison was used when searching for
common themes, and these themes were discussed by superimposing them against the
theoretical framework in order to better understand the dynamics of providing
meaningful after-school physical activity programs (Glaser & Strauss).

Documents provided were analyzed using a similar method. A DDDM theme was
also used to understand the decision-making process of the administration via document
analysis. In particular, understanding how activities are determined to be valuable was
sought. When no documents existed, or none were provided, the interviews were the sole
source of information.

When coding the transcriptions for the interviews, a three-phase system was used.
Borrowed from the Straussian system of grounded theory (Grbich, 2007; Miles &
Huberman, 1994), a three-phase coding system was used to anchor the codes in the
research questions, while still allowing for the organic theme building to occur over two more phases. The first level of coding was an organization the relevant quotes into four general thematic areas anchored on the research questions. These initial codes include *Inventory*, representing any information connected to the nature of the programs, including days of the week the programs were offered, times of day, what programs were offered, as well as who staffed the programs. The second category was *Implementation*, and includes factors guiding affect the types of programs offered, and to what extent. This code assignment definition differs from the first code in that it includes the reasons why the specific activities are offered, as well as why they take the form in which they existed. The third code label *Needs* was assigned to all the quotes that referred to any need the students might have which are targeted, provided, or asked for by the students and staff of these three programs. Finally, the fourth initial code assigned was *Data*. This code refers to any passages in the transcriptions that refer to measurements, data use, evaluations, or information either being used or possessing the potential to be used. Examples of these four initial codes can are presented in a comparative way in Table 2, and include quotes from the interviews illustrating the type of quote assigned to that particular theme.
Table 2: Research Questions and First Phase Codes.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Corresponding First Phase Code &amp; Exemplar Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) What is the nature of after-school exercise programs in California continuation high schools?</td>
<td>Inventory “I’ve been in after-school weight-lifting and football.”</td>
</tr>
<tr>
<td>2) What factors from the perspective of site leaders, facilitators, and student participants affect the type of after-school exercise programs offered and level of implementation (e.g., school context, needs of students, resources available)?</td>
<td>Implementation “So this year I have money. That’s about all the support we get from above.”</td>
</tr>
<tr>
<td>3) In what ways do after-school exercise programs address the specific needs of continuation school students according to site administrators, program facilitators, and student participants?</td>
<td>Needs “And that’s what made me start working out. Not competition, but the camaraderie.”</td>
</tr>
<tr>
<td>4) How do administrators and teachers use data or evidence to develop or implement their exercise programs?</td>
<td>Data “Students must maintain good progress reports, and those are done every week.”</td>
</tr>
</tbody>
</table>

As can be seen in this table, the quotes representing the different codes clearly fall into those four categories. Each category is closely labeled to match the four research questions of the study, and can easily be expanded upon for further analysis.
The second phase of coding established a more detailed level of assigning codes in order to understand the details of each main code. Phase two coding included distilling the initial label of Inventory into the sub-codes of: (a) activity types, and (b) days and times per week. The code of Implementation was expanded into the sub-codes: (a) degree of implementation, (b) implementation factors, and (c) program wishes. The area of Needs was further subdivided into the areas labeled: (a) physical health; (b) mental, emotional, and social health benefits; (c) academic benefits; and (d) additional student needs. Finally, the code of Data was truncated into the labels of: (a) data being used, and (b) data for potential use. The second-phase codes can be found in Table 3.

Table 3: First Phase Codes and Second Phase Codes.

<table>
<thead>
<tr>
<th>First Phase Code</th>
<th>Second Phase Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>Activity Types</td>
</tr>
<tr>
<td></td>
<td>Days and Times Per Week</td>
</tr>
<tr>
<td>Implementation</td>
<td>Degree of Implementation</td>
</tr>
<tr>
<td></td>
<td>Implementation Factors</td>
</tr>
<tr>
<td></td>
<td>Program Wishes</td>
</tr>
<tr>
<td>Needs</td>
<td>Physical Health</td>
</tr>
<tr>
<td></td>
<td>Mental, Emotional, and Social Health</td>
</tr>
<tr>
<td></td>
<td>Benefits</td>
</tr>
<tr>
<td></td>
<td>Academic Benefits</td>
</tr>
<tr>
<td></td>
<td>Additional Student Needs</td>
</tr>
<tr>
<td>Data</td>
<td>Data Being Used</td>
</tr>
<tr>
<td></td>
<td>Data for Potential Use</td>
</tr>
</tbody>
</table>
These second phase codes serve to create a more detailed breakdown of the quotes and data from the documents. These codes delineate the quotes from a general label to a more detailed understanding, as illustrated in Table 4.

Table 4: Second Phase Codes and Corresponding Exemplar Quotes.

<table>
<thead>
<tr>
<th>Second Phase Code</th>
<th>Exemplar Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Types</td>
<td>“We have basketball season, football season, and weight season is a constant.”</td>
</tr>
<tr>
<td>Days and Times Per Week</td>
<td>“We had practice every day for basketball.”</td>
</tr>
<tr>
<td>Degree of Implementation</td>
<td>“We’ve updated the weight room, exercise room, with the best equipment we can get our hands on!”</td>
</tr>
<tr>
<td>Implementation Factors</td>
<td>“Other than that, there’s no financial assistance from the site or the district.”</td>
</tr>
<tr>
<td>Program Wishes</td>
<td>“I want to know what everybody else is doing!”</td>
</tr>
<tr>
<td>Physical Health</td>
<td>“([Last year]) I’d rather go after school and do bad things. and then this year, like, it happens everyday. I’m actually feeling this stuff ([physical conditioning]) and it actually feels better.”</td>
</tr>
</tbody>
</table>
Table 4: Second Phase Codes and Corresponding Exemplar Quotes continued.

<table>
<thead>
<tr>
<th>Category</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental, Emotional, and Social Health Benefits</td>
<td>“And that’s what made me start working out. Not competition, but the camaraderie.”</td>
</tr>
<tr>
<td>Academic Benefits</td>
<td>“You can’t play a sport without having a certain grade point average.”</td>
</tr>
<tr>
<td>Additional Student Needs</td>
<td>“A sport is a team effort. You could use that for jobs.”</td>
</tr>
<tr>
<td>Data Being Used</td>
<td>“Students must maintain good progress reports, and those are done every week.”</td>
</tr>
<tr>
<td>Data for Potential Use</td>
<td>“‘You’ll walk in the morning and it’ll be like ‘I’ve talked to your teacher …and you better start to clean up (your grades)) or they won’t let you play!”</td>
</tr>
</tbody>
</table>

This information was more usable to see both the strengths and gaps in the process of providing services to the students. However, this second level of code assignment wasn’t sufficient to address the major themes present in the interviews.

Finally, the third phase of the coding involved considering themes that manifest throughout the second phase of the coding, then assigning category codes based on both the research questions’ main focus, as well as the data that arose organically. These final codes included nuanced aspects of the second phase code list, as well as new codes not previously considered. Additionally, some of the second phase codes were dropped, as
they did not seem as important to the themes that manifest from the data. First phase codes, such as Inventory, were dropped from the lineage line, as once the data for Inventory had been evaluated, the research question could be answered; additionally, no information from the data regarding the Inventory aspect of the research seemed to inform any of the next iteration of thematic trends. The third-phase themes were organized around the theoretical framework and included aspects of the Maslow (1943), Bronfenbrenner (1979), Benard (2004), and DDDM information. The following table (Table 5) illustrates how the theoretical framework of Maslow, Bronfenbrenner, and Benard was seen in the interview transcriptions.

Table 5: Theoretical Framework Quote Examples.

**Maslow—Hierarchy of Needs:**

1. “([The physical activity program]) keeps me active, and it keeps me fit because if it wasn't for sports I would probably go home and be a couch potato.”

2. “([Last year]) I’d rather go after school and do bad things. And then this year, like, it happens every day. I’m actually feeling this stuff ([physical conditioning]) and it actually feels better.”

**Bronfenbrenner—Nested Environment of Influence:**

1. “And that’s what made me start lifting more weight. Not competition, but the camaraderie.”

2. “So where we're failing once we leave the school, I think the failure is in the community and in the parenting of some of these kids. And if that's the case, then we need to keep them at school with people that care about them and people that won't allow them to deviate from what is right. Because in many cases, these kids don't know what's right until they're told.”
Table 5: Theoretical Framework Quote Examples continued.

**Benard—Resiliency Building:**

1. “I think it [(working out)] makes you a better person, so that you are achieving something. You come here and it makes me feel like I’m not a total failure, like I am achieving something.”

2. “If we can teach these kids to succeed in an avenue which they may have not given themselves the opportunity to succeed or not been able to afford the opportunity to succeed, then we're going to teach a better individual to become better today than they were yesterday, better tomorrow than they are today, and a perpetual growth throughout adulthood that's going to give us a functioning member of society instead of an inmate.”

The examples herein contained serve to anchor the results of the investigation into the theoretical framework, but do not show the specific coding used. The themes used for coding the Maslow (1943) framework are physical health, weight management, and nutrition. The Bronfenbrenner (1979) framework is exemplified by themes such as support systems, family groups, friend groups, recruitment, and group selection. Thematic coding based on Benard’s (2004) framework are social/emotional connections, growth, and teamwork. Finally, the DDDM aspect of the study was investigated in the third phase by using codes such as organizing, data use, feedback, and data source. The four research questions are addressed by synthesizing the thematic coding after analyzing the data. These final code assignments (Table 6) and their synthesis enabled the researcher to draw conclusions, create new theory, and answer the research questions directly in Chapter 5.
Table 6: Third Phase Data Coding and Theoretical Framework.

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<th>Theory and Literature</th>
<th>Second Phase</th>
<th>Third Phase</th>
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<tr>
<td>Framework</td>
<td>Code</td>
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<tr>
<td>Maslow</td>
<td>Physical Health</td>
<td>1. Physical Health/Exercise</td>
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<td>2. Aesthetics</td>
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<td>3. Nutrition</td>
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<td>Bronfenbrenner</td>
<td>Additional</td>
<td>1. Support Systems</td>
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<td>5. Group Selection</td>
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<td>Benard</td>
<td>Mental, Emotional, and Social Health Benefits</td>
<td>1. Social/Emotional Connections</td>
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<td>Academic Benefits</td>
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<td>Data-Driven Decision Making</td>
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<td>4. Data Source</td>
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CHAPTER 4: FINDINGS

As presented in Chapter 1, this study addresses four questions regarding after-school physical activity programs through interviews with students, facilitators, and leaders of three continuation schools in three different districts in southern California, as well as by analyzing documents from these sites. These research questions were:

1) What is the nature of after-school exercise programs in California continuation high schools?

2) What factors— from the perspective of site leaders, facilitators, and student participants— affect the type of after-school exercise programs offered and level of implementation (e.g., school context, needs of students, resources available)?

3) In what ways do after-school exercise programs address the specific needs of continuation school students according to site administrators, program facilitators, and student participants?

4) How do administrators and teachers use data or evidence to develop or implement their exercise programs?

By answering these four questions, this study will help education leaders and practitioners understand how to determine relevant data for particular situations, how to apply that data to decision-making to yield positive results, and how to better understand and serve the growing population of at-risk students. The purpose of this chapter is to analyze the findings of the interviews and documents, and to distill themes, both general and specific, which serve to better understand the specific benefits of these after-school physical-activity programs. Presenting these findings by individual site first, then by
cross-comparison of all three, facilitate a better understanding of the commonalities and differences uncovered.

*Theoretical Framework*

Maslow’s (1943) structure of a hierarchy of needs, whereby successive levels cannot be attained without first attending to the lower levels, doesn’t account for the myriad examples of individuals becoming successful despite missing some Maslowvian “levels” through their lifetime. Bronfenbrenner (1979) suggests the nested environment of the individual helps better explain the influence of the environment in which the individual exists. Although the environment is important to understanding the organism, human beings have self-determination, so understanding the environment alone does not allow for full comprehension of the reasons that some people are resilient at some point while others are not. Benard (2004) explains several factors, habits, and skills that can be taught or provided which greatly increase the chances that an individual will become resilient. Recognizing the confluence of these three theoretical models in the after-school physical activities at the continuation schools is the next step in understanding the complexity of the individual and their response to overcoming challenges. Schools might be able to provide avenues to increase the likelihood that the continuation school students develop the ability to overcome the congregation of aggregate manufacturers, which led them to fall behind in school in the first place. Throughout this investigation into the three different districts and schools, many statements made by participants, facilitators, and site leaders supported the original framework established in Chapter 2.
Overview of School Programs

The schools involved in this study all have similar demographics. The structure of the individual schools allowed for a different release time each day, which meant the after-school physical activities began at different times for each site. These school programs all received funds from the 21st Century/ASSETS grant. This fact was unknown to the researcher at the beginning of the study. Two of the programs are completely facilitated by on-site faculty members, while an off-campus commercial vendor facilitates one. Each school provides the service of hosting an after-school physical activity program in their own idiom, with significant differences in some areas, and important similarities in others.

First School: Other View Continuation High School

Other View School: Nature of the Programs

The first school analyzed was Other View Continuation High School. Offering a variety of activities, Other View is the school with the longest duration of after-school physical activities. The participants in these after-school physical activity programs vary in age from 14 to 19 years old. The duration of participation is equally as broad, with some students having begun participating within 6 months of the interviews, while others have been participating for 2 years. The formal physical activity program has been in existence for 6 years, with an informal program in place for 14 years. The school offers football, basketball, surfing, softball, soccer, weight training, conditioning, running, and yoga workouts. The football, soccer, basketball, and softball programs all are in conjunction with other continuation schools, which form an unofficial league of
participants, and include travel for arranged competitions. The other activities are hosted on campus, with the exception of surfing, which is facilitated at the beach.

The different activities are offered a variety of days throughout the week, but something is offered each day. Most activities are offered two to three times each week. Each activity is held immediately after school, with the exception of prearranged games, which are held when the various schools can arrive at a playing field, generally 1 to 2 hours after school is out for the day. The organized sports (i.e., basketball, football, softball, and soccer) are held three times a week—two practices, and one game. The individual sports (e.g., fitness, weights) are hosted three times a week, with surfing offered every other week during the warm-water months, typically September through October. All activities are voluntary for the participating students, and all students, regardless of gender, are welcome to participate. However, the programs offered are not specifically directed toward female involvement. There is also no formal way of measuring how many females are participating in the activities. A fitness class targeting females was offered and subsequently eliminated due to a low participation rate. None of the students, facilitators, or site administrators explained why the participation rate was low in this gender-specific activity.

*Other View School: Factors Affecting Programs Offered and Degrees of Implementation*

At Other View, the first factor considered in offering an activity the apparent interest level of potential participants as evidenced by staff conversations with students. Many students explained they had a chance to speak with a facilitator to contribute their idea of good activities to offer. When enough students voice interest, the activity is
offered after first considering safety. The second factor is the participation rate. Activities are offered initially to gauge the interest level, but are then cancelled if there is a consistent low participation rate. The administrator of the after-school activities at Other View School explained a female-specific exercise class, which was provided for a few months, was subsequently cancelled due to low participation. The site administrator and program facilitators explained that the goal is to have the most students possible participate; therefore, if the turnout is low, the activity is cancelled to make room for an activity that will hopefully attract more participants.

Another of the factors influencing both what activities are offered and the degree to which they are implemented is the school’s financial status. The two aspects of this factor are personnel expenses and equipment cost. All activities offered are facilitated by staff members at the high school who voluntarily serve as coaches. None of the staff is required to participate in the physical activities offered. Staff members who choose to participate are reimbursed at their hourly rate of pay. The 2009-2010 school year was the first year that participating staff members were paid for their time. For the previous 13 years it was not a paid activity and approximately 50% of the staff led an activity. That staff participation rate increased to approximately 75% in the 2009-2010 school year.

Both the grant coordinator and the principal of Other View explained that the strength of their program was mining the knowledge of the staff on campus. The preexisting interests and expertise found in the staff members who already teach on campus is another factor determining what activities are offered. The coordinator explained:

This staff has surfers, artists, photographers, athletes—people who understand business, people that have traveled, worked in business. It’s a
very diverse group. We have bilingual teachers and people who have traveled. They are all interested in something: teachers interested in computers, teachers interested in world culture, teachers interested in cultural art. I really thought from the beginning this was the perfect place to do this grant. We haven't outsourced anything. We've done everything in house. We've used our talent. When the kids wanted something I wasn't sure we could do, I looked to see what we could do.

The principal also explained the strength of having on-campus staff members lead the activities:

Here's what's increased staff involvement—is I have money and I go the staff and I say I'd like you to do this, and I can pay you to do it as well. In the past, there's nothing from me or whoever in charge, to say ‘I want you to this I want you to do that, and do that.’ There was no incentive for the teachers so whatever after-school program I had going on; that was at their own volition. “Hey I like working out I'm going to have a Tuesday/Thursday workout class. Anybody who wants to work out with me can come after school. I'm a good runner, I'm going to run on Mondays and Wednesday.” So ... that's how it was. So now, with a little bit of money in my pocket, I'm going to teachers and saying, “I know you do this. Let’s get this going and I can even pay you for it.” The strength of any education program is the staff. Number one: The first thing that comes to my mind is the staff.

It was clear throughout the interview that the site principal valued the staff as a significant factor in the student participation rate. Students interviewed also made comments pointing to how much they interpreted the teachers who are willing to stay after school as being caring and invested in the well-being of the students. Through the 21st Century/ ASSETS grant, equipment costs are provided for up to $5,000 for site-based decisions. The grant coordinator of Other View School explained:

The grant parameters are extremely loose. We’re allowed to buy capitalized equipment under $5,000 pretty easily. Over $5,000 is kind of tough. But there is a lot of latitude on what we’re allowed to buy, how we are allowed to spend the money.
Although the weight lifting and conditioning participant groups don’t require fields or courts, they do require equipment; finances are another aspect of implementation factors. The school has invested more than $2,500 over the past 5 years to update the exercise and weight room with mold removal, new equipment, acquired used equipment, paint, and a small clothes-changing room area. Previous to the 21st Century/ASSETS grant, the school didn’t have money to pay teachers, buy equipment, or provide for transportation.

Another factor influencing the activities offered is the physical environment of the school site, or the access the school has to other facilities or environments, which would serve as a space to offer the activities. The surf group, football, soccer, softball, and basketball teams all require transportation and fields or courts. This access is provided predominately by staff members using their own vehicles to provide transportation. This situation can be seen as a response to the institutional structure of leadership and policies, which can impede service to these students. During the interviews, multiple respondents commented on the site administrator’s willingness to provide transportation, but the district management’s unwillingness, or inability, to provide it. One respondent’s anecdote summarized the mood of the site facilitators:

*Say we just want a bus. We can’t get a bus on short notice in this school district. It takes 3 to 4 weeks of paperwork that is required, for this school to get transportation. Whereas … I will give you an example, the Chula Vista School, we had, I think it was for basketball season. I called the guy; it was for soccer. We were supposed to go there for soccer and the emails were going on during spring break. I go, “I’m sorry Chris, I cannot get a bus set up, and it’s just difficult on this short a notice.” He goes, “Let me take a look, let me check into some things. I’ll see if we can get up there.” An hour later he emails me back, “All right, I’ve got a bus. We’re good, we’ll see you guys on” whatever the day was. It took him an hour. If there was a situation where we didn’t have drivers and we just needed to get a bus and … “All right—let’s just spend the money out of the grant”; it*
would never happen. It would be impossible! So, I would like that to be different; that's a district-wide thing.

The process of acquiring transportation for the continuation school activities takes weeks of logistical planning, in contrast to a few hours in another district. In the minds of the site facilitators this procedural speed-bump or impediment seems to be common. However, the site leadership is seen as supportive, even assisting by driving students to activities off campus.

Finally, the legal consequences of having students under the age of 18 participate were discussed during the interviews. The site principal commented that the school district has specific attorneys who are always available for conversations regarding liability, participation rules, etc. The principal was clear that this was considered a positive support structure in place. The principal specifically commented that there was a great comfort in knowing the attorneys could be reached at any time for the answers to legal questions.

*Other View School: Program Wishes*

All respondents had suggestions for how to improve the programs offered. Most of these responses circled around further developments of programs already offered. More games with other schools, more equipment for football, more exercise equipment in the weight room, and more trips to areas off campus were common answers. The leadership and staff facilitator responses were very similar to each other, as their main concern was getting more students involved. Whether that was via offering girl-only activities, traveling for new adventures (i.e., rock climbing), or providing better equipment, all staff mentioned getting more students involved. Several staff members
suggested more activities to lead to a general healthier lifestyle, such as a nutrition aspect to the activities; one suggested there is a cultural aspect to overcome when teaching health and fitness, and that this factor would need to be addressed to fully engage the students in making better food and lifestyle choices. The student participants predominately discussed additional equipment they would like, as well as improvements and changes to already existing activities they would like to have evolve. For football, students wanted pads in order to turn the sport from flag football into the tackle version of the game. More equipment specific to sports—such as football goal posts, bleachers for the fans, and helmets—were common responses from the students.

*Other View School: Addressing Continuation School Student Physical Health*

Some facilitators spoke about promoting lifestyle changes toward better health decisions, while one commented about the need to further this aspect. Several facilitators made comments such as “there’s discussions [sic] about what you should be eating and how you should be hydrating. Some students will get specific kinds of coaching on that because they want to hear more on that.” It is clear by the responses made that, although there is a specific purpose for being at a practice (such as football), the health decisions made have ramifications far beyond the football field. This is reflected by one coach explaining, “And I always tell them, hey, you’re lifting weights twice a week; you’re not in shape because of that! You’re just getting bigger muscles and we need to talk about you getting into better shape!” This idea of pushing the knowledge even beyond the immediate scope of the activity was a common theme presented by all the staff members.
Student participants indicated that they had noticed how much better they feel when they exercise regularly. Comments like, “you know you are actually doing something good for your body, instead of just laying around” illustrate the students’ understanding the relationship between feeling good and the benefits of the exercising. Students also commented on the difference between their experience in classes and in the after-school exercise programs. One student directly addressed this when he commented that the students in the daily classes are:

…just there. Like the P.E. [physical education] classes, like fourth or fifth period weights. They’re just doing … just people in here pretending to do. Yeah, but after-school people, if they come here after school they actually want, they actually want [sic] to try and get healthier.

Most of the students commented on how much more focused the after-school groups were in each activity, specifically commenting that the volunteer aspect of the program was important. Students reported that if they had family obligations or needed to work, they could get in trouble for being absent from school. However, if they missed a day from the after-school activities, there was no punishment. The positive-only attendance policy allows them to participate when they can, with no fear of showing up after an absence to find punishment waiting for them.

*Other View School: Addressing Mental, Emotional, and Social Health*

Another theme of responses was involving the mental, emotional, or social health of the students. Many students replied that connecting with other students, as well as adults, made them exercise harder, show up more often, and let go of some of the stress they may have felt during a day at school. Having the exercise activities on campus seemed to be of importance. Student participants were very clear that the physical activity
programs offered at the school site were different and more attractive to them when compared with off-campus alternatives. One student responded, “Well honestly, I know I wouldn’t do this outside of school, like workout. So, I like doing this at school because I get to hang out with my friends.” Similar responses were heard from other students interviewed. Students also indicated that meeting new people on campus was easier in the exercise programs when compared to academic classes or lunchtime. Connecting with other students was a common thread of response.

Another response from students took the form of self-reflection regarding their academic path. Several students claimed access to the exercise programs made them feel like they were considered regular students, as opposed to what they self-labeled as “total failures.” The physical activity programs seem to have anchored the members of the interview focus group onto a positive idea of themselves, which had previously been in question: their self-worth. Comments like the above came from both male and female respondents. The comments by the students regarding the teachers and their efforts to provide healthy activities for the students after school were filled with high energy. The focus from many of the students was on how much more invested they were in school because the teachers provided other activities after school; for example, “At a regular high school I wouldn’t have stayed after school for anything—at all!” The student goes on to explain, “I would do nothing at home and this place just makes me want to come and hang out with my friends, and do weights and all that. It’s pretty fun.” Another student added, “It doesn’t mean that I like school because of the academics, I say I like school because of the sports.” Several students echoed this theme—they will participate
in the academics when they perceive it to be a gatekeeper to the fun physical-health activity, which they can enjoy with their chosen peers.

The social-emotional connections students experienced during these after-school physical activity programs were discussed by all respondents, both adult and student. The adults were very clear about what they have seen regarding the students being more connected to each other, adults, and the school as a whole. Comments such as “it is connecting kids to the school. The kids who participate in the sports programs take pride in uniforms, and they have our school name on it” and “there’s a pride that the kids exhibit” were common. Teachers reported seeing connections made organically among the students, but also as a part of the program’s structure. One site facilitator reported seeing program aspects where students needed to help others, “including the weight lifting, which we call an individual event, but in truth forces people to work together, watch out for each other.” That facilitator also explained, “I think that’s one of the most positive aspects of the whole program, is that, it really does, it forces the kids to work together with other people to be successful, and that’s something that I don’t think happens for a lot of the kids who are not participating.” Other comments from adults included seeing happy students working together and students complaining about how tough the exercises were, but then laughing together about the difficulty when they began to exercise. The responses from adults regarding the social-emotional aspect of participation were all positive. There were no outlier responses discussing any negative aspects.
The site administrator also addressed the secondary social benefits of the exercise programs. Although many continuation schools do not have sports teams, this school did. They would play touch football against other continuation high schools. The principal explained the release time for school was before 1 p.m.; approximately 150 students would stay on campus until 3:30 p.m. to watch the game. Even though only 24 students were on the team, all these other students would stay on campus until the game started. This choice was explained as benefiting the students due to the social connection students made, as well as the academic work completed while students were waiting for the game to begin. Of their own volition, other students made signs through the week to support the football team. No one asked them to produce supportive decorations for the team; they asked the administration if they could do it. The principal explained that the benefits go beyond the specific students who are participating when he responded with “getting more activities, getting more kids to physically participate in something: that’s a great thing, but the benefits go beyond that.” One adult facilitator introduced a different positive aspect when he explained students who have already graduated come back and ask permission to work out with the group after school. The connection they made as students to the adults or to other students has stayed with them years after graduation.

Students were not as reflectively insightful about the significance of their connections with school and that relationship to their participation in the after-school physical activities, but their comments definitely show a pattern of connection in harmony with what the adults reflected upon. Most students felt like the physical activities and the locale provided a place they could step away from all their worries of
the day. For some it was a place to come to exercise for the sake of feeling energized; for others the opposite was the target—they worked out and exercised in order to feel calmer. Although some students commented that they weren’t the best academic students, other students in the after-school activities would help them reflect on the assignment for the day, explain the lecture from a class while they worked out, or reconnect them to the school after a rough day or work.

*Other View School: Academic Benefits*

Student participants commented that one of the benefits of their participation was the academic achievement they realized during the period of time in which they were involved. All students commented on the extra attention they received via credit acquisition checkups, although none of them agreed on how often these progress reports were utilized. General comments like, “They just watch us extra closely” and “I think they watch us a little bit more” were common responses. The academic progress is measured by credits earned in each class. One student explained that the staff monitors their progress by “checking up on and seeing how we’re doing in our classes. Seeing how many credits we need to graduate and all that.” Again, never specifically mentioning a collectively understood pattern of monitoring was common in the responses. However, when asked about their academic credit acquisition, all the student respondents affirmed that there was a link between exercising and doing better in school. One respondent who summarized the others in one response explained, “After school I love working out, and the next day I’ll go to school and I’ll be like ‘Oh, I feel good.’ And then I’ll just focus on all my work. I’ll focus hard. I’m studying for football. I am going into football this next
season, so I am definitely going to try harder to get my grades up.” Although respondents differed in their particular activity of interest, this sentiment was the same for all students.

Similar to the student participants, the program facilitators were affirmative about participants benefiting academically during their time participating in the after-school physical activity programs. One respondent commented that the academic connection among students at this school site was rare, but that the football players “would look out for each other socially, but a little bit academically, and that is kind of, in this setting, very uncommon to see— to see a kid be intentional about helping another student in class because of a sport.” Similar responses were heard from other adults involved in the program, most citing anecdotal examples, such as “I think it most definitely improves their study skills, because you have to be doing good in school to be on the team.” This quote reflects two observable commonalities among adult respondents at this school: First, there is a firm belief that there are clear academic benefits to participation, and second, there are no empirical data units to measure regarding the validity of these strong beliefs.

Site administrators also commented on the academic benefits of the participants. The principal provided anecdotal evidence and responses such as, “A student who is absent or tardy cannot participate in the football program, so any kid who’s on the team is doing well in school, and a lot of those kids weren’t doing well before the program.” Another administrator referred to a progress report that was circulated among the participants’ teachers in order to document their current academic status. In questioning the principal and students about this progress report, it seems the progress reports are
used intermittently, or the students and the program facilitators don’t know how often the progress reports are circulated. There were no common responses given that could have been used to triangulate or validate how these progress reports are used. Other anecdotes from the principal included attendance improvement from the participants in the football program; no anecdotes were provided regarding progress reports for participants in other after-school activities.

*Other View School: Addressing Additional Student Needs*

Student participants explained several benefits they perceive as receiving due to participating in the after-school physical activity programs. Several students explained that the activities are good conditioning to prepare them for their eventual entry into the military. Many of the student participants also commented that they could ask their counselor (graduation advisor) to apply the time spent in the after-school activities toward earning Physical Education or Elective credits, therefore accelerating their progress toward graduation. A few students explained the benefits of having access to exercise equipment, as they could not afford to participate in activities outside of school due to family economic hardships. Finally, students explained that they appreciated having a space to be with their friends after a hard day at school. Specifically, they explained that ending their day in a space where they feel comfortable helped them let go of whatever had frustrated them with the academic day, and allowed them to leave school with a positive association toward the campus.

One benefit commented upon by all respondents, both adults and students, was the behavioral changes. Integrating character development lessons such as hard work,
commitment, responsibility, and leadership development into the workouts has been a focus for many of the facilitators. Specific to the conditioning and weights workouts, but present in all the activities, these character development lessons were perceived as having positive effects in other areas of both the school day and off-campus. Students commented that problems with friends, family, and other students seemed less stressful when they had worked out, as well as when they are equipped with the lessons presented through the workouts.

Program facilitators and the site administrator referred to the attendance of the student participants as better than the school population average. A relationship was established between a prerequisite attendance rate and the students’ participation in the after-school physical activities. Although no empirical data were provided, evidence was presented to the researcher by all adults interviewed regarding improvements in attendance due to the prerequisite in the form of anecdotes of individual students. No change in attendance rates for the group of participants has been established at this site.

Other View School: Data Being Used

The school leadership has established a minimum rate of attendance as a prerequisite for students to participate in the after-school physical activity programs. This was explained in the interviews by everyone, and has been obviously communicated to all staff, facilitators, leaders, and students interviewed. It is clear from analysis of the interviews and documents that some methods of data were used in some capacity. However, this was clearly not communicated along the lines of decision-making to all the stakeholders. In addition, there does not appear to be a structured and measured way of
determining any changes to behavior, credit acquisition, or attendance rates of the participants. All respondents brought up different ways they perceived the school management to be using data to inform decisions. Comments from the students, such as “You’ll walk in, in the morning, and it’ll be like ‘I’ve talked to your teacher’ and this or that and, like, ‘you better start to clean up or they won’t let you play,’” and explaining that the campus security guard “checks tardies and stuff” were common. What was discovered as used regularly were the indirect, anecdotal, and informal checkups throughout the day, as well as periodical progress reports. Staff, site leadership, and students mentioned the informal checkups, which ranged from daily to monthly. No one mentioned any comparison between grading periods for changes in credit acquisition after beginning to participate in any physical activities.

*Other View School: Data for Potential Use*

There are several sources of data that could be utilized at this school, as identified by the interview participants. The first source of data discussed was individual cumulative files of attendance and academic credit acquisition. It is clear from the interviews that this data exists; it does not appear the school has used this existing data to measure any pre- or post-participation changes. With the new state student numbering system established, it is likely most students have easy-to-acquire records. The school could measure the attendance rate and academic credit acquisition prior to their involvement in the physical activity programs to assess any relationship between participation and improved attendance and credits earned.
The second potential data source discussed was the progress reports. All respondents obviously had working knowledge that progress reports were on campus as tools for communication among students, staff, facilitators, and the administrator. However, it was clear there was no common understanding of when these progress reports were collected, what was done with them once collected, or if they were compared to previous progress reports. A clarification and clearly planned and communicated system of analysis of this existing tool could provide very clear measurements and summaries of weekly behavior and academic work of the participants.

Finally, data could be garnered from students at Other View School who could be interviewed regarding their perception of school for a quick view into their experience. Although many conversations seem to be held in an impromptu manner, these conversations, as reflected via the interviews for this study, didn’t ever seem to have an open-ended response from the students regarding their perceived perception of their own investment in the school. These informal conversations could be the richest source of data with which to understand what motivates these students to participate in after-school physical activity programs, work on their academic studies, or even show up to school.

Second School: Seaside Continuation High School

Seaside School: Nature of the Programs

Similar to the previous school, Seaside School offers after-school physical activity programs, but has been offering them for only 2 years. The school staff offers four sports throughout the year: football, basketball, softball and soccer. The participants are 14-17 years old, and activities are offered a minimum of two but usually three times
per week, depending on the availability of the staff. Two adult interviewees explained that students get together at lunch every day when they feel more practice is needed in a sport, particularly if a competition is scheduled with another school. Several student respondents commented that the only reason they practiced every day was due to the easy access they had to basketball courts, and that only basketball was played daily at lunch during the season; none of the other sport fields were located on campus and the students had to travel off-campus to access these facilities. Other students added that during softball season the only time they played was during games; the school had to pay for busing to take students to a field to play. All students are invited to participate in all sports. Both students and adults described the action of adults as very inviting toward all students to come and participate. The students explained the requirements for participating: certain grades earned, attendance percentage in school, and behavioral issues.

**Seaside School: Factors Affecting Programs Offered and Degrees of Implementation**

The funding for the after-school exercise program is a significant factor affecting the implementation of the after-school physical activity programs. The site leader explained there was one weight-lifting program offered previous to the four-sport regimen implemented in the past 2 years, but nothing else. The weight program had been offered in the past, but was no longer offered because the teacher leading that activity had retired; the weight equipment now sat unused. The funding was not specifically referenced as the structure upon which all activities were based, but it was apparent from
the interviews that this is the case for football, soccer, basketball, and softball—the four sports currently offered.

The budgeting is administered by the facilitator on campus, who reports to the principal and keeps the staff members briefed on decisions regarding the status of finances, programs decisions, and discussions held in meetings with other facilitators. The site leader and athletics coach also reported clear communication among the different adults on campus. The funding for the 21st Century/ASSETS grant comes through the U.S. Department of Education and is delivered to the California State Department of Education. The funds are then disseminated to the different county offices of education, where they are finally distributed to the individual school districts. The facilitator explained that each county office of education, each district, and each site has a 21st Century/ASSETS manager. The managers meet regularly to discuss achievements and challenges.

Both the adult and student interviewees explained that the first consideration of the leaders and facilitators is the students. A survey is administered periodically to determine which activities the students would like to see offered. Once this information is gathered, the specific sports are organized and initiated by the facilitator of the program. Conversations are held each season to ensure students still want the originally requested sport.

Another aspect of implementation is getting student participants, and this school has a significantly effective invitation method—direct! Participation in the sports and activities is offered to all students, both verbally and through posters and flyers on the
campus. Adults and students commented on one individual who somehow seems to approach every student on campus, even if he doesn’t know the student. Students explained this facilitator would only have seen a student for a moment, but:

If he sees you playing basketball he will come right at you and put you on the team! And that’s how it started; I’m on my first day here. I took a step on the basketball court [clap] “Hey, you’re good at basketball aren’t you?” Whoa! I didn’t even touch the ball!

The students in the focus group interview nodded in agreement with this anecdote. It was apparent they had all been warmly and definitively approached and invited to participate by this one individual. None of the students reported accidentally wandering into participation; all of them were recruited, and most of them referred to the same individual as the one who first contacted them.

The final consideration for implementing the activities at Sea View is the facilities available at, or to, the school. The school does not have a basketball court, baseball field, soccer field, or any open fields on the campus. All sports and activities requiring large areas necessitate travel to other locales. Interestingly, there is a weight-training space with equipment on the campus not utilized by staff or students. Interviewees, both adult and student, explained there was a teacher who used to work at Seaside who hosted weight training time after school, but he retired and the equipment sits unused. The logistics of getting students to and from these other locations then becomes a financial budgeting issue for buses and a time budgeting issue for travel.

*Seaside School: Program Wishes*

Students at the school explained their hopes for enhancement of the current offerings. Most students mentioned better equipment for team sports, such as football
pads and volleyballs. Several students mentioned a change in the time the activities are offered. It was explained that students regularly had to wait until after an extended seventh period before the sports or physical activity programs were offered. This delay in the initiation of activities was perceived as a negative situation. Finally, several students mentioned their desire for additional activities such as weight lifting, volleyball, and other sports.

The facilitators had a similar response to that of the students, but with a consideration of the monitoring of the program. The first thing mentioned by the facilitator was the interest in growing their program to be a league for all of the continuation schools with students traveling to compete against each other. Also mentioned was the desire to have the records of the impact on academics and social health available to everyone.

Finally, the school site leader added to the wish list by explaining the attendance policy as directed by the grant parameters. The school is financially reimbursed for the first hour that a student is present but subsequent hours are not paid for according to this site leader. This principal feels that any hours spent on campus in after-school physical activities should count toward the positive attendance. The next issue that this site principal would like to see resolved is transportation. A van, a small bus, or some other vehicle that could provide regular transportation to fields or other schools is important to continue offering some of the sports opportunities. This site principal’s last suggestion toward improving the program was anchored on measuring the positive benefits of
participation. Suggestions were connecting attendance records of long-term students and comparing them to short-term students in regards to participation.

**Seaside School: Addressing Continuation School Student Physical Health**

The after-school exercise programs at Seaside are predominately team sports. Although there is a lot of physical activity involved, not many of the interview responses contained information regarding physical health. None of the adults interviewed gave any responses that indicated the physical health of the students was a primary concern. Students commented that they felt better at the end of the day if they exercised. Comments such as “it keeps me active and it keeps me fit, because if it wasn’t for sports I would probably go home and be a couch potato” illustrated that these students know participating in exercise is good for them.

**Seaside School: Addressing Mental, Emotional, and Social Health**

Student participants explained the positive benefits of being a part of a team, even when there are problems on that team. Several students explained a very specific situation when the team had some internal disagreements. Students who were interviewed commented on the need for social interaction that was positive, brought people together, and made them feel like they were committed to the well-being of the group. Specifically, one student explained:

And plus, if you’re a captain of a team, you have to set an example for everybody else, too. Like on the basketball team, there was a time I was captain of the basketball team. And I believe it was in the tournament for the championship. [31:31] Me, and one of my players named Dan, [pseudonym] we we’re arguing. And then when we started arguing; the whole team just kind of crumbled. And we all just started playing really bad, and we had to get out of that little problem we had. We had to have a big long talk. We all were like, “we need to talk.” It was pretty much a
team effort, you know. We just all agreed on, at that time that we need to talk this out real quick before we mess up the whole game. And it would be like we did all this for nothing. I mean we can’t win this way.

Another student added the statement “Once communication is broken in [sic] a team, there won’t be communication in [sic] the players. And without communication it’s not really a team.” The students were very clear that they witnessed the need for communication, even during a stressful time. The social implications of understanding this concept will hopefully serve them well throughout their lives.

The program facilitators reported the activities benefit the kids in mental, emotional, and social ways as well. Comments reflecting evidence of a more authentic engagement of relationships, both student-student and student-adult, were present through much of the interview. Phrases like “I think you’ll see them more engaged” and “I just see a huge bonding going on” were peppered throughout. Large explanations such as,

The kids, when they get to know you outside of the school setting and on the sports field, it seems like they open up to you more and they become closer to you as a teacher and as a coach. I think it bonds the staff, too. Everybody’s involved and rooting on the team. It’s really positive, really very positive.

These comments showed belief by the staff members of more investment by participating students compared to those who didn’t. This participation spilled over into student body members who weren’t directly participating. The facilitator from Seaside explained, “And not only do we have the athletes that are playing in the games, I also bring fans to the games. We bring anywhere from 10 to 20 fans just to come watch. They just want to come watch and they’re rooting everyone on, making signs. It’s a huge bonding
experience.” The facilitator went on to explain the home situation of some of these students, and how he believed much of what was missing at home in some situations was being offered through participation in these school-provided activities. This interviewee went so far as to explain how he saw the instability at home being countered by the emotional and social stability that had been provided by these after-school activities. “The students,” he explained, “even like coming to school, whereas previously they didn’t.”

The school site administrators also commented on these needs being met via participation. One administrator explained how students can feel lost on a large campus, and how this small school setting can enable a higher percentage of participation. He explained:

You’ve got a kid that enjoys playing soccer, but he has to compete and try out at a school that has 4,000 students and one-fourth of them play soccer. Half of those play well. Then half of those should be in a league, playing with adults. So, how does a kid get any playing time when he has to compete at such a high level? Well, here, if you can play, keep your attendance up, keep your grades up, you’re in.

This feeling of social health facilitated through participation is also seen as beneficial to the students and their sense of community. The local community includes several rival gangs, as explained by this comment:

See, the sport brings them together. Because, normally, they wouldn’t associate with each other, because, you know, I’m from here— I’m from there ... But we’re a small school. And the sports ... And the reason that I keep telling you that the sports is the mechanism to reduce disciplinary problems—because we bring the kids together from different neighborhoods, who, historically, at the comprehensive schools, they did not get along, and they did not associate with each other. But you need a team of so many players, so they know they have to, you know, get along to participate in a sport.
The same administrator commented:

> We get kids from all over [town]—all from different neighborhoods, and that’s important out here. You know? So, when they come together to play a sport, they kind of put that stuff aside and then participate. Now, after the sport is over, I don’t know how they act.

The administrator seemed resolved that participation in sports helps to keep the identity of the individual less focused on the gang and more focused on the team. Although there is no empirical data from this site regarding how students interact with each other off-campus and away from the team and sports, two administrators referred to the positive aspects of coming together. One explained:

> A lot of people have different ideas about coming here. Some of them are very apprehensive. But they can come here and find something in common with other students. Well, I may not know you, I may be a different race, I may be a different ethnicity, come from a different culture, but you and I play ball. That can be the thing that brings us together.

The explanation of benefits didn’t stop there, as both administrators were very clear that this was a crucial first step for many of these students. The same administrator went on to assert the important part wasn’t solely the coming together, but in learning how to be together. The administrator specifically explained,

> I think it really helps them bond with other kids. It helps them learn how to deal with other people. It helps them deal with problems they may have in life, as far as interacting with people and communicating effectively with others.

These two beginning steps, coming together and learning how to be together, were an echo of the facilitator’s comments as earlier reported.
Seaside School: Academic Benefits

Student participants explained the school’s expectations and prerequisites for participation in the after-school physical activity programs. One of these requirements is a minimum progression of attaining academic credit. A student who falls beneath this minimum expectation is not allowed to fully participate in the after-school programs. However, it was explained that students who were not allowed to fully participate were encouraged to catch up with their work and participate as soon as that minimum requirement was met. Students commented that other students on the team would encourage them to get caught up and would offer positive comments to motivate their teammates to finish their work and rejoin the group after school. No students referred to measurement tools or data-tracking systems during the interviews.

Program facilitators reiterated the student comments regarding the minimum qualifications in academic progression in order to participate in the after-school physical activity programs. Also mentioned by the program facilitators was the support system in place for students who fell behind. The way they measured these minimum requirements was the grade point average and attendance rate of the students. No facilitators referred to other feedback forms or monitoring tools.

The site administrator explained the criteria for students who wish to participate in the after-school physical activities. These criteria are used to increase credit acquisition, improve behavior, and increase attendance rates of all the participants. It was explained that this criteria was the basis for deciding who got to participate. However, no progress reports or weekly checkup sheets were mentioned during the interview.
Furthermore, no documents were provided to support daily use in determining participation. In agreement with the facilitator and the student participants’ comments, the site administrator explained that attendance rates and grades earned in classes were the two data pieces used to determine eligibility for participation.

**Seaside School: Addressing Additional Student Needs**

Student participants explained that simply having a place to stay was a benefit for them. Two students expanded on this by describing a day of going back home without staying after school. They said that type of day consisted of a transient experience of moving from one friend’s house to another, not arriving home until 9 or 10 at night. With the physical activities offered at school, they could stay around the school adults until 6 or 7 p.m. some days, and they preferred this to their neighborhoods. At this point in the interview, the students were asked what they would want decision makers to know. One responded that the school should

Keep the athletic department open for us. It really does help us. It really helps. It really keeps us motivated, keeps us active, instead of having us just go out to the streets and do whatever we want. We actually want to stay after school and to play. We really want to stay after school!

The students were not shy about explaining their understanding of how bad some of their home situations were. Additionally, they seemed to have phenomenally insightful understanding of the benefits they were realizing in their lives from participating in these activities at school.

The program facilitator explained some additional benefits provided by participating in these programs. One benefit stems from the social aspect of participating. The facilitators mentioned that the culture developed in these sports programs provides
something not accessed through the normal school day activities. Echoing what the
students explained about communicating when a problem arises, he explained,

Well, all of these things involve working together. So that you have that
piece where teamwork—getting along well with other people! It all adds
up to when they go into the job market or the work force, how you can get
along with other people. Working together. Being supportive to your
teammates. I think that’s a big piece right there that they might not
necessarily get in the classroom.

Job skills, particularly working together as a team, seem to be an additional benefit, as
evidenced by these comments.

The site administrator added one aspect none of the other interview participants
commented on. The principal’s additional thoughts were in regards to a focus of the
workout. He believed that having a reason to be physically active and a purpose to the
practice adds intensity and focus for the students. He was very clear he felt this was a
positive aspect.

Seaside School: Data Being Used

The data used at Seaside School included report cards, progress reports,
attendance rate charts, and, initially, surveys regarding student activity interests. Report
cards and attendance rates were the only two data pieces used to determine eligibility for
participation. It was very clear after interviewing all stakeholders during the research
process that very little data were used to develop or implement the exercise program.
Everyone interviewed agreed that there were a few pieces of data that were used to
determine eligibility and activities offered, but no consistent daily use outside of those
two factors was present.
Seaside School: Data for Potential Use

The data for potential use at Seaside School is found in already existing stores of information, or in simple and inexpensive additions. Existing data for individual students regarding attendance rates before participation in the after-school physical activity programs could be compared to current attendance rates during participation to determine any positive changes. Additionally, grades in credits earned in the past could be compared to grades and credits earned during participation in the after-school physical activity program. Finally, surveys or interviews regarding students’ perception of their engagement on campus could be implemented before the beginning of the after-school programs each year and then again during the school year to determine any positive change in social or emotional engagement.

Third School: Oak Continuation High School

Oak School: Nature of the Programs

When asked questions regarding the nature of the after-school exercise programs at Oak School, respondents were much more varied in their answers than participants in the first two study sites. Most responses given were what was expected along the lines of sports offered such as football, basketball, soccer, and baseball. Answers not previously heard at other sites included providing remote-control cars, martial arts, rock climbing, boxing, and dodgeball. Student respondents indicated that a recreation room was open to them 2 days a week, and an outside vendor came onto campus at the end of the day 3 days a week, making after-school activities available every day. Students, staff, and leaders all indicated the after-school physical activity program had been in existence for 8
or 9 months at this site. Students also indicated there was a wide variety in how many
days a week they chose to participate. Some students explained they participated 3 days a
week but would like to participate more. Other students shared their attendance rate in the
physical activities was once or twice every other week.

The time each day provided for these activities varied with the activity. Some
activities classified as “physical” such as remote-control cars were offered one hour per
day. Other activities such as football, softball, basketball, and soccer are offered in a
league format and include travel time to other continuation schools; including travel time,
these activities may take up to 4 hours after school. In general, students stay on campus
and do not travel. On these days the programs offered may run up to an hour and a half,
and the programs are offered immediately after school. As a side note, future
investigations should clarify specifically what is meant by the term “physical activity,” as
the researcher had to consistently guide the conversation towards movement activities,
specifically activities where the muscles are working, heart rate is increasing, and the
cardiovascular system is engaged in a manner that is above and beyond the rate one
would find standing, sitting, or walking slowly.

*Oak School: Factors Affecting Programs Offered and Degrees of Implementation*

Financial considerations were the major burden to implementing an after-school
physical activity program. The site leader indicated that the teaching staff at Oak School
was very reluctant to lead after-school physical activity programs. With the exception of
one staff member who coaches baseball, all activities are led by an outside vendor who is
contracted to provide services, which include physical activity programs. This contract
includes providing coaches for sports teams, equipment for the activities, and food for snacks. Upon further investigation it was discovered that the 21st Century/ASSETS grant mandates snacks for the student participants. Interview participants could not provide information regarding any nutritional guidelines dictating what types of food are provided to students. Due to the low volunteer rate of the teachers at the school site, the principal sought an outside vendor to provide these services. The principal did indicate that ideally staff members would be providing the leadership of these activities and programs.

A second factor affecting implementation of these programs is the financial burden of providing services. It is clear that at Oak School the 21st Century/ASSETS grant made it possible for the principal to hire the outside vendor to provide the opportunities for after-school physical activity programs. However, there are certain parameters that need to exist in order to receive the funding. The site leader explained the rush to establish the prerequisite anchors in order to utilize the money from the grant. She explained: “The money came in so fast, we were so rushed by the feds [federal government] to get the programs running that the, like, the idea that we’re supposed to have a safety plan is really an afterthought.” Previous to this grant only one teacher was offering any after-school physical activity. It was not made clear if this was the same teacher who is currently participating.

Finally, the facilities available at Oak School are the last limiting factor regarding what specific activities are offered. There is no gym or exercise room, so there is no space for exercise during inclement weather. There is a recreation room with table tennis
and board games, but it is unclear how often students play table tennis. There is a field available for soccer, softball, or other activities. This field makes it possible for team sports or outdoor exercise to occur, but no individual indoor exercise options are offered.

_Oak School: Program Wishes_

It is clear that from the site leadership point of view more teacher participation is the primary goal of developing the program further. Appreciation was specifically mentioned for the current outside vendor, but it was made very clear that the site principal had a vision of the after-school physical activity programs intertwining with the energy of the regular school day and the teaching staff. The site leader also explained her wish to gain the personnel and facilities to provide more than one activity at a time; she specifically mentioned wanting a weight room and a studio for yoga or dance, as well as the flexibility of offering these different programs at different times to be able to work within a wide array of student time constraints.

The site facilitator explained several aspects he would like to see developed regarding these after-school programs. First, he hopes the drug-deterrent and cessation program will eventually incorporate with after-school physical activity programs. Next, the facilitator believes providing better uniforms and shoes would benefit the students by making them feel they are worth high-quality equipment. The facilitator would like to see newer and better equipment used in all the after-school physical activity programs.

Some students explained that different kinds of activities offered each day is what they would like to see changed with the program. Students indicated that activities were offered one at a time each day. If any students did not want to participate in
whatever specific activity was offered that day, they would leave campus because no other options exist. Students also stated very clearly their desire for longer daily offerings, more frequency throughout the week, and more offered on the weekends. Citing boredom and a lack of activities for them in the community and at home during the weekends, students explained going fishing, playing paintball, and any other physical activity in the form of a field trip on the weekend would be a positive development.

*Oak School: Addressing Continuation School Student Physical Health*

Some student participants explained how staying and participating in the after-school programs helps keep them healthy. Comments specifically referencing sitting for 2 hours while waiting for the bus, sitting at home watching TV, or just “having nothing to do” illustrated the value of the programs for the students’ physical health.

The program facilitator provided many examples of how the students’ physical health was positively impacted by their participation in the after-school physical activity programs. The facilitator specifically explained, “We keep them on campus. Then these guys, one, they are not smoking; they are not drinking; they’re not involved in drug activity.” This statement shows alternative uses of time when compared with the after-school programs on campus; when students are left under their own auspices, their time is not necessarily productive. The facilitator went on to explain that he considers the after-school programs as a drug-use deterrent. Specifically, “I think that drug intervention is huge. I see a lot of kids that are just too interested in the drugs, or alcohol, or smoking after school.” Providing alternative activities seems extremely valuable.
The site leader explained there are no physical education activity classes offered during the regular school day at Oak. The after-school physical activity programs are the only physical activity programs offered to the students. This means if there is no physical activity going on at home, the after-school programs are the only source made available to the students. It seems clear with this population physical health is an important aspect to work on.

*Oak School: Addressing Mental, Emotional, and Social Health*

Students made very few comments addressing mental, social, and emotional benefits. Comments such as “we give more time to school,” “we spend more time here. We get to know the teachers there because they’re it with us pretty much most of the time; we are getting more school spirit out of them,” and “you go more for your school, instead of just coming in and wanting to leave right after courses” all point to some type of understanding in the students of a connection between the after-school physical activity implementation and spending more time at school with adults and other students.

The program facilitators explained in great detail the positive mental and social-emotional benefits realized by students from participation in after-school physical activity programs. Specific references to utilizing sports as a "vehicle to get different students to interact with one another that may otherwise not interact with each other" and working to see that students “are playing fairly, encouraging sportsmanship” were very prevalent in the interview data. Anecdotes regarding students encouraging each other and supporting each other were plentiful. Growth shown in individuals includes how to cheer on a team
mate when they have made a mistake, whereas previous to these engagements only ridicule was heard when someone made a mistake.

The site administrator indicated a significant positive change in behavior by many of the students who participated in the after-school programs. Specifically, improvements in behavior in attendance were noted during the soccer season. The principal explained that she felt soccer created “an element of participation and leadership” at the school, which had not previously existed. The principal claimed that this factor is noticed both by other staff members and students. She explained, “It’s created a shift on campus—small one, but the teachers see it. We suddenly have kids as recognized leaders and who are doing [sic]. They’re recognized leaders because they are doing positive things at school and the other kids are noticing.” The participation rate increased over several months and across different activities. It was explained that the principal

...begged, borrowed, and pleaded to get 11 kids on a soccer team. I ordered 16 shirts and by the end of the little tiny season, I had 16 shirts accounted for. I had 16 kids instead of 11. You know, like I started with 9 and managed to generate enthusiasm and then had like 25 kids sign up for softball.

Participation in after-school activities was almost nonexistent until the funding from the 21st Century/ASSETS grant was provided. It seems that the funding had a direct influence upon the participation rate and, therefore, the behavior and investment in the school from the students.

Oak School: Academic Benefits

Neither the student participants in the group interview nor the site leader reported any improvements in the students’ academic standings or rate of progress toward
graduation due to their involvement in the after-school physical activity programs. No prerequisite attendance rate, grade point average, or rate of credit completion was mentioned by any of the students in the focus group interview.

The private vendor who is the program facilitator did mention there was a clear relationship between the participation and an improvement in academic performance. One statement clearly specified there was no instrument to neither gauge nor measure this relationship nor track any changes. The academic connection comment segued into a general comment about the social-emotional aspect of the benefits of involvement in after-school physical activity programs. The facilitator stated:

> What we do see is that students who were involved in the beginning of the year didn’t really care whether they went to class. They didn’t care a whole lot if they turn [sic] in their assignments; they just showed up to play sports. Once we got them to the point where telling them during that time playing sports, “we take that not as a vehicle to teach football but as a vehicle to teach life.” If we can get a life aspect for these kids, this is football is one thing, but for you to be successful in football field in your training and you’re practicing, practice is what makes you successful. The homework is what makes you successful in your grades. So we found a lot of kids, even though they want to come out and play, are saying, “hey, look—I’ve got an assignment due, and I’m going to do the assignment.”

At the beginning of the year they didn’t care about the assignment.

He further explained, “We can’t really gauge them. We can see it, but to put it on paper and send it to someone that isn’t here is really difficult.” Although there is logic to the explanation, no evidence was presented that clearly showed any academic improvement by the participants at this school site. However, all adults involved in this study did echo the sentiment that the participating students have improved attendance rates. Again, no evidence was presented to support these claims.
Oak School: Addressing Additional Student Needs

Student participants very clearly felt there is nothing to do in the community after school. Providing a space where they can come together gives them both a place to be and a positive alternative to destructive activities. Although this may seem to some to be trivial, it was very clear that providing a place to stay was significant to the students.

Program facilitator responses echoed the sentiment of the students regarding a space for them to exist after school. One anecdote supporting this sentiment regarded a young woman who usually did not interact with anyone. Once she became involved in the after-school martial arts program she spent more time talking with staff members and the private vendors who provided instruction after school. After weeks of working out she confided in adults leading the program that over a period of 2 years, she had been frequently raped by one of her family members. This anecdote serves to show the value of nothing more than time spent around adults outside of the students’ usual contexts and spheres of influence.

The site administrator also commented on this after-school time and its benefit to students. The principal explained, “Most of them, they didn’t have anything to do. They’d go across the street, they’d smoke, they’d loiter, they’d litter in people’s yards. Now what we’re finding is that our programs are interesting enough that they are staying on campus. And at times, it’s kind of hard to get them to leave at 2:30 when they need to go get buses, because they’re so engaged.” All stakeholders interviewed noted that having a place for the students to be involved in a productive activity was a critical positive aspect.
Oak School: Data Being Used

Very little data is used to drive the decisions of the after-school physical activity program at Oak, according to the interviews and document analysis. A survey was distributed at the beginning of the implementation to determine what activities the students would like to have offered. The site leader indicated that this survey was one of the main factors informing the decision on which activities to offer. Attendance, a mandatory accounting factor, is kept in accordance with the rules governing the 21st Century/ASSETS grant. Based on both the review of the interview transcriptions and document analysis, it appears that no other data is used.

Oak School: Data for Potential Use

Several sources of data could prove to both inform the decisions made and help leaders and decision-makers track specific positive improvements made to the attendance and academic progress patterns of students. Extant data sources include attendance databases, cumulative behavior history files, and cumulative academic progress reports. Designing a progress report could also serve to monitor changes if all students were required to self-reflect on a weekly basis with one adult on campus. Positive changes could easily be measured and verified by using already existing data; comparing previous rates of negative behavior issues, academic credit acquisition, and attendance previous to the engagement in after-school physical activity programs could show any benefits realized in these three areas.
Cumulative Findings: Document Review

Very little information or insight was gained in reviewing the documents for each individual school. However, the review of the 21st Century/ASSETS grant as applied to each school was very helpful in reiterating what was presented through many of the interviews. It gave more understanding to the new energy put into creating or advancing the programs. The support of the federal, state, and county education departments seemed critical to the existence of a program at two of the three schools. Given the new support, it is also important to note two of the schools did have programs before the grant, but in very limited capacity. These early versions of the programs also were reliant upon the on-site staff volunteering their time after school. Upon reviewing the budgets for the three schools, it is very apparent the 21st Century/ASSETS grant funding enabled all schools in this study to offer activities on a set schedule not reliant upon the individual schedules of teachers and their free time after school. Teachers and vendors who commit to the schedule and are paid are expected to show up every scheduled day; in the past, teachers who volunteered their time may have canceled the activity due to time constraints and other obligations. The funding also allowed for Oak School to hire outside contractors to provide activities. Other documents reviewed included daily attendance charts, which record positive-only attendance, as well as cumulative attendance charts. These charts are mandated as part of the conditions for funding; all three schools in the study use them.

Schools also presented written surveys supplied to students to indicate which physical activities they would like to see offered. All schools surveyed their students, but no significant information was gained in the analysis of these surveys other than taking
inventory of students’ desires. Oak also presented a copy of the progress reports that students can take to each teacher for feedback on how they are progressing, both academically and behaviorally. Although the form seems like it would be a useful tool, there was no indication in the interviews that all stakeholders agreed upon how often these reports were used. Finally, meeting notes from Seaside indicated there was time allotted at several staff meetings for discussion to occur with the staff to build support and brainstorm ideas for creating the after-school physical exercise programs. No notes from staff meetings indicating such time allotment were made available from either Other View or Oak Continuation High Schools.

Coding Analysis Results

Once the three phases of code assignments were organized and studied, clear themes arose. Four clear themes arose which had not been previously considered: (1) constant caring, (2) mentoring, (3) place of belonging, and (4) cooperative leadership.

The theme of constant caring arose out of social-emotional connections. Student comments regarding adults consistently checking on them throughout the day made this evident. The previously unconsidered aspect of mentoring arose out of support systems and recruitment, phase-three codes that stemmed from additional student needs in the second phase code. Interestingly, although the use of data in any semblance of regular use was not present, two of the schools used intermittent progress reports to check on student behavior and academic progress. Although this isn’t an effective path on which to base a DDDM system, it does communicate another way of caring for the students and paying attention to them. If these progress reports are viewed as a data collection device, as they
are currently utilized at the two sites, they are not effective. However, if these progress reports are seen as a communication device to let the students know the teachers and staff care about them, it does seem to be working. This aspect supports the code of *constant caring*.

The thematic code of *place of belonging* harkens back to Bronfenbrenner’s (1979) foundational concept—the environment in which the individual is located influences who they are. In this case, the students appreciate the opportunity to choose to be in the environment of the physical activities. This space, regardless of the activity, allows for the student to have a place of belonging; the physical activity aspect adds more health benefits. Finally, the *cooperative leadership* theme arose from interviews with facilitators and site leaders. The data from two of the schools included comments regarding the principal letting the facilitators make decisions, and checking in with them to keep everyone aware of what decisions are being made. The third school did not mention this aspect, with the principal mentioning that programmatic, supply, and logistical decisions were made by her alone. Table 6 presents the similarities and differences among the schools.

*Cumulative Findings: Similarities*

Although sports are offered at traditional comprehensive high schools, not all students were able to play prior to their enrollment at Other View School. The single data unit used to determine if a student will be recommended for enrollment at a continuation school is failing classes. Until the student remedies their grades, they cannot participate in sports. Therefore, when a student finally arrives at Other View they have probably
failed many classes; until the student starts earning academic credits, they cannot participate. So, prior to their participation in Oak’s after-school activities, it is highly likely that students were not on sports teams due to grade issues, attendance issues, or behavior issues. Once the continuation school helps them start to change their academic standing, they can participate. This is reported to motivate the students to increase their academic standing and to be effective, according to the interview participants.

There are several aspects found across all three sites and districts. The first shared aspect was the presence of the 21st Century/ASSETS grant. The funding for all these after-school physical activity programs came from the same source. During the interviews, all principals and facilitators revealed that the 21st century/ASSETS grant was providing funding for any after-school activities, physical activities, academic pursuits, and artistic endeavors, among other things. This information was not known during the proposal phase of this dissertation. These three schools offer physical activity programs, but offer other activities as well, including study skills and academic recovery classes.

The second aspect shared in the findings among schools was the distributed and cooperative management among the grant coordinator at the site, the site principal, and the facilitator for each activity; these three levels of decision making seem to blend effectively at each site. All decision makers reported collegial working relationships with the other adults involved in the program.

A human connection factor with at least one adult connecting deeply in some form with the students seemed to be a factor needing further analysis. Although not all schools had this type of adult presence, all the students or adults made mention of this
type of relationship. At two of the schools this took the form of active recruitment and unstructured, impromptu academic and behavior checkups.

Finally, all of the schools indicated there was data reflecting which students participated in after-school physical activity programs and which students participated in study skills or academic recovery classes. Role was taken, in a positive-attendance-only recording system where students are credited for attending but do not receive negative consequences if they do not attend. There was no indication that any action was taken based on this information.

Cumulative Findings: Differences

Although there was a similar structure to all the interviews, there was a significant difference at one of the participant sites, as can be seen in Table 7. Across all three schools, with all interview participants, there was a quick sense of candor and honesty established between the interviewer and the participants, including the students. This connection was not experienced at Oak School. The students were dismissive of many of the questions, grunting their answers and shrugging their shoulders for many responses. The time spent with this group was approximately half the time spent with the other student groups. Although there may be myriad explanations for this, one factor noted by the researcher was that the student participants were spending time with a private contractor hired to facilitate the after-school programs, not a teacher on campus whom the students would see every day. Many of the students, staff, and leadership at the other two sites commented that the constant informal connection through the school day with
the teacher who facilitated the after-school programs seems to be an integral part of the social and emotional connection many students felt toward the school staff.

Another difference is the lack of daily active recruitment at Oak School. None of the interview participants presented any comments suggesting they were approached during their school day and asked to participate with any regularity. Programs were posted, and students were invited, but in a once-in-a-while event format. The data shows both Other View and Seaside School students are repeatedly approached several times by a variety of adults, across many days, and with great frequency. Also related, it is interesting to note that Oak was the only school to use an outside vendor. The interview with this vendor was very impressive as far as his knowledge of social-emotional engagement, mental health, and his work trying to ensure funding for these after-school physical activity programs. In spite of all this awareness, the student interview focus group at Oak seemed to be the most detached and disinterested in the interview and research process, noticeably more so than any of the other student groups. Fidgeting, silly answers, and a lack of authentic engagement by many of the student participants created a situation where very little data were gathered regarding benefits realized by participating in the after-school physical activity program. No relationship is suggested between hiring an outside vendor and the students’ engagement level in the conclusion of this study, as the methodology and design of the study is not structured to measure that relationship. However, the existence of those two aspects at the same site of study is interesting to note.
Table 7: Data Across Schools by Theme.

<table>
<thead>
<tr>
<th>1. Inventory</th>
<th>Continuation High School Study Sites</th>
<th>Other View</th>
<th>Seaside</th>
<th>Oak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Days Per Week</td>
<td>Basketball</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Type of Activity</td>
<td>Basketball</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Softball</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Football</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soccer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weights</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surfing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Running</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Implementation</th>
<th>Activities</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFF Campus</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Facilitator?</td>
<td>Teachers</td>
<td>Teachers</td>
<td>Vendor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Needs Serviced</th>
<th>Place of Belonging</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Connections With Adults And Other Students</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Students Report Caring Adults</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
Table 7: Data Across Schools by Theme continued.

4. Data Use

<table>
<thead>
<tr>
<th>Attendance</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occasional</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Progress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Leadership Aspects

<table>
<thead>
<tr>
<th>Supplies are Provided</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Provider Workers</td>
<td>Teachers</td>
<td>Teachers</td>
<td>Vendor</td>
</tr>
<tr>
<td>Regular Attendance</td>
<td>Attendance</td>
<td>Attendance</td>
<td>Attendance</td>
</tr>
<tr>
<td>Management Style</td>
<td>Site Leader supports facilitator decisions.</td>
<td>Team meets to make decisions.</td>
<td>Site leader makes program decisions.</td>
</tr>
</tbody>
</table>

6. Connection to Adults

<table>
<thead>
<tr>
<th>Adults on Campus</th>
<th>Adults on Campus</th>
<th>Adults from off-campus facilitate program.</th>
</tr>
</thead>
<tbody>
<tr>
<td>facilitate</td>
<td>facilitate</td>
<td>program.</td>
</tr>
<tr>
<td>program.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Finally, all three schools seemed to focus on different aspects of the programs.

The three strongest aspects present in the data are the logistics of offering activities, the social-emotional development of the individual and group as facilitated by participation in these activities, and the physical health realized through participation. There seems to be a relationship between the longevity and history of each individual program and the strongest emphasized area of these three aspects of focus, but the data does not warrant...
that conclusion exclusively. Specifically, the youngest program at Oak School focuses on the logistics of offering activities, whatever that activity may be. The school with the next-longest running program, Seaside, is predominately focused on the social connections and emotional status of the students. Finally, Other View has the oldest program, and they seem to emphasize the physical health aspect. These emphasized aspects at each school do not appear to be exclusive of the other aspects, and all three schools addressed the other aspects, as well as academic achievement, in the interview data. Table 7 illustrates the similarities and differences among the study sites according to the final key characteristic theme codes.

Table 8: Presence of Key Program Characteristics by Continuation High School Site.

<table>
<thead>
<tr>
<th></th>
<th>Other View</th>
<th>Seaside</th>
<th>Oak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant caring is present?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Mentoring aspects are indicated as present by student participant data?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sense of belonging is indicated?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Cooperative Leadership Is indicated as present.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
The final thematic codes indicate the social and emotional aspect provided by these aspects of the after-school physical activity programs are of great significance. The constant connections made through the day by staff members; the lessons in a pseudo-mentoring capacity, either impromptu or planned; and the feeling of belonging all seem to be very powerful attraction facets to these programs. This study was not designed to test each one of these studies for individual significance in the absence of the other aspects, but the confluence of all of them seem to have positive consequences. This suggests that the theoretical framework on which this study is based needs revising to incorporate this new information. Additionally, the cooperative leadership aspect seems to provide a positive aspect as well, although this study was also not designed to calibrate the significance of that finding.

Chapter Summary

The purpose of this chapter has been to synthesize and analyze the data from interviews and documents in order to answer the research questions presented in the first chapter of this document. Below are the cumulative summaries of the research:

1. The two continuation high schools (Other View, Seaside) that capitalized on the talent of the already-present teachers had students who were more invested in sharing their authentic experience with the researcher. Comments made by the students suggested the interactions with adults who coach them after school were important to being engaged at the school. This is significant given the importance the data suggests regarding the social-emotional connection these programs can help develop. The interviews may have garnered different data if the students were more invested in their participation.
2. Programs offered as voluntary were valuable to the students, as their individual life situations dictated their patterns of attendance and were often out of their control. Choosing whom they worked out with, as well as which days they attended, was of high value to the students.

3. All three schools appeared to have no consistent use of data as understood by all stakeholders. Participants referred to data sources such as progress reports, attendance records, behavior reports, academic credit acquisition, and verbal teacher reports. Pieces of data such as progress reports were used, but not consistently, nor were their use and function understood with any consistency by any of the stakeholders. If any systems of data use and analysis were in place, few people knew about them.

4. Students made it clear the provision to exercise on campus after school was valuable for their health, mental wellbeing, and social connections to both other students and adults. Frequent responses from students and staff members included ample examples of improved attitudes, attendance rates, and academic foci due to the interest in retaining the ability to be with their friends in the after-school physical activities. In addition, students at Other View and Seaside Continuation High Schools frequently mentioned feeling connected to at least one adult involved with the physical activities.

5. Offering free exercise opportunities to the students who attended these three continuation high schools was valuable to them because of their low socioeconomic status. Many of the students at these types of schools were unable to join gyms or leagues for sports and fitness activities. The opportunities and facilities provided are their only avenue for use of equipment and guidance for exercise after school.
Chapter 5 completes the analysis of this study by offering conclusions based on the study, as well as recommendations for policy makers, leaders, and practitioners who are interested in providing opportunities to at-risk students to be physically healthy, invested in their education, and socially and emotionally engaged with other people in a healthy manner.
CHAPTER 5: CONCLUSIONS

The purpose of this chapter is to synthesize the separate sections of the study into a unified final conclusion, as well as make recommendations based on the research. Subsections in this chapter will revisit the research and theoretical framework in order to understand the rationale for the study, then directly address the research questions and provide cumulative answers based on the research, recommendations for future research, recommendations for both practitioners and researchers, and offer concluding thoughts.

This study focused on continuation high school students involved in after-school physical activity programs. Continuation school students often have factors present in their lives which make completing their graduation requirements at traditional comprehensive schools challenging (Austin et al., 2008; Mancini and Huebner, 2004; Perez et al., 2008; Worrell, 1996). The traditional low socioeconomic status and access to resources as documented by Rueda (2008), Perez et al. and WestEd (2007) is problematic regarding health status for this population. Research shows a relationship among schools that provide physical activity programs for up to 6 hours per week and positive impacts on academics (Carlson et al., 2008; Crosnoe, 2006; Irandoust & Karlsson, 2002; Kubik et al., 2004, Maggos, 2007), even for special populations, such as autistic children (Nicholson, 2008).

This study was designed to answer the four research questions in order to better understand what positive effects are realized at continuation schools that offer physical activity programs in addition to the state-mandated physical education activity hours. Framing the research questions and methodology on past research and theories, this study serves to place the theory in the context of decisions made on a daily basis, as well as
programmatic designs structured at several levels of decision making. The theoretical framework of Maslow (1943) suggests the physical wellbeing of a person needs to be present in order for the higher-order thinking to be present. Bronfenbrenner (1979) posits the individual is anchored in their context, and is influenced by their surroundings. Benard (2004) informs us that the individual can learn resiliency skills when put in a healthy environment. These three theoretical concepts all reach confluence in the after-school physical activities provided in the continuation schools. Research on data systems and their use suggest there are myriad ways for data to be actively used to benefit individual growth and provide opportunity for systemic program analysis (Datnow et al., 2007; Marsh et al., 2006; Sharkey & Murnane, 2006). An important aspect of implementing any system of data analysis is stakeholders’ understanding and trusting the data system’s use and validity (Colburn & Talbert, 2006; Datnow et al., 2007; Knapp et al., 2007; Marsh et al.; Wayman & Cho, 2008).

This qualitative study used an exploratory and descriptive case study, which utilized interviews and documents analysis. This design was chosen due to the lack of information about these schools. Researchers suggest this methodology can help people explain the details of their experience (Vygotsky, 1978) in a natural setting that helps the researcher establish themes of importance (Creswell & Plano Clark, 2007) and ultimately understand the significant meaning behind the experiences (Miles & Huberman, 1994; Seidman, 2006).
Research Questions

The three-phase coding structure allowed the data to be organized into a new theme structure, revealing four new themes. These themes support the continuance and improvement of the after-school physical activity programs. The following responses address each of the research questions based on data from the study.

1) What is the nature of after-school exercise programs in the three California continuation high schools used for this study? There are a variety of programs offered, and they vary with each school site. All activities are voluntary, and all are funded by the 21st Century/ASSETS grant. Two of the three sites studied did not have an after-school physical activity program before they received grant money; one site did provide physical activities after school prior to the grant, but grew in size and activities offered upon receiving the grant money. All schools offer team sports, but only one offers individual training and conditioning. The frequency of the programs vary from meeting for one special activity day every few weeks for large, costly trips (such as a trip to the beach to learn surfing) to meeting every day for individual conditioning and weight training. The minimum meeting time is one hour, and some programs meet for four hours or more, depending on the activity. The findings of the data analysis indicate the physical space provided gives students a social and emotional benefit, in addition to the activity’s benefit to their health.

2) What factors—from the perspective of site leaders, facilitators, and student participants—affect the type of after-school exercise programs offered and level of implementation (e.g., school context, needs of students, resources available)? Different
schools have different factors affecting what activities are offered. These key factors include financial support, facility considerations, preexisting physical resources, staff knowledge and interest, and an understanding of the importance of the program. Money to entice staff members to work longer hours after school seems to be a common factor. Other View School already had staff members staying after school voluntarily, but the funding offer doubled the staff participation rate. At Oak there was no one, and now there is one staff member and one outside vendor hired to come in and coach. At Seaside there was one staff member leading activities; now there are four.

The facilities available on or near campuses are another factor influencing the programs offered. At Seaside, no fields exist, so travel is necessary if there is going to be a soccer or football game because there are no fields near the school. Other View chooses to take students to the beach, also not near the school. Other View also has a weight room, soccer and football field, and an outdoor workout space for conditioning. Oak has all the resources it needs on campus, except for teacher facilitators. At all three schools, primary or additional sports equipment, shoes, and uniforms are provided due to 21st Century/ASSETS grant funds. Prior to this grant, no shoes were purchased for students, equipment was preexisting, and uniforms weren’t used. If students wanted to play soccer, they needed to provide their own running or soccer shoes. Not all students who would have liked to would participate, because they didn’t own athletic shoes. The grant clearly made it possible for these students to participate.

The staffing of the programs is another factor regarding what is offered. Only one teacher at Oak School leads an after-school program; this school uses an outside vendor
for almost all their activities. At both Other View and Seaside, teachers from the school are exclusively used to provide after-school staffing. Teachers at these two schools are recruited and taken on a voluntary basis, and are utilized for activities in which they have experience or training.

Finally, the most surprising factor affecting the programs offered was how most staff members and students felt they were unimportant to district and state decision makers. Many comments from stakeholders at the site level made it very clear that these programs were extremely valuable, but they were afraid funding would disappear at some level; teachers and site leaders specifically mentioned their concern that people at the district level didn’t understand how important these activities were to the student participants. Students made general comments about program decision makers and their lack of understanding of the programs’ benefits to students. Helping people understand the importance of these programs is a crucial factor for leaders to consider when discussing what is best for these students. Additionally, the cooperative leadership aspect of the data findings indicates a need for leaders to look to staff who work directly with the students to help them make the best decisions when considering how to get students socially and emotionally connected to the activities and to school.

3) In what ways do after-school exercise programs address the specific needs of continuation school students, according to site administrators, program facilitators, and student participants? There are several factors appearing to relate to participation in these activities. These include academics, behavior, social-emotional connections to the school environment, staff members, other students, and growth as an individual from healthy
adult interactions. As reported in interviews, the academics and behavior improved by participation in these after-school physical activity programs. However, no systematic data was presented to support these claims. Myriad examples of individual students improving grades due to their participation abound in the interviews, but no one could clearly guide the researcher to any quantitative data-supported evidence.

Regarding the social-emotional connections students made, both with each other and the teachers, there were many comments explaining the relaxation and feeling of connection with other people during after-school workouts. A feeling of belonging was expressed, as well as feelings of validity as a whole person and not just as a single-faceted student. Finally, the extra interaction and constant connections with facilitators and adults throughout the day seemed to connect students with teachers in ways they had not previously experienced. Statements from the students described staff members who really seemed to care about students’ growth in strength, staff commenting on the play the students made in a campus-hosted soccer game, and the change in body shape that comes from weeks of consistent healthy habits—all were presented as treasured aspects of these programs. These programs were staffed with people who regularly interact with the students throughout the day, which is clearly of value to the participating students. Finally, there seems to be a relationship between facets of mentoring and student investment, even though these programs are not necessarily designed to be mentoring programs. Students commented about the connection they had with teachers who facilitated the after-school programs and how those teachers treat them like they matter. The constant contact throughout the school day with those teachers made an impact, as
indicated by the interview data. The students who participated in the focus group interviews did not indicate any specific theme to the daily interactions, only that there were contacts regarding a variety of topics. From analyzing the data based in these interviews, the theme that arises regarding this facet is constant caring. This constant caring seems to take the form of conversations regarding corrective action needed on the part of the student, positive comments about a game or workout from the day before, or an interaction—which from an outsiders vantage point might seem like aggressive haranguing about turning in assignments for classes—that is actually appreciated by the students. From the students’ point of view this constant interaction is appreciated, even if it doesn’t seem welcome at times. Participating in the physical activities seems to have a positive effect, but students who see staff members throughout the day trust and know the staff members and seem to be the most connected to the school, their growth, and other people.

4) How do administrators and teachers use data or evidence to develop or implement their exercise programs? It was clear through the analysis of the data that no members of any of the sites participating in this study had a common understanding of the data being used by different members. The term data can mean many things; the adults in the schools participating in this study all answered according to their interpretation of the questions regarding data. Having a common language and understanding of the terms would be a great first move for any leader at the site, county, state, or federal level, as indicated by the research presented in the literature review of this study. Understanding the myriad interpretations of the word data, a common
understanding of the use of the word in a specific context would prove to advance the conversation to a meaningful place. Aside from attendance rates being measured as mandated by the law as a necessary factor for continued funding, no data analysis was seen at any of these sites. Although there were prerequisites of credit acquisition and attendance rates used by two sites, a common understanding of how these factors were measured, and by whom, was lacking. Cumulatively, there was very little understanding across all stakeholder strata of what—if anything—was being measured. Participants in the interviews all indicated some awareness of the importance of data use, but none of the schools had a standard, commonly understood way of gathering measurable, benchmark-oriented data to determine changes in behavior or investment in the students. Although the data analysis did not indicate any consistent use of data for analyzing the benefits realized by students, the progress reports used by two of the schools can be seen as data from the students’ vantage point. By mandating progress reports, the students see data indicating the leaders and activity facilitators care about them, even if that data is only provided intermittently through that particular instrument.

The findings of this study suggest a trajectory for further investigation into the literature about mentoring, as well as action to integrate mentoring aspects into the activities and sports. Because of the finding that the students at continuation schools rely on the facilities as a place to belong, providing and supporting a safe and healthy space where students feel a sense of belonging is crucial to the success of these programs. The research clearly suggests being located on a school site is beneficial to keeping participants interested. Leaders can increase the rate of success by selecting the best staff
members to work at the continuation schools. McKinney, Haberman, Stafford-Johnson, and Robinson (2008) provide research that suggests the at-risk student does not connect with their learning by being exposed to people who have special training within the school system, but are more likely to become authentically invested in their own learning being taught by people with a certain set of personality traits. To provide equity for the alternative education student, leaders can familiarize themselves with the research that helps them determine characteristics needed when hiring. This is an example of the Argyris double loop paradigm for creating solutions (Smith, 2001). A double loop paradigm is a system of addressing the underlying causes of a situation and implementing a remedy which will prevent the same situation from occurring again. Contrasted to this, a single loop solution addresses only the immediate issue and does not look to the underlying causes (Smith). School leaders can help these students to become invested in their own learning by finding the best double-loop solution; in this case it is finding the right people for the job!

Limitations of the Study

Several facets of this study limited its overarching applicability. First, the location of the school sites limited the type of student participants in the study. Although comparable to each other site in regards to the socioeconomic status of students, racial demographics, and second-language learners, these three school sites were all located in the same region of the state. Research in different areas may have uncovered different answers during the interview process based on regional differences. Although physiological aspects of health discussed in the literature review of this study are
generalizable in all human beings, different social and emotional realities may have influenced what students perceived as necessary for progress in school.

Another limiting factor of this study was the interview aspect of the inquiry. In the interviews the participants were self-reporting. Omissions, partial understandings, and hidden meanings of responses were all potential limiting factors in the investigator’s comprehension of the interview data. These factors were minimized by comparing responses to that of other participants to check for missing information or outlying data.

Finally, administration, facilitator, and student participation was based on accessibility by the researcher; other voices unable to be accessed for this study might have yielded further information not reflected in this research construct.

**Implications for Theory**

The research of the three theories upon which this research is anchored yielded some helpful aspects to understanding facets of people. When considering the theoretical framework for this study, the three models all add to our understanding of why a socially and emotionally at-risk high school student would benefit from building resiliency skills while getting fit with a healthy group of people in a place that is a chosen context. Bronfenbrenner’s (1979) nested structure addresses many environmental systems that influence the individual, but his theory does not directly address the environment inside the individual. Benard’s (2004) resiliency directly addresses the skills that can be developed in the individual. That being said, a blending of those three frameworks—Maslow’s (1943) hierarchy structure, Bronfenbrenner’s nested environment as pictured as concentric circles of influence, and Benard’s resiliency-building literature—into a new
theoretical model would seem prudent. Although these three frameworks are individually strong at explaining their specific topics, a facet of all of them needs to be used to obtain a more complete and complex understanding of the continuation school students.

A new theoretical model, which incorporates these various ideas into one structure, can be imagined as a spider web. A researcher investigating a different aspect of education context conceived of a connection system of related topics and disciplines, which assists in relationship analysis. Although the labels and relationships are not directly associated with the topic at hand, the physical structure helps us understand the necessary next step in our contemplation of the continuation school student and the context in which they exist and make decisions.

![Figure 3: Kennedy’s Relationship Linkage Model](image)

The key aspect to Kennedy’s (2008) model (Figure 3) is the linkage model among the different disciplines. The appearance of a web of connectivity between the different
aspects of the research helps us envision another way of addressing hierarchy, the nested structure, and resiliency.

We can conceive of another type of conceptual framework through the informational and structural understanding of Maslow (1943), Bronfenbrenner (1979), and Benard (2004); the structural understanding of Kennedy (2008); and the addition of an organic experience of spheres of influence manipulating the important strands of connections. A spider web contains strands, but they can be damaged or broken. If enough strands are intact the web can survive and fulfill its purpose; the spider can thrive. If the foundational and anchoring strands are broken, the structure cannot last and its effectiveness is nullified. A structure similar to a spider web might help us understand the individual and that person’s basic needs, contexts, and development. If one were to imagine a spider’s web anchored onto two branches of a tree, the tree branches would represent a society and government; the main strands of the web would be core beliefs, family ties, spiritual faith, or any number of other significant personal strengths. The inner strands of the web would be important, but less significant positive influences, such as friends, personal development, sense of humor, etc. The labels in this theory are not the crucial part and may appear on different strands for different people; the crucial part is that the strands are present.

Like in nature, if some strands are broken, the web can still function in a healthy, productive manner. However, if enough strands are broken, or the anchors become detached, then there is little hope that the web can function productively. The spider must maintain the web. In the case of the individual students, they need to be active
participants, the responsive spider in the web building of their lives. Figure 4 represents this spider web model.

![Spider Web Model](image)

Figure 4: Spider Web Model

If the basic knowledge of how to build a metaphorical web, or healthy life (i.e., health, patience, learning, other core growth and survival concepts) is not present, Maslow (1943), Bronfenbrenner (1979), and Benard’s (2004) work all suggest that the individual has little hope for significant healthy growth and well-being. Programs such as the after-school physical activities can provide many of these positive facets in a physical setting, which already has many of the aspects needed. This study’s information can help a wide variety of stakeholders support students to become resilient. At-risk students are labeled as such due to the confluence of conditions, which individually are negative and in the aggregate are devastatingly negative. Conversely, sufficient aggregate positive influences can help counter this. Understanding this helps us realize the significance in considering
this new information for leadership practice decisions, practitioners in alternative education programs, training and education in universities and teacher education programs, and future research.

*Implications for Leadership Practice*

The implications for leadership and policy making involve several facets, and should be considered on several levels. Considerations should be made in both the comprehensive, traditional schools, as well as in the alternative education programs when considering programs offered, staffing decisions, both the physical and social-emotional environment fostered by leadership, and budgeting. In education generally no single person is burdened with all of these considerations, yet individuals must understand these facets to bring a well-thought-out proposal to stakeholder leadership meetings.

Additionally, all stakeholders would be best served if conversations regarding the phrase *what is best for students* included reviewing, at minimum, summaries of the research regarding the at-risk student. The burden of this last aspect should be placed on several tiers of the educational leadership strata, including the site principals. These site leaders bear the responsibility and ability of understanding research and presenting it in such a way that staff members, parents, students, and community members can understand it and become productive members of the conversation regarding students.

If comprehensive high schools and their leadership—who bear the responsibility for providing the opportunity for students to transfer to continuation schools—want to prevent students from falling behind in their credits in the first place, it would behoove them to inventory which students are starting to fall behind and investigate after-school
activities that those students would enjoy and benefit from. By offering voluntary-participation physical-activity options in addition to sports teams, students who feel disconnected from the school may find an avenue to connect with a teacher on campus who can help them invest in themselves and further their educational progress. In this manner, leaders could mitigate the extent to which continuation schools are presently needed; In theory, this should be a goal of leadership.

The implication for leaders facing staffing decisions is another crucial aspect. When determining which staff members would best serve the students, a wide array of interests and activities in the teacher’s background would be best. Given the small number of staff members at each alternative education site, the more varied the interests of the staff, the more experiences and activities staff members could offer to students in the after-school programs. Staffing decisions are arrived at in a wide variety of paths and at a wide variety of levels. Depending upon the governing rules, laws, and collective bargaining agreements (whichever may apply), recruiting staff could prove to be challenging. However, when opportunities arise as vacancies open or transfers allow, leaders should seek to place teachers at continuation schools that bring more than a single-subject credential certifying them to teach their particular subject. When possible, a variety of interests or expertise in another subject area, even if not certified, could add to the range of activities offered after school, while giving the students an environment whereby they can have the potential to connect with the adults on campus in a multifaceted manner.
Site and district leaders must also understand their role in providing a physical space for staff members to want to spend their after-school time. If the school management is tyrannical, teachers will not want to work additional hours. If the environment is collegial and positive, it is more likely staff members will want to offer more of themselves after school. In addition, physical considerations, such as a comfortable food preparation area or a welcoming staff lounge area, may provide a small rest in the middle of a day—which could theoretically span from 6:30 a.m. until 5 p.m. or longer. Providing an environment that encourages staff to stay on campus could be a critical piece that may attract more staff members. This physical and social-emotional aspect of connection to the school applies to staff as well as students. A few dollars invested initially in creating a campus where teachers want to spend extra hours may, in the long run, save money that would otherwise be spent on hiring outside contractors to come to the campus.

In addition, site and district leaders need to consider the overall environment on campus. All these aspects influence whether the student leaves immediately after school, or stays and participates all these aspects influence whether the student leaves immediately after school, or stays and participates from physical safety considerations, such as adequate lighting during darker night hours and safe wait areas for rides home from parents to students’ feelings regarding a sense of inclusion in the activities. The more barriers leaders can remove to will facilitate authentic, invested participation the more students will participate of their own accord when they realize how data can benefit
them. It is clear from this research project that many at-risk continuation school students are interested in staying after school and participating in physical activities.

Finally, funding decisions at the state and federal levels need to benefit programs that keep students coming to school. Minimal funding could assist existing programs and could be a catalyst to involve staff members who don’t currently participate due to financial obligations, such as tutoring after school in the community for extra pay outside the contracted school day. If these staff members could reap similar financial benefits by staying on campus, they could save gas, time, and the logistical considerations of finding clients off-campus. The existing programs could expand current offerings, create new programs, improve equipment, or provide new facilities, depending upon the financial scope of the new funds. Additionally, funding can be provided for teachers to gain more expertise in the activities they are interested in learning.

**Implications for Alternative Education Programs**

Alternative education programs need to be the first to take action since the students they serve have generally been given their last chance for formal education. The primary action should be to discover what activities students want. Discovering this information, as well as understanding what times and days students could be able to attend and offering activities during these periods, should lead to offering activities that would create the highest participation rate. The next order of business should be to match student requests with staff talent and training. Finding staff members who can offer skills and knowledge outside of their subject area will take time but, as the research shows, is worth the investment. Finally, leaders of continuation schools need to implement a
program where staff can easily track how students are faring regarding academic credit acquisition and behavior. Part of this implementation procedure should be to ensure all stakeholders understand and are comfortable talking about and using data to illuminate the activities and the positive consequences of student participation. By taking the time to implement these three phases, continuation school leaders should see a positive change in participating students.

*Implications for Universities and Teacher Education Programs*

Universities, administrative credentialing and certifying programs, and teacher education programs (TEP) can benefit from these findings as well. Focusing on the whole person, educators can practice finding alternative ways to engage students and keep them fit, as well as explore other strengths the teachers and leaders bring to the school setting. Being certified in one subject doesn’t negate the validity of leading activities in other areas and schools of education should help new teachers uncover personal interests that may seem to be peripheral to their primary subject of teaching. These additional interests and strengths could be a significant benefit for the school site where the new teacher or leader works, and could also model the benefits of a variety of skills and interests.

In addition to cataloging other interests and strengths, schools of education could include situational examples for future teachers to process, which should comprise low socioeconomic status (SES) student issues. The insights gained from reality-based situation practicum could create teachers who include all students when designing lessons and leaders who consider all students when making policy. Many schools of education teach about second-language learners and students with other needs who require an
individual education plan (IEP), but few discuss the significance of the handicap that poverty brings.

To discuss the need for a new type of plan, an economic educational plan (EEP), it would help to list specific ways teachers and leaders can better serve the low-SES student. During the course of leadership and teacher training the EEP idea could be applied in concept—if not in reality. Training could possibly help educators adjust how lessons and policies are designed in order to counter the clear statistics showing that poverty-stricken students are more likely to be sent to a continuation school. For example, students who work 30 or more hours per week and work from 3 p.m. until 11 p.m. weekdays are not likely to complete homework. If grades are based on homework that must be completed between Monday and Friday, and the low-SES student is working those days, the class’s homework policy has doomed this type of student to be marked down from a lack of homework completion. Schools of education that include assignments and practicum involving knowledge building, compassion, and skill building for increased efficacy for serving low-SES students, will be training teachers and leaders to truly serve all students—and we can hopefully have fewer students referred to continuation schools.

Areas for Future Research

There are several specific avenues for needed future research, which would greatly benefit both the academic world and society in general. Although these specific and individual research areas are discussed in the next section as recommendations for professional practice, designing a study to utilize them all in harmony would be a
powerful examination device by which researchers, practitioners, and policy makers could see the empirical difference that involvement in after-school physical activities makes in the personal and academic lives of these students.

Disparate pieces currently utilized by the campuses in this study could be harmonized to make a significant advancement in data use. A survey of student engagement could be used as a benchmark to understand a student’s status upon enrollment in a new activity, and then again at the conclusion of the activity. This survey could provide specific data regarding any change in the student during the course of the participation. By conducting the survey again at the end of the participation time, changes in the students’ perception of their involvement and engagement at school could be measured.

Research designed with additional pre- and post-activity benchmarks could measure levels of credit acquisition, behavior changes, and levels of engagement on the campus, as well as a student’s self-reflective social engagement. This information could then be measured against a control group of students who are not participating in after-school physical activity programs. Although this would be a large-scale study, it could be done over a period of a single school year, either at one site or at several, if the research personnel were available. Additionally, beginning this type of complex study at several school sites in different areas, over the same period of time, would be helpful in establishing patterns across a wider geographic area.

A study in a wide geographic area involving a high number of continuation schools focusing on the duration of these after-school programs in order to build a
relationship between the maturity of the program and the emphasis of focus would also
provide useful data. The three schools studied for this project seem to have each focused
on a different area for their programs. As each school program had a distinctly different
longevity of the program, measuring if there is a relationship between the focus and
intended outcome of participation and the length of time the program has been in place
would be interesting. It could also provide information regarding the value of the
individuals who facilitate the programs and their institutional history. Suggested research
questions are:

1. Do students realize more benefits when facilitators who are also full-time
teachers are running a program of after-school physical activities as compared with
vendors who are not on campus all day?

2. Does the number of years a teacher or vendor has been involved with a single
campus affect the efficacy of the after-school physical activity program?

Finally, a study researching the comparison of teachers who participate as
facilitators of after-school physical activity programs versus those who do not could be
useful—especially when evaluating their overall contentedness, level of health, perceived
job satisfaction, and connection to the school. If there was data that showed teachers who
participated in longer hours on campus were more or less happy with their jobs, felt more
or less productive at work, or who felt their efficacy was higher or lower than their peers
who did not engage in these programs it would serve as more information on which
decisions by leaders could be based. Keeping teachers engaged and interested may help
them stay energized and invested throughout their careers and prevent burnout. More studies in this area are needed to better understand the ramifications of participation.

*Recommendations for Leaders and Practitioners*

Although the ideal research situation would incorporate all aspects of the following recommendations, schools aren’t specifically funded for research. That being the case, the following recommendations are presented to enable policy makers, district and site leaders, and after-school activity facilitators to focus on both inexpensive, immediate ways and larger, more expensive ways to take action on the research and conclusions herein presented.

*Recommendation 1:*

Schools should utilize a pre- and post-engagement measurement survey to measure the effectiveness of their after-school activities programs. This survey should be validated by researchers and should measure the students’ individual perceived level of engagement on campus. Seeing their own change in perception of their experience on campus based on the survey results—reinforced with a debriefing session on their time and experience at the school—could be a recipe for amazing insight of their own path of becoming invested in a positive outcome for their future.

*Recommendation 2:*

Schools should track changes in the cumulative student rate of academic credit acquisition both pre-involvement and during involvement. Seeing a change in the students’ rate of credit-acquisition after they begin to participate in the after-school physical activities could also spark an interest in continuing to improve based on
reflections on their prior success. Many students end up at continuation schools after failing classes; the more clear, empirical measurements we can train students to use to enable them to accurately reflect on their positive growth, the more likely they will migrate into the cycle of positive growth.

Recommendation 3:

Attendance and behavior patterns should be recorded during involvement with after-school physical activity programs and then compared to pre-participation data of the same measurements. Very similar to the last recommendation, this comparison could create a positive cycle of behavior, which focuses on improving behavior by concentrating on positive self-reflection. Additionally, students could be educated to read their own records and could become active participants in the reflection process. Improving from there, a program could include student mentors or coaches who would train newer students to understand the data reports and reflective process.

Recommendation 4:

Leaders need to use empirical data, as well as train and empower their staff members to use data. The use of this data, as well as the resulting findings, needs to be communicated to all stakeholders. Although communication is important, leaders also need to be able to help different stakeholders understand the value of data use. Although individual student data should be kept confidential, the understanding of it and the knowledge of its use should be publicly advertised, explained, and supported. Creating a culture of positive, effective, and competent data use could make this habit a lifelong
pursuit for these students, while raising expectations for staff and leaders for basing decisions in definitions of the word *data*, which all stakeholders understand.

**Recommendation 5:**

Leaders must ask for the status of trust at their schools, starting from the bottom and working up. Beginning with students, then moving on to staff and middle managers, all stakeholders must be provided a safe avenue to voice their true feelings on trust. Both students and staff must know that they matter and are part of a team, which was made clear via interviews with both staff and students throughout the study; surveys can provide data to support moving toward this target environment. If surveys are too expensive or time-consuming, interviews and conversations at staff meetings could be used.

Mutual trust and interaction sets the tone for the school, based on its leader’s actions. At sites where students commented on positive staff experiences, and the staff and leadership commented positively about staff meetings, their ability to approach each other with problems, and their connections with the students, there were also comments from the staff reflecting on their ability to work as a team to solve problems, design new programs, or manage student participants. Student comments also supported this recommendation, with many students commenting that they were asked their thoughts on the activities offered. As a result, they communicated feeling more invested in their current school than in previous schools they attended.
**Recommendation 6:**

Use the strength of what already exists on the school campus, in both people and facilities. It is clear that connections made between students and staff members are stronger when reiterated and buttressed many times throughout the school day. Using staff already on campus during the school day to provide coaching or supervision for after-school activities may be the least expensive way to get the highest level of quality social and emotional connection to the activities and to the school. Utilizing preexisting facilities to the extent possible could allow any funds allotted to the programs to enhance preexisting materials.

**Recommendation 7:**

School leaders should draw upon relevant effective mentoring programs and implement trainings or provide materials, conversation opportunities, and study group release time for after-school physical activity facilitators as part of professional staff development offerings throughout the year. Potentially inexpensive, these trainings or study groups could help build the facilitators’ efficacy in connecting students to the school, staff members, each other, and themselves. The environment for mentoring is rich in opportunity in these after-school programs.

**Conclusion and Final Thoughts**

In conclusion, this study has provided a foundation for future research on alternative education and the benefits of physical activity programs with at-risk youth in the continuation school setting. Although this study focused specifically on physical activities, the methodology used, as well as the methodologies suggested in the areas for
future research, could easily be adapted to measure music programs, drama, visual arts, service learning programs, volunteer groups, or any other school-related programs that may be seen as positive for human development and growth, but not directly measured by standardized tests in this era of accountability and high stakes tests.

In times of economic hardship and increased stress, it could be argued that these seemingly secondary, or even tertiary, school activities become primary connection activities for many people in society. Sports and exercise with friends and family becomes a wonderful and productive outlet for stress release accumulated by financial hardships. Listening to music, dancing, painting, or myriad of other activities can be supported easily and inexpensively by providing them on school campuses which already have facilities to support such community activities.

Leaders who can understand the importance of these activities and measure the positive results can help anchor their continued existence in the schools, as well as help other stakeholders reach conclusions when making decisions that ensure students are provided an education that develops their physical, social, and emotional well-being, in addition to their intellectual development. The goal of education should be healthy, happy, and intelligent children and adults who contribute to the world, not simply data collection. The after-school physical activity programs are one possibly effective way to help get us closer to that goal.
Appendix A
Activity Facilitator Interview Protocol.

Introduction: “I am a graduate student in the Joint Doctoral Program in Education Studies at UCSD and CSUSM. Thank you for agreeing to be a part of this interview. I am interested in your perception of how the after-school physical activity program benefits students here on your campus. The questions I will ask you will help me better understand the functioning of this program. If at any time you wish to stop the interview please let me know, as there will be no negative consequences. Do you have any questions before we begin?”

1. What is your role on this campus in regards to the after-school workout program? (establishing aspect and depth of involvement)

2. What is the nature of the after-school exercise program? (exploratory)

3. Do you think the students participating in the exercise program are more connected to the school than students who are not participating? Why do you think this? (teacher’s perception of program success)

4. What do you use as evidence of their being connected or not connected? (data use)

5. Do you have a formal way of measuring how those students are doing compared to other students that you are utilizing? What are those measurement instruments? (data use, potential growth of program)

6. What type of support is provided by the site leadership? (facilitation)

7. If you had complete control of finances and support, what three things would you like to see happen with the workout program? (areas for growth)

8. What are the strengths of this program? (strengths-based perception)

9. Do you have any thoughts on what these students experience through participating in this program, which may be above and beyond the connection that gets made in a normal classroom? (teacher’s perception of program)
10. Is there any information you would want to know about what other schools or other programs do that may be similar or may be different from what you have going on here? (exploratory, sharing strengths)

11. Is there anyone else on this campus that you think I should talk to about this program who might have a different impression than you, or do you know of an additional or different facet of the program that you think someone should talk about? (teacher’s perception of organization of control of program)
Appendix B
Focus Group Interview Introduction and Protocol Sheet (to be read and handed to each participating student).

Introduction: “My name is Erik. I’m a graduate student in the joint doctoral program in Education Studies at UCSD and CSUSM. Thank you for agreeing to be a participant in this interview. I am interested in your perception of how the after-school physical activity programs here on your campus benefit you. The questions I will ask you will help me better understand the functioning and benefits of this program. I have asked you here as a group because sometimes friends and peers say things that help us remember our own ideas. Although this interview will be recorded, no names will be used so your identity will not be known to anyone. If at any time you wish to stop the interview, please let me know, as there will be no negative consequences. You may also choose not to answer or to skip any question. Do you have any questions before we begin?”

1. What kind of after-school exercise program do you participate in? What do you do? (exploratory)

2. How many times a week do you participate in the after-school physical activity program? (establishing aspect and depth of involvement)

3. How long have you participated in this program? Weeks? Months? Years? (establishing aspect and depth of involvement)

4. Does the program meet any needs that you have? If so, which needs is it meeting?

5. Do you think this physical activity program is good for you? Why or why not?

6. Do you think you are more connected to the school than students who are not participating? Why do you think this? (participant’s perception of program success)

7. How do you know that you’re more or less connected to the school? (data use)

8. Is there a formal way of measuring how you are doing compared to other students? If so, how is this measured? (data use, potential growth of program)

9. If you could change anything, what three things would you like to see happen with the workout program? (areas for growth)

10. What are the strengths of this program? Why? (strengths-based perception)

11. What do you experience in this program which is above and beyond the connection that gets made in a normal classroom? (perception of program)
12. Is there anyone else on this campus that you think I should talk with about this program who might have a different impression than you, or additional or different experience of the program that you think should be talked about? (Perception of organization of control of program)
Appendix C
AUDI0FILE RECORDING RELEASE CONSENT FORM  
UNIVERSITY OF CALIFORNIA, SAN DIEGO

As part of this project, a digital recording will be made of you during your participation in this interview. This is completely voluntary and up to you to decide to participate. In any use of the digital recordings, your name will not be identified and your identity will be kept confidential. You may request to stop the taping at any time or to erase any portion of your recording. You may also choose to not answer or skip any question. Please read and understand each statement below. Please indicate below the uses of these digital recordings to which you are willing to consent by initialing the statements.

_____ 1. The recordings can be studied by the research team members.  
Initial

_____ 2. The recordings can be used for scientific publications.  
Initial

_____ 3. The recordings can be reviewed at meetings of scientists.  
Initial

_____ 4. The recordings can be presented in public presentations to non-scientific groups.  
Initial

You have the right to request that the recording be stopped or erased during the interview. While every effort is made to reduce risk, there exists the possibility of a loss of confidentiality in this research study and feelings of discomfort. To minimize this risk, your interview responses will be kept confidential, available only to me for analysis purposes and to a transcriber not associated with this study. Your name and site location will not be associated with the recording processed by the transcriber. All digital audio recordings and transcripts will be entered into a computer file and both hard and digital copies will be stored in a locked cabinet or in a computer with password protection. The researcher is the only individual with access to this cabinet, computer, and files.

By signing below you indicate that the researcher has explained this research study, answered your questions, and that you voluntarily grant your consent, which can be withdrawn at any time, for participation in this study. If you have any questions about this research, I will be happy to answer them now. If you have any questions in the future, please contact me at xxx-xxxx-xxxx or xxxxx@ucsd.edu. Also questions about the study can be addressed to my advisor, Dr. Carolyn Huie Hofstetter, at 858-822-6688 or chofstet@ucsd.edu. If you have any questions about your rights as a research participant, you may also contact the Institutional Review Board at the University of California, San Diego Human Research Protections Program at (858) 455-5050.

You have read the above description and give your consent for the use of digital recording as indicated above.

_________________________________________________________  __________________________
Signature                                                      Date
Appendix D
“Measuring the Benefits of After-School Physical Activities in the Continuation School Setting”

Erik Conklin, a graduate student researcher at University of California, San Diego, is conducting a research study regarding the ways of measuring effectiveness of the after-school physical activity program. As the site administrator of this school that provides this program, I would like to receive your consent to allow your students to participate. This consent is in addition to the consent and assent forms to be read and signed by each participant and their parent/guardian (if under 18).

This research has several objectives:
1. To better understand if students who participate in the after-school physical activity program experience a change in their perception of their engagement on campus.
2. To better understand what type of measuring devices are utilized by the staff and administration to determine success of the program.
3. To better understand if there is an academic or behavioral change in students who participate in the after-school physical activity program.

All students enrolled in some of your after-school physical activity programs will be asked to participate in a focus group interview that will be scheduled at a convenient time for you, your staff, and the students. As the principal, you will be asked to allow some after-school time of approximately 30-90 minutes for the administration of the focus group interview protocol to the students from your after-school physical activity programs who volunteer to participate in the study. This interview is designed to measure student engagement on campus. Attached is a copy of the interview protocol instrument. The purpose of this exploratory study is to explore how the effect of after school exercise programs on students in your continuation high school is measured. The results of the data collected are available to you by request at the end of the study analysis and results will only be presented as aggregate data, thus student confidentiality will be protected.

Participation does not require any changes to your instruction, and only minimal after-school time is requested to carry out the study (approximately one session of after-school activity time). There is some risk of breach of privacy or data confidentiality. This is minimized by restricting access to this data to the researcher only. The benefit is that the study may provide information about data use to measure the benefits of after-school physical activity programs. If you are interested in receiving information about the results of this study, you may contact me, or my advisor using the information listed below, and we will be happy to send the results to you. Please provide necessary contact information as needed to send this information.
Participation in the research study is voluntary; thus, you do not have to participate in this research if you do not want to. If you agree to be in this study, but later change your mind, you may drop out at any time. If you choose to drop out of the study all information obtained to the date of your decision will be expunged/ deleted from the study. There are no penalties or consequences of any kind if you decide you do not want to participate. While every effort is made to reduce risk there exist the possibility of a loss of confidentiality in this research study and feelings of discomfort. Too minimize this risk the interview answers will be kept confidential, available only to me, and my dissertation advisor, for analysis purposes. All interview information, audio tape recordings, and transcripts with personal identifying information will be entered into a computer file and both hard and digital copies will be stored in a locked cabinet. This data will be maintained on a single password protected computer. The researcher is the only individual with access to this cabinet, computer, and files.

By signing below you indicate that the researcher has explained this research study, answered your questions, and that you voluntarily grant your consent, which can be withdrawal at any time, for participation in this study. If you have any questions about this research, I will be happy to answer them now. If you have any questions in the future, please contact me at xxx-xxx-xxxx or xxxxx@ucsd.edu. Also questions about the study can be addressed to my advisor Dr. Carolyn Hui3 Hofstetter at 858-822-6688 or chofstet@ucsd.edu. If you have any questions about your rights as a research participant, you may also contact the Institutional Review Board at the University of California, San Diego Human Research Protections Program at (858) 455-5050.

I agree to participate and grant permission for access to this campus by this research study principal investigator (PI).

________________________________       ______                     ___________
Participant’s Name                      Date                          Campus

_______________________________
Participant’s Signature

_______________________________
Principal Investigator/Researcher’s Signature
Appendix E
University of California, San Diego
Adolescent Assent to Act as a Research Subject

“Measuring the Benefits of After-School Physical Activities in the Continuation School Setting”

Erik Conklin, a graduate student, is conducting a research study to find out more about the benefits of after-school physical activity programs. You have been asked to participate in this study because you participate in one of these programs. There will be approximately 60 participants in this study. The purpose of this study is to determine if the physical activity programs serve a purpose that is apparently needed.

If you agree to participate in this study, you will be invited to participate as part of a focus group interview. This focus group will engage with Erik Conklin in one interview session, as a group. The focus group interview session will last approximately 30-90 minutes.

Participation in this study may involve some added risks or discomforts. These include:

1. A potential for the loss of confidentiality. The interview session will be digitally recorded for analysis at a later time. This risk will be mitigated by the participants being referred to as student #1, student #2, etc., instead of their names. Research records will be kept confidential to the extent allowed by law. Research records may be reviewed by: 1) the UCSD Institutional Review Board, 2) the primary investigator (Erik Conklin) and 3) the supervising chairperson of the doctoral committee (Dr. Carolyn Hofstetter).

2. There a potential for boredom. If the focus group interview becomes tedious for the participants, the interviewer will pause the conversation in order for the participants to take a break. The interview will resume after participants feel they are ready to continue.

Because this is a research study, there may also be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

The alternatives to participation in this study are to avoid volunteering.

There may or may not be any direct benefit to you from participating this study. The investigator, however, may learn more about the physical activity programs in continuation schools and society may benefit from this knowledge.

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which you are entitled. If you decide that you no
longer wish to continue in this study, you will only be required to notify the primary researcher (Erik Conklin) of your wish to stop participating.

The PI may remove you from the study without your consent if the PI feels it is in your best interest or the best interest of the study. You may also be withdrawn from the study if you do not follow the instructions given by the study personnel.

You will be told if any important new information is found during the course of this study that may affect your wanting to continue.

No compensation will be provided for the time volunteered by you.

There will be no cost to you for participating in this study. The time commitment will be the same amount of time as one period of participation in the after-school physical activity program.

This letter of consent has explained this study to you. If you have other questions or research-related problems, you may reach Erik Conklin at (xxx) xxx-xxxx. You may call the Human Research Protections Program Office at (858) 455-5050 to inquire about your rights as a research subject or to report research-related problems.

You have received a copy of this consent document.

You agree to participate.

_______________________
Student Name (Print)

_______________________
Student Signature
University of California, San Diego
Consent to Allow Your Child to Act as a Research Subject

“Measuring the Benefits of After-School Physical Activities in the Continuation School Setting”

Erik Conklin, a graduate student, is conducting a research study to find out more about the benefits of after-school physical activity programs. Your child has been asked to participate in this study because they participate in one of these programs. There will be approximately 60 participants in this study. The purpose of this study is to determine if the physical activity programs serve a purpose that is apparently needed.

If you agree to let your child participate in this study, the following will happen to them:
1) They will be invited to participate as part of a focus group. This focus group will engage with Erik Conklin in one interview session, as a group. The focus group interview session will last approximately 45-90 minutes.

Participation in this study may involve some added risks or discomforts. These include:
1. A potential for the loss of confidentiality. The interview session will be digitally recorded for analysis at a later time. This risk will be mitigated by the participants being referred to as student #1, student #2, etc., instead of their names. Research records will be kept confidential to the extent allowed by law. Research records may be reviewed by: 1) the UCSD Institutional Review Board, 2) the primary investigator (Erik Conklin) and 3) the supervising chairperson of the doctoral committee (Dr. Carolyn Hofstetter).

2. There a potential for boredom. If the focus group interview becomes tedious for the participants, the interviewer will pause the conversation in order for the participants to take a break. The interview will resume after participants feel they are ready to continue.

Because this is a research study, there may also be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

The alternatives to participation in this study are to avoid volunteering.

There may or may not be any direct benefit to your child from participating in this study. The investigator, however, may learn more about the physical activity programs in continuation schools and society may benefit from this knowledge.

Participation in research is entirely voluntary. Your child may refuse to participate or withdraw or refuse to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which they are entitled. If your child
decides that they no longer wish to continue in this study you, or your child only need to notify the primary researcher (Erik Conklin) of your wish for them to stop participating.

The PI may remove your child from the study without your consent if the PI feels it is in their best interest or the best interest of the study. They may also be withdrawn from the study if they do not follow the instructions given by the study personnel.

You and your child will be told if any important new information is found during the course of this study that may affect your child’s wish to continue.

No compensation will be provided for the time volunteered by your child.

There will be no cost to you or your child for participating in this study. The time commitment will be the same amount of time as one period of participation in the after-school physical activity program.

This letter of consent has explained this study to you. If you have other questions or research-related problems, you may reach Erik Conklin at (xxx) xxx-xxxx. You may call the Human Research Protections Program Office at (858) 455-5050 to inquire about your rights as a research subject or to report research-related problems.

You have received a copy of this consent document.

You agree for your child to participate.

_______________________
Student Name (Print)

_______________________
Parent Name (Print)

_______________________
Parent’s signature
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