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# Sustaining school achievement in California's elementary schools after state monitoring

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# SUSTAINING SCHOOL ACHIEVEMENT IN CALIFORNIA'S ELEMENTARY SCHOOLS AFTER STATE MONITORING

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# ABSTRACT

This study examined the Academic Performance Index (API) and Adequate Yearly Progress (AYP) achievement trends between 2004 and 2006 of 58 California public elementary schools after exiting state monitoring and investigated practices for sustaining consistent achievement growth.

Statistical methods were used to analyze statewide achievement trends in 58 former elementary state monitored schools in California. Findings indicated that 57% of schools demonstrated positive achievement growth on API over the 2 years after they exited state monitoring; however, only 44% of the schools were able to sustain 2 years of consecutive API growth. A larger percentage (72%) of schools maintained positive growth on AYP in English language arts and math (79%).

In order to determine sustainability factors, four of the principals from schools with 2 years of positive API growth after exiting state monitoring were interviewed to determine their perception on factors contributing to sustained achievement growth. The interviews revealed each of the schools focused on deep implementation of the Essential Program Components (EPCs) from the Academic Program Survey (APS) with a focus on improving instructional practices. The principals also created coherent systems around a common goal, facilitated culture change, and provided regular accountability, monitoring, and feedback.

The study concluded the SAIT process is a very important intervention but achievement trends varied and did not guarantee sustained achievement growth. The nine EPCs of the APS laid the foundation for sustained achievement growth; however, the

EPCs must work in conjunction with strong leadership practices, strategic steps for English learners and closing the achievement gap, with a clear sustainability plan.

Study outcomes recommend that external support providers engaged in school reform continue their use of the EPCs. They should assist schools with continuous refinement of the EPCs with a focus on instructional practices, capacity building, and collaboration. Providers should also develop school leadership capacity with a focus on systems thinking, monitoring and feedback, and culture change. Finally it is recommended that future school reform efforts should extend over a longer period of time and/or require schools to develop a sustainability plan. Periodic monitoring and support after exiting sanctions is also recommended.

# Chapter One: Foundations of the Study

## *Background*

In the current era of educational accountability, California's public schools are under enormous state and federal pressure to sustain academic achievement growth year after year.

> Nationally this focus is most evident with the implementation of accountability provisions of the federal No Child Left Behind (NCLB) Act of 2001. However, even prior to NCLB, many states and districts had instituted their own performance-based accountability programs that aimed to improve student learning, particularly in low-performing schools, and to provide incentives (both positive and negative) for schools and districts to improve student outcomes (Parish, Bitter, Perez, Gonzalez, 2005, p. I-17).

The California Legislature passed the Public Schools Accountability Act (PSAA) in 1999 prior to NCLB. It authorized California's Academic Program Index (API) (Parish et al., 2005, p. I-17). The API measures student academic performance and the growth of schools within a range from a low of 200 to a high of 1000. It also measures a school's academic achievement growth over time and provides a consistent statewide accountability system. California schools must demonstrate consistent academic achievement growth every year as measured by the state's API. The California Department of Education (CDE) determines their growth targets each year. The growth target is five percent of the difference between the school's previous Base API and the state's goal of 800 if a school's previous API is between 200 and 690. If a school's base API is between 691 and 800 the

growth target is a gain of five points or to a score of 800. If a school's base API is over 800, there growth target is to stay over 800 (CDE, 2008a).

In addition to establishing California's API, PSAA authorized the Immediate Intervention/Underperforming Schools Program (II/USP). In 1999, schools scoring below the 50th percentile were invited to apply for the II/USP grant. Schools in the lowest performance deciles could receive additional state funding if they were selected for the II/USP program (CDE, 2008m). Applying for II/USP funding was optional. The goal of the II/USP funding was to assist selected schools with improving test scores on the API within two years. If they did not, they would face further sanctions (CDE, 2008m). CDE selected 430 schools statewide to receive II/USP funding in the first year and an additional 430 schools in year two and year three. Over a three year period, CDE identified 1290 schools as underperforming.

The II/USP program required schools to contract with an external provider to help them develop and implement an action plan. Schools received $200 per pupil per year to implement their Action Plan and an additional $50,000 to pay for an external provider. Under II/USP, schools analyzed their data, identified specific areas for improvement and determined strategies to improve student achievement. II/USP schools were expected to improve student achievement within two years. Any schools that showed growth on California's Academic Program Index but did not achieve their growth targets were given an additional year and placed "under watch" (Parish et al., 2005, p. I-24). After meeting their growth target for two years, schools were removed from the list of underperforming schools by CDE.

Unfortunately, “only 83 of the initial 430 II/USP schools (19%) met their students' test score growth targets for two consecutive years” (Chrisman, 2004, p. 1). Additionally, the 2003 *Evaluation Study of the Immediate Intervention/Underperforming Schools Program* concluded that overall,

> The impact of II/USP participation on student achievement has been negligible. Any small advantage experienced by II/USP schools relative to comparison schools during program participation dissipated before or soon after program completion (II/USP). There was no evidence II/USP program had the desired effect on student achievement (Parish et al., 2005, p. I-32).

CDE identified the schools not able to exit II/USP after three years and required them to enter state monitoring. California gave these schools additional time, money, and support to exit state sanctions. Each school was given a one time amount of $75,000 and $150 per student to contract with a School Assistance and Intervention Team (SAIT) and to implement the corrective actions identified by SAIT (CDE, 2008n).

CDE required state monitored schools to hire an external SAIT consultant team to assist them with a thorough analysis of data and their ranking on the Essential Program Components (EPCs) found in the Academic Program Survey (APS). The APS requires schools to evaluate their current level of implementation in each of the following nine areas:

1. Instructional Program
2. Instructional Time
3. School Administrator Training Program-Assembly Bill (AB) 430
4. Credentialed Teachers and Teacher Professional Development

5. Student Achievement Monitoring System
6. Ongoing Instructional Assistance and Support for Teachers
7. Teacher Collaboration
8. Instructional Pacing
9. Fiscal Alignment

The SAIT team reviewed the school's achievement data, their scores on the Academic Program Survey, and reviewed the school's documents in order to write corrective actions the school was required to implement. The SAIT team monitored the school's progress on the corrective actions every three months and provided a detailed report to the CDE. SAIT schools had significantly more accountability than schools under II/USP.

Schools exit state monitoring by making significant growth for two consecutive years on their API (CDE, 2008o). A school has up to three years to achieve this goal. CDE provided significant time, resources, and funding to state monitored schools. To justify the costs committed to SAIT, it is important to evaluate its effectiveness in reaching sustained student achievement,

CDE identified 83 elementary state monitored schools statewide between 2002 and 2004. The 2008 SAIT evaluation found "the SAIT Program is effective in helping low performing schools improve classroom instruction and student achievement" (Hatchuel, Tabernik, & Associates, 2008, p. 8). What is unknown is if SAIT contributes to sustainable growth in student achievement once the funding, support, and monitoring are discontinued.

*Problem Statement*

Statewide, there were 83 elementary schools placed in state monitoring between 2002 and 2004. Once identified, these schools contracted for external support from a CDE approved SAIT provider. SAIT providers worked with the school and developed a corrective action plan for the school and monitored the school every three months regarding progress and implementation of their corrective action plans. Once schools exit state monitoring, however, there is no requirement for monitoring progress. CDE does not require SAIT providers to formally monitor former SAIT School's academic achievement once they exit state monitoring. Consequently, it is unknown if elementary schools that exited SAIT can sustain achievement growth after sanctions are completed. The Evaluation Study of the II/USP Accountability Act of 1999 states,

> At this early point, we are unable to assess the actual effectiveness of the SAIT process on improving student outcomes. While a substantial percentage of SAIT schools met their growth targets in the first year of participation (2003-2004), we have minimal evidence at this point to confirm a link between these outcomes and the SAIT process (Parish et al., 2005, p. 9).

It is important to monitor school reform efforts for sustainability because past research shows that school reform efforts frequently fail and are not sustainable. According to Michael Fullan in his article, *The Three Stories of Educational Reform*,

> It takes about three years to achieve successful change in student performance in an elementary school. Depending on size, it takes about six years to do so in a secondary school. While this is good news, there are two serious problems with this finding. First, these successes occur in only a small number of schools; that is,

these reform efforts have not "gone to scale" and been widely reproduced. Second, and equally problematic, there is no guarantee that the initial success will last. Put in terms of the change process, there has been strong adoption and implementation, but not strong institutionalization (Fullan, 2000, p. 1).

### *Purpose of the Study*

The purpose of this study was twofold: a) To examine the achievement trends on California's accountability measures of public elementary schools in California after they exited state monitoring, and b) To identify the practices perceived as contributing to sustainable student achievement growth in former state monitored schools with the highest continuous API growth as reported by the schools' principals.

### *Research Questions*

The following questions guided the study:

1. What were the achievement trends of California public elementary schools on state accountability measures two years after they have exited state monitoring?
    a. To what extent, if at all, was there a statistically-significant relationship between the year a school exited state monitoring and API growth?
    b. To what extent, if at all, was there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in English language arts?
    c. To what extent, if at all, was there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in mathematics?

2. What practices did principals of the elementary schools with two years of positive API growth after exiting state monitoring credit as contributing to sustaining student achievement growth?

### *Importance of the Study*

This study provides information on the sustainability of achievement growth in elementary schools that have exited state monitoring. Additionally, it identified practices at elementary schools that have sustained achievement growth after exiting state monitoring. This study specifically focused on (a) examining state wide data trends for elementary schools that exited state monitoring and (b) examining the practices in elementary schools that exited state monitoring and sustained student achievement growth in California.

This study adds to the growing body of research on school reform efforts. The information from this study is important because current district and school reform efforts in California are modeled after the SAIT process and the use of the Essential Program Components. Therefore, it is critical for state and local level policy makers to understand what factors contribute to sustained reform efforts.

### *Delimitations of the Study*

Due to the nature of this study, the data trends examined were limited to California elementary schools that were selected for II/USP funding between 1999 and 2002, and failed to make their achievement targets on the API during this time and were placed in state monitoring. The quantitative analysis was limited to the schools that exited state monitoring as of 2006 and had available data on the CDE website. The research on principal's or the principal's designee's perceptions was limited to elementary schools that

sustained positive achievement growth on California's API accountability measure for two years or more after exiting state monitoring. The interviewees were limited to those principals or designees who had been at the selected schools for a minimum of six months and had knowledge of their school's achievement trends and practices that contributed to sustained student achievement growth.

### *Limitations of the Study*

The scope of this study was limited to California elementary schools that were identified as underperforming and participated in the II/USP grant and were placed in state monitoring after failing to meet achievement targets. A limitation of this study relates to the relationship this researcher had with a limited number of the schools in the study. The researcher had worked closely with six of the state's 83 former elementary SAIT schools as a Riverside County office employee and had worked with these schools to help improve overall school performance. This relationship could have directly or indirectly influenced the outcome of the study and administrators' willingness to participate, as well as the veracity of their responses on six of the elementary schools in California. The researcher may have brought additional information regarding a school or the SAIT process that could possibly have influenced the interpretation of the data.

Another limitation was the potential for principal mobility at the identified schools. If a principal was relatively new to the school, they may not have had enough information regarding the factors that contributed to sustained achievement growth. Therefore, the depth of knowledge regarding sustainability factors and the amount of time spend preparing for the interview questions may have been a potential limitations for this study.

Lastly, this study was limited to those principals for whom district superintendents gave permission to access and who accepted the invitation to participate as a study subject.

### *Assumptions of the Study*

The quantitative aspect of this study assumed that California's Standardized Testing and Reporting (STAR) reports are accurate and were valid assessment of student achievement. The California Department of Education Standards and Assessment Division published a California Standards Technical Report in March 2009. The report analyzed California's testing efforts and supports the reliability and validity of the tests. The report includes extensive statistical analysis of California's tests and concludes that the tests are valid and reliable. The technical report can be accessed at http://www.cde.ca.gov/ta/tg/sr/technicalrpts.asp.

This study assumed that the principals or the principal's designee participating in this study were the most knowledgeable and credible sources of information about their respective elementary schools and practices that sustain student achievement. Additionally, it was assumed that the responses from the principals' interviews accurately represented the practices at the elementary schools.

### *Operational Definition of Terms*

Academic Performance Index (API)*:* measures the academic performance and growth of schools by using student test score and demographic data. "The cornerstone of California's *Public Schools Accountability Act of 1999*; measures the academic performance and growth of schools on a variety of academic measures" (CDE, 2008e).

Adequate Yearly Progress (AYP): required by the federal No Child Left Behind Act; AYP measures the performance of California schools and districts. “AYP is a statewide accountability system mandated by the No Child Left behind Act of 2001 requiring each state to ensure that all schools and districts make Adequate Yearly Progress” (CDE, 2007b).

English Learner: “An English learner is a K-12 student who, based on objective assessment, has not developed listening, speaking, reading, and writing proficiencies in English sufficient for participation in the regular school program” (CDE, 2008k).

High Priority: “Assists the lowest performing schools, schools in deciles 1 to 5 according to statewide 2000 Academic Performance Index (API), to increase students' achievement” (CDE, 2008g).

Immediate Intervention/Underperforming Schools Program (II/USP): Guidance and resources for II/USP that provides funds to selected schools (CDE, 2007a).

No Child Left Behind (NCLB): a federal program “to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach proficiency on State academic achievement standards and academic assessments” (CDE, 2007b).

Public Schools Accountability Act (PSAA): “Authorizes the creation of an educational accountability system for California public schools. Its primary goal is to help schools improve and to measure the academic achievement of all students” (CDE, 2008j).

School Assistance and Intervention Teams (SAIT): “The purpose of a SAIT is to investigate and provide intensive support and monitoring to assist state-monitored schools in improving student learning” (CDE, 2008n).

STAR Program-Standardized Testing and Reporting (STAR) program*:* "Test results are used for student and school accountability purposes" (CDE, 2007b).

## Organization of the Study

This study is organized in five chapters. The first chapter provides the background and foundation of the study. Chapter one contains a brief history of PSAA in California and the state sanctions for schools identified as underperforming. It lays the case for examining if elementary school's are able to sustain achievement growth consistently after being identified as underperforming and placed in state monitoring.

Chapter two provides a history of California education reform between 1994 and 2008 and provides a summary of previous evaluation studies done on II/USP and state monitored schools. A review of the research behind the Essential Program components is provided and a summary of practices found in schools that are able to sustain academic achievement growth.

Chapter three outlines the methods used by the research in this study. The chapter includes a restatement of the research questions, the specifics of the research design, a discussion of human subjects and the characteristics that will be measured in the study. Next, chapter three outlines the data collection procedures, the instruments that will be used and provides a summary of the studies research methods.

Chapter four reviews the statistical analysis of the data, identifies the themes from the principal interviews, and presents the findings of the study. This chapter presents the analysis of the data collected and its relationship to the research questions.

Chapter five presents conclusions and implications from the study. It also presents recommendations for policy makers and future research.

# Chapter Two: Review of the Literature

## *Introduction*

In order to examine the literature on school reform and sustained achievement growth, this chapter examines four areas: (a) the history of educational accountability in California from 1994 to 2009, (b) a summary of previous studies done on California's Immediate Intervention/Underperforming Schools Program and School Assistance and Intervention Team schools (SAIT), (c) a review of previous literature reviews that synthesize the literature foundation behind the components of the Essential Program Components (EPCs) used in the SAIT process, and (d) the characteristics found in schools that are able to sustain academic achievement growth.

## *History of California's Accountability System*

Many changes have occurred in California's Accountability system since the mid 1990s. In 1994, the Improving America's Schools Act published by the United States Department of Education proposed school accountability for student performance on state assessments. As the accountability movement grew across the United States, the California legislature enacted several new policies to improve student achievement statewide. California Education Code 52050-52050.5 (California Department of Education, 2002a) outlines the intent of California's accountability model. The purpose is to provide "academic development of each pupil and prepare each pupil, to the extent of his or her ability, to become a lifelong learner, equipped to live and succeed within the economic and societal complexities of the 21st century." Additionally, the Education Code states the legislation focuses on providing a high quality education consistent with statewide content and performance standards, a meaningful assessment and reporting system, and authorized

the development of a statewide comprehensive accountability system (California Education Code 52050-52050.5).

One of California's initial accountability actions was implementation of the Standardized Testing and Reporting (STAR) Program in 1997. STAR "requires that all public school districts in California use a single standardized test, designated by the State Board of Education to test each student in grades two through eleven by May 15 of each fiscal year, beginning in 1997-98" (CDE, 2002b). In 1998, the State Board of Education selected the Stanford Achievement Test, ninth edition (SAT-9) as the assessment tool used for all students in grades two through eleven to measure school performance and to hold them accountable for student performance. In 2003, California transitioned to the California Standards Test (CST), which more accurately assessed California's content area standards (Hatchuel, et al., 2008, p. 18).

> Thus, although different tests have been used (SAT 9, the CST, and others), the STAR system has been accumulating state assessment data in English Language Arts (ELA) and mathematics across grades 2-11 since 1998. These data are reported at the school level, using a common performance scales which measure proficiency levels" (Hatchuel et al., p. 18).

From 1995 to 1998, California also completed the development of content and performance standards in language arts, math, science, social science, and visual and performing arts. The standards identified the expectations of student learning by grade level and content area. Additionally, California developed frameworks in these areas to guide implementation of the content standards and requirements for instructional materials.

*Public Schools Accountability Act*

In 1999, California implemented the Public Schools Accountability Act (PSAA) which authorized a new educational accountability system for public schools.

> PSAA is based on the dual premise that accountability in education should be aligned with the central goals of the system – that is, student achievement – and that schools should be the principal unit of accountability, since the entire school environment influences student success (Harr, Parrish, Socias, & Gubbins, 2007, p. 1).

PSAA authorized three main initiatives: the Academic Performance Index (API), the Immediate Intervention/ Underperforming Schools Program (II/USP), and the Governor's Performance Award (GPA) program (CDE, 2008f).

The API measures the academic achievement performance and growth of schools in California. It is scaled from 200 to 1000 and is calculated using a complex formula based on individual student achievement scores. Each year, CDE identifies each school's API growth target for the year. The growth target is five percent of the distance between the school's current API and the state's goal of 800. Schools already over 800 must remain above this amount (American Institutes for Research, 2003, p. 1; CDE, 2008i).

II/USP provided funding to assist low performing schools to improve academic achievement. Schools in the bottom half of API scores and failing to meet API annual growth targets could apply for additional funding to improve achievement trends. Selected schools received an initial amount of $50,000 and $200 per student to hire an external provider, develop an II/USP plan and implement the plan over a two to three year period (American Institutes for Research, 2003, p. 2). In return, II/USP schools

agreed to further accountability sanctions and state monitoring if they did not improve student achievement.

The third component of PSAA was the High Achieving/Improving Schools Program (HA/ISP), also known as the Governor's Performance Award (GPA) program. This program rewarded schools that meet school wide API growth targets for all of their significant subgroups of students (American Institutes for Research, 2003, p. 2). The awards were based on improved student academic achievement on California's state assessment between 2000 and 2001. "Fifty-seven percent of all K-12 public schools met their growth targets, and 48 percent qualified for the awards. Schools may use the award money for any purpose designated by a team of teachers, parents, administrators and students at the school site" (Office of the Governor, 2002). Schools used this funding in a variety of ways which included classroom library materials, school site improvements and computer software. In order to be eligible, all student subgroups had to meet or exceed the school's API target or have an increase of 4 API points and have a 95% participation rate (Office of the Governor). Unfortunately, in 2003, budget resources were no longer available to support the GPA program (Chladek, 2002, p. 4) and the program was eliminated.

California's educational reform efforts had begun.

*No Child Left Behind*

Amidst California's school reform efforts, President George W. Bush signed the No Child Left Behind (NCLB) Act of 2001 (Public Law 107-110) on January 8, 2002. Its purpose was to improve public schools across the United States. NCLB reauthorized the Elementary and Secondary Education Act of 1965 (ESEA) to provide all students with a

fair and equal opportunity to have a high-quality education. NCLB required annual testing in grades three through eight and imposed sanctions on schools that failed to make adequate yearly progress.

> The Elementary and Secondary Act is the federal law authorizing and regulating the majority of K-12 education programs. The first part, known as Title 1 of the Elementary and Secondary Education Act was originally enacted in 1965 (Public law 89-10) as the cornerstone of Lyndon B. Johnson's 'War on Poverty.' The act authorized grants for elementary and secondary school programs for children of low income families, school library materials, textbooks and instructional materials for school children; supplementary education centers and services; strengthening state education agencies, and educational research and research training (Ingram, 2005, p. 2).

Under NCLB, every state was required to set grade-level standards and create a system to determine how students are meeting those standards. The system had to be based on challenging benchmarks in ELA and mathematics. All students in grades 3 to 8 were required to be tested each year to ensure they reached proficiency by 2014. NCLB holds schools and school districts accountable for results and for ensuring all students are learning. School districts and schools that fail to meet Adequate Yearly Progress (AYP) must undergo improvement, corrective action, and restructuring procedures designed to get them back on track and meet standards. NCLB empowers parents, educators, and community members by allowing them access to data and annual assessment results on the quality of the schools, the qualifications of the teachers, and the progress of the students. The statewide reports include disaggregated data based on race, gender,

disability, economic status, and limited English proficiency. They also show each school's overall student performance and the success schools have in closing the achievement gap between disadvantaged and non-disadvantaged students.

Title I of NCLB requires each state define AYP criteria. Schools must meet these proficiency standards for all significant student populations yearly as part of each state's accountability assessment. The goal of NCLB is to have 100% of the nation's students proficient by 2014. California's achievement targets are demonstrated on Figure 1 and Figure 2.

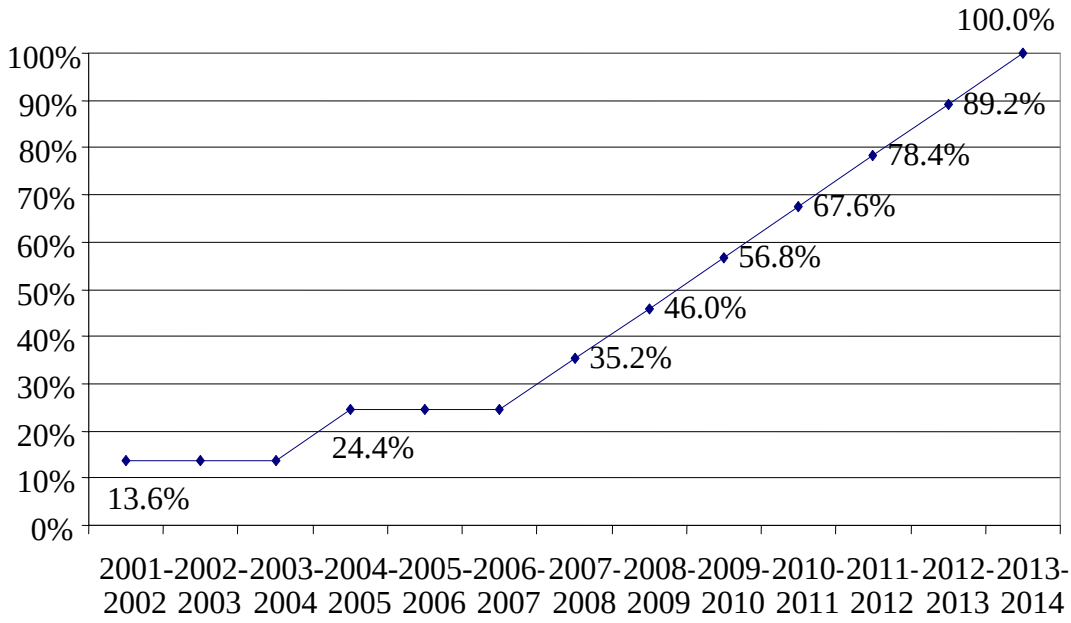


*Figure 1*. Annual measurable objectives for grades 2-8 percent proficient ELA.

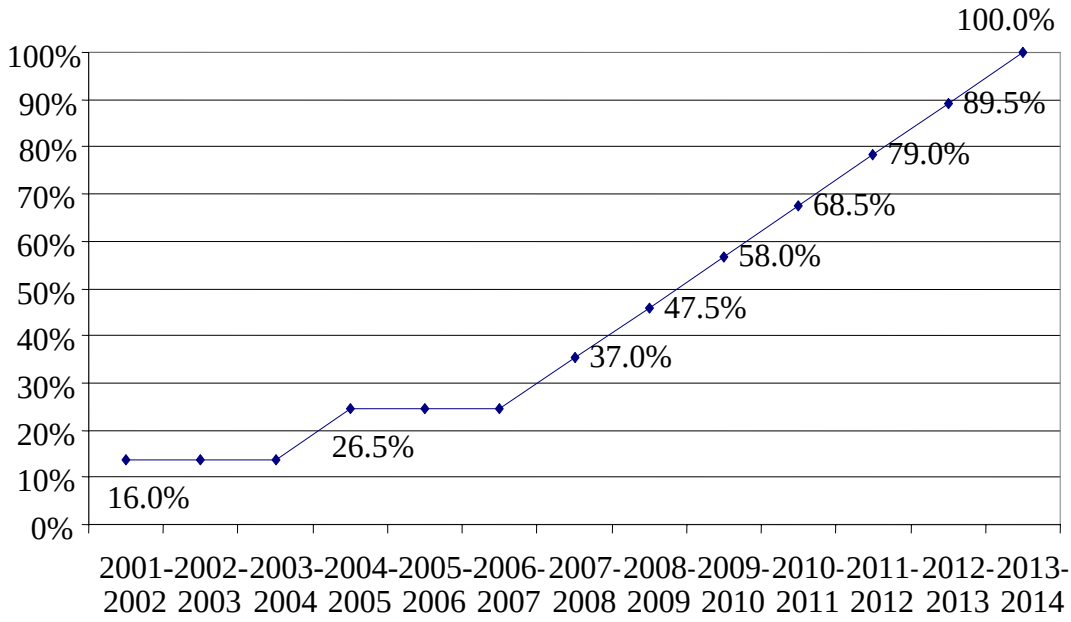


*Figure 2.* Annual measurable objectives for grades 2-8 percent proficient math.

These achievement targets are "reshaping the mission of education. Schools are now expected not only to offer education, but to ensure learning" (Darling-Hammond, 1996, p. 5).

The NCLB policies and emphasis on accountability have increased pressure on schools to strategically change their practices to improve student achievement.

> Under No Child Left Behind, states are working to close the achievement gap and make sure all students, including those who are disadvantaged, achieve academic proficiency. Schools not making progress must take corrective actions by providing supplemental services, such as free tutoring or after-school assistance. If a school does not make adequate yearly progress within five years, the principal must make dramatic changes as to how the school is run (US Department of Education, 2004).

These accountability mandates challenge high poverty schools with large numbers of low socio-economic students and English language learners.

> More than any other federal education law in history, NCLB has affected families, classrooms and school districts throughout the country. Virtually every aspect of schooling—from what is taught in elementary, middle, and high school classes, to how teachers are hired, to how money is allocated—has been affected by the statute (Aspen Institute, 2007, p. 12).

As a result of changes in federal accountability, California modified the STAR assessment to meet NCLB requirements. The STAR changed to the California Achievement Test, sixth edition (CAT/6) and the state completed the transition to standards-based assessments in the form of the California Standards Test (CST) in 2002. The CST measures student's mastery of California's academic content standards in English-language arts, mathematics, history-social science, and science. Students score at one of five proficiency levels: advanced, proficient, basic, below basic, and far below basic. These proficiency levels measure student proficiency as required by NCLB.

As a result of NCLB, accountability in California increased for both individual schools and school districts. Schools and districts were now required to meet state accountability requirements for AYP for NCLB and API growth targets for PSAA. California needed to develop a school reform model to help schools meet these two accountability requirements.

At this point, the CDE developed the Academic Program Survey (APS) (CDE, 2008r). Research on high performing schools and the elements of Reading First were used to develop the Nine Essential Program Components (EPCs) of the APS (Wells,

Pearson, & Sousa, 2006, p. 6). A review of the literature on the EPCs can be found later in this chapter. The APS is now used as a standard document in California's different educational reform models.

*State Monitored Schools*

In 2003, accountability sanction for II/USP schools began in California. Schools that received II/USP money were now accountable for student achievement growth. Between 1999 and 2002, CDE identified 1690 schools that did not meet PSAA Standards. As stated in the legislation, the policy identified specific consequences for lack of growth during participation in II/USP. Schools that met their academic growth targets each year during II/USP implementation exited the program. II/USP schools that made API but did not make their identified targets were given an extra year of funding to improve academic achievement and were placed "on watch". Schools that did not make API growth were placed in state monitoring (Parish et al., 2005, p. 27). Schools under state monitoring were required to contract with a School Assistance and Intervention Team (SAIT). It was their role to work with schools that had not exited II/USP and assist them with improving student achievement.

Additionally, some schools entered state monitoring as part of a second intervention program called the High Priority Schools Grant Program (CDE, 2008f). The High Priority Grant (HPSGP), like II/USP, was designed to improve student achievement in California's low performing schools. Schools volunteering to receive funding were held accountable for improving student achievement. "In 2001-02, 366 schools received HPSGP funds, and in 2005-06, 508 schools received HPSGP funding" (Hatchuel et al., 2008, p. 13).

Achievement expectations for High Priority schools were slightly different than II/USP schools. High Priority schools were required to meet their API growth targets for three consecutive years or show a minimum of 10 API points over three years with at least two of the three years with positive growth. High Priority schools that did not achieve these academic targets were placed in state monitoring (Hatchuel et al., 2008, p. 13).

As a result of II/USP and HPSGP, California had a large number of schools under state sanctions. Consequently, it was important for CDE to develop a model of school reform to help schools entering state monitoring. CDE first began with creating a theory of actions that guided the work of. According to the II/USP evaluation study of 2005, the state monitoring process is based on the following assumptions regarding student achievement:

1. Unsuccessful schools lack one or more essential components. This is one form of a "gap" model, which assumes that once schools fully implement each component and fill each gap, student results will improve.
2. A focus on the instructional program and teacher/principal knowledge and skills will improve student learning. The nine essential components do not include non-academic components such as school climate or facilities.
3. Consistent and regular monitoring of progress on the nine essential components by an informed external entity will ensure proper and full implementation of these components (Parish et al., 2005, p. 29).

The SAIT process focused on fully implementing the nine essential program components identified as critical for student success.

> The APS is used to measure the level of implementation of the essential program components and to identify priority areas of need. The survey is completed by staff members and then verified by the SAIT team through document review and interviews (Parish et al., 2005, p. 124).

Approved SAIT teams completed the SAIT work. The teams submit proposals to CDE outlining their experience with underperforming schools and their capacity and expertise to assist schools. Once approved, SAIT teams were required to attend formal SAIT training in order to be an approved SAIT provider. During 2002-2004 when the schools in this study were part of state monitoring, there were a total of 45 possible SAIT teams approved in California (Parish et al., 2005, p. 125).

Once contracted to work as a SAIT with a state monitored schools, the SAIT team conducted an audit of the school's instructional program. First, the SAIT team met with district and site leadership to outline the SAIT process. Next, they taught the site leaders how to administer and score the APS using the provided rubric. The goal of this process was to have the school evaluate and reflect on their current practices regarding the essential program components. Additionally, schools were required to do a detailed review of current achievement data and data trends for the previous three years.

Once the school completed their analysis, the SAIT team did a verification visit at the school site. The school was required to provide evidence regarding each of the essential program components that validated the score they gave themselves. The role of the SAIT team was to verify the accuracy of the evidence and the school's scores on the APS. SAIT teams could change the scores if the evidence did not warrant the score the school gave itself. Additionally, the SAIT team interviewed administrators and teachers

to continue to verify the accuracy of the APS and to gain a greater understanding of the school's needs. The use of document review, interviews, and data analysis allowed the SAIT team to triangulate the data and to validate the APS scores. The school was ranked on a one to four scale on each of the nine components of the APS. The possible scores were minimally, partially, substantially, or fully. Any area that has a score of minimally or partially required a corrective action written into the school's SAIT plan. The goal of the SAIT process was to have every component at substantially or fully on the APS.

Once the analysis was completed, the SAIT team wrote a Report of Findings. In the report, specific corrective actions were written as well as benchmark activities, persons responsible, and completion dates (Parish et al., 2005, p. 26). The Report of Findings was submitted to the District's Local Governing Board for approval and was submitted to CDE as an official document and posted on the online state monitoring system. Once the report of findings was completed, the team worked directly with the school to implement the corrective actions. In addition, the team conducted three formal monitoring visits each school year and submitted a monitoring report to CDE (Parish et al, p. 126). Official state monitoring occurred every few months and the SAIT team was required to review data and progress toward the corrective actions and benchmarks. During monitoring visits, the team examined evidence that demonstrated the school's progress toward their goals and wrote a report of progress that documented the school's progress and next steps. The report was presented to the Local Governing Board as an information item after each SAIT report was filed with CDE.

Schools that entered state monitoring were expected to receive intensive support and assistance when implementing corrective actions. Schools had up to three years to meet the exit criteria for exiting SAIT (Hatchuel et al., 2008, p. 14).

### *Previous Research on II/USP and SAIT Schools*

This study focused on the sustainability of achievement growth on California's accountability measures in schools that were initially in II/USP and then entered state monitoring due to lack of achievement growth. CDE has previously published a report that evaluated the II/USP program. Published in 2005, the report found several significant findings regarding II/USP. The report also examined the SAIT process but the study did not draw any conclusions because the writers lacked data regarding SAIT schools' achievement. This study will build off of the information found in the *Evaluation Study of the Immediate Intervention/Underperforming Schools Program of the Public Schools Accountability Act of 1999* (Parrish et al, 2005). This section will summarize this report's key findings.

#### *II/USP Findings*

In 2004, CDE contracted with American Institutes for Research to conduct a continuation study of the II/USP component of PSAA. The study's purpose was to provide information needed to shape future accountability programs and legislation (Parrish et al., 2005, p. 17). It examined achievement trends from II/USP schools and did a comparison study with schools that had similar demographics. Additionally, the researchers administered surveys, and conducted interviews of site and district administrators, SAIT providers, and teachers to gather in-depth information. The mixed methodology approach was conducted at 21 case study schools across the three cohorts of

II/USP schools (Parrish, et al). The study contains several conclusions, which are summarized below.

The first conclusion found "the impact of II/USP participation on student achievement has been negligible. Any small advantage experienced by II/USP schools relative to comparison schools during program participation dissipated before or soon after program completion" (Parrish, et al., 2005, p. vi). The study identified several possibilities for this conclusion. First, increased accountability requirements had created a statewide trend of achievement gains in low-performing schools. There were modest differences between II/USP and the comparisons schools. However, some of the II/USP schools did show larger achievement gains, (.02 standard deviations) but the trends were inconsistent. "This modest level of improvement, even if sustained, can be considered fairly insignificant from an educational standpoint (Cohen, 1969), and when considering the amount of funds and effort invested in II/USP" (Parrish, et al, p. vi).

Another possible explanation for the variation of growth could be related factors such as district policies and school's capacity to change their practices. A third explanation was improper implementation of the state's theory of practice and the possibility that schools and districts were more focused on meeting NCLB requirements (AYP) instead of API. Other possibilities identified were inadequate guidance, lack of motivation to change, and lack of clarity. A final possibility is the school's inability to sustain initiatives after II/USP funding was removed from the schools. According to interviews in the study, schools indicated that programs were cut due to the elimination of funding. The schools were not able to sustain programs that they had implemented (Parrish et al., 2005).

The study's second conclusion was that II/USP contributed to growth in some schools (Parrish et al., 2005, p. 137). When interviewed, the schools that demonstrated growth credited building capacity, instructional coherence, and systematic assessment and data based decision-making. Factors identified that inhibited growth included late distribution of funds, limited guidance, lack of communication, and limited support from their external provider.

Another conclusion showed district policies were potential factors contributing to school success. These included technical assistance and professional development, particularly around systematic assessment and data use, as well as the targeting of resources to low-performing schools (Parrish et al., 2005, p. 138).

An additional conclusion found that competing interviews indicated that most schools were focused on meeting AYP targets instead of API targets and they did not focus on II/USP accountability requirements (Parrish et al., 2005, p. 139).

The study also examined II/USP's effect on student sub-groups. The study found statistically significant gains in the English learner subgroup since 1999 compared to English only students. However, there was no effect in elementary schools and there was an inconsistent pattern in middle schools. It was most significant in high schools. The achievement gap for special education students widened in II/USP schools and there was no consistent effect for students with disabilities. Students on free and reduced lunch achievement data also varied but there was slight evidence of a positive effect on this subgroup in II/USP schools (Parrish et al., 2005, p. I-86).

Even though the achievement data did not show statistical significance, the evaluation study did discover essential factors for school wide growth. Telephone

interviews with 20 of the growth schools indicated “the most essential factors for school wide growth in student achievement were reported to be a coherent instructional program tied to the standards, leadership, professional development (including instructional coaches and teacher collaboration), and systematic assessment and data-based decision-making” (Parrish, et al., 2005, p. 88). Other factors included (a) staff buy-in; (b) clarity, specificity, and relevance, of strategies implemented the level of focus at the school on implementation of their action plan; (c) and the leader’s ability to create a sense of urgency (Parrish et al, p. 88).

In addition to the CDE’s evaluation study, Valerie Chrisman completed a dissertation in 2004 on the 85 schools that demonstrated positive achievement growth from the first cohort of II/USP schools. Her interviews and surveys of schools that had made their API achievement targets indicated the use of intervention and English language development programs as critical for improved student achievement. Additionally, high expectations for student learning and a clear plan for improving student achievement were found at schools that showed the most achievement growth (Chrisman, 2004, p. 76). There was also evidence of strong teacher, site, and district leadership in the schools that showed the most achievement growth (Chrisman, p. 77). Finally, there was evidence of professional development on strong teaching practices and strategies that were implemented school wide (Chrisman, p. 97). Additionally, teachers worked collaboratively to develop lessons focused on teaching grade level standards. The collaborative teams used common instructional pacing and common assessments as they collaborated on instructional practices.

Other characteristics of the performing II/USP schools were the staff's belief that they could improve student achievement and their ability to specifically identify how they were able to achieve growth. A school wide focus on student achievement was evident and successes were celebrated (Chrisman, 2004, p. 81). Instructional minutes were increased in language arts and math and the schools also indicated that a strong and supportive district office played an important role in improving student achievement. Teachers at the successful schools engaged in regular teacher collaboration, professional development regarding State Board approved instructional materials and they received coaching in their instructional practices (Chrisman, p. 95).

Both of the above studies also identified the importance of district and site leadership, strong coherent instructional programs, staff buy-in on the improvement process, teacher collaboration, use of data, and implementation of specific instructional strategies.

*SAIT Findings*

CDE's evaluation of PSAA also included initial research on SAIT schools. The study was completed in the early stages of SAIT so there were no findings regarding SAIT's effectiveness.

> Since schools did not start implementing the revised SAIT process until the 2003-04 school year, it is difficult to draw concrete conclusions about the effect the SAIT process has had on student achievement. However, it is worth noting that of the 30 schools that entered the SAIT process in the 2003-04 school year, 70 percent met both their school wide API and comparable improvement targets for that year. Of the remaining schools, 13 percent met one of the growth targets,

> while 17 percent did not meet either growth target. While a substantial portion of schools undergoing the SAIT process met their growth targets in the first year, it is not clear to what extent the process contributed to this growth, as the intervention had only been in place for a part of the school year and in some cases for only a few months (Parrish et al., 2005, p. 128).

In addition to examining the initial data trends, the report included telephone interviews to obtain additional information on SAIT. The interviews showed that SAIT established basic components in the language arts and math programs but it did not address leadership concerns, school culture, or instructional practices. The SAIT process also did not address English learners and students with disabilities, two important student sub-groups (Parrish et al., 2005, p. 33).

Another finding from the SAIT interviews indicated differences in support from SAIT providers and district office support. Some providers did the minimum three visits a year while others provided additional support (Parrish, et al., 2005, p. 33).

The primary SAIT recommendation from the report states, "the state should engage in ongoing assessment of the most successful and effective methods for realizing school improvement within the state monitoring process" (Parrish et al., 2005, p. 147).

Additional recommendations include adding components that address the instruction of English learner and special education populations, and school culture. It is also recommended that SAIT teams be allowed to visit classrooms.

Finally, in 2008, CDE received an evaluation study of the SAIT process. The study's analysis of achievement trends indicate:

> English language arts (ELA) and mathematics growth rates for the overall group of SAIT schools exceed the average growth rates of California deciles 1-5 schools and for all California schools. Results also suggest that growth rates for most significant subgroups mirror those of the entire sample. Significant subgroups that exceeded the average growth rates statewide and in deciles 1-5 to a statistically degree included: socioeconomically disadvantaged students, students with disabilities, Hispanics or Latinos, and English language learners. Only the African American subgroup consistently failed to achieve statistically significant increases in ELA and math performance (Hatchuel et al., 2008, p. 6).

The study also examined the EPCs found in the APS. The study concluded that implementation of the EPCs was positively related to improved instruction and increased learning. However, it was recommended that the EPCs be modified to specifically address English learners and students with disabilities (Hatchuel et al., 2008, p. 6).

The study's findings on how SAIT is implemented at the school level identified that most staffs believed the SAIT process improved their school. Strong leadership, correctly assessing students and placing them in appropriate instructional programs and teacher professional development on the state adopted instructional programs (SB 472) were keys to success. Other important factors included having a data management system, strong district support, and alignment of their Single School Plan for Student Achievement (Hatchuel et al., 2008, p. 6).

Findings showed that SAIT providers had a positive impact on school achievement, especially when they focused on instructional leadership, improving classroom instruction, and working collaboratively with the school. Building trust and

relationships with schools, assisting them with tasks they did not have the capacity to perform, principal coaching, and direct support for each of the EPCs and working with the district to provide support also improved achievement (Hatchuel et al., 2008). Overall, the study concluded that (a) SAIT is effective in helping low performing schools improve classroom instruction and student achievement; (b) the EPCs help low performing schools improve academic achievement; (c) the nine EPCs are more effective when all components are addressed in combination; (d) principal leadership is associated with success; (e) district participation and support aids successful EPC implementation; (f) SAIT providers plays a key role in the SAIT process; (g) and exited schools would like to continue implementing the EPCs, but often do not feel they have the support or resources to do so (Hatchuel et al., p. 9).

The evaluation study also recommends further study on sustainability of achievement growth in SAIT schools. “Sustainability is another topic that emerged in the data analysis and merits future research” (Hatchuel et al., 2008, p. 13).

*Summary of Previous II/USP and SAIT Findings*

When examining the four studies around II/USP and SAIT, several themes emerge. The first theme is the importance of effective leadership at the school. School leaders are critical to a school’s success. In the schools that showed growth, the leaders convinced staff members of the need for change, maintained a clear focus on student achievement and the implementation of the action plan, and clearly stated expectations and goals. A second theme was instructional coherence aligned with state standards. Instructional coherence is when “a common instructional framework guides curriculum, teaching, assessment, and learning climate. This framework combines specific

expectations for student learning with specific strategies and materials to guide teaching and assessment" (Newmann, Smith, Allensworth, Bryk, 2001, p. 14). A third theme was a focus on student achievement through systematic assessment and data based decision making. A fourth theme was professional development and coaching. This was evidenced through an existence of strong instructional programs, effective strategies, strong teaching practices, teacher collaboration, and the use of academic coaches. A fifth theme was strong district policies and support that assisted schools with improving achievement. The studies found that district policies could help or hinder a school's achievement growth. In schools that showed growth, the district provided regular support. Lastly, the studies identified the importance of the outside provider working with the school. They identified the importance of building relationships, principal coaching, capacity building, assistance with all aspects of the APS and facilitating support from the school district.

*The Essential Program Components of the Academic Program Survey*

The previous studies on II/USP and SAIT clearly articulated the importance of instructional coherence and the EPCs. In California, the EPCs identified as critical to improving student achievement are:

1. Instructional Program
2. Instructional Time
3. School Administrator Training Program-Assembly Bill (AB) 430
4. Credentialed Teachers and Teacher Professional Development
5. Student Achievement Monitoring System
6. Ongoing Instructional Assistance and Support for Teachers

7. Teacher Collaboration
8. Instructional Pacing
9. Fiscal Alignment

Each of these nine Essential Program Components (EPCs), were selected to increase student achievement in ELA and math.

> By focusing on the instructional core—curriculum and instruction, and supports for curriculum and instruction— the EPCs aim to ensure the School Assistance and Intervention Team (SAIT) process remains focused intensively on the improvement of student achievement in key academic subject areas (American Institutes for Research, 2006, p. 1).

The goal of the EPCs is to create instructional coherence across the school in language arts and math. All nine of the components are designed to work together to develop an instructional program focused on state standards and standards aligned instructional materials.

> The EPCs are designed to serve as the foundation of an effective improvement process. However, each school has unique challenges and should be examined closely to identify individual needs. Any improvement process must be not only comprehensive, but also intensive and customized to ensure that the process addresses the factors that have most hindered improvement in student achievement in a particular context (American Institutes for Research, 2006 p. 2).

The next section reviews previous literature reviews and research summaries that lay the research foundation behind each of the program components and their contribution to achievement growth.

*Instructional Program*

The first EPC is defined as:

> Use of State Board of Education (SBE) adopted (kindergarten through grade eight) or standards-aligned (grade nine through twelve) English-language arts and mathematics instructional materials, including intervention materials" (CDE, 2008d). The rubric used to score this component defines proficiency as "the school/district provides the most recent SBE adopted core instructional programs, including accelerated interventions, for reading/language arts (2002-08 adoption) and mathematics (2001-07 adoption), documented to be in daily use in every classroom with materials for every student (CDE, 2008d).

In order to successfully implement the first EPC, a school must demonstrate standards aligned instruction for all students. In order to achieve this, the EPCs require schools to use common State Board of Education (SBE) approved instructional materials. California's SBE approved instructional materials are written to specific criteria outlined in the California content frameworks and are subject to a rigorous review by the Instructional Material Advisory Panel (IMAP) to determine alignment with state standards and the state frameworks. California content standards outline specific learning expectations for students in California schools by the end of each grade level. "Content standards, combined with performance standards, which gauge the degree to which students are meeting grade level content standards, go beyond setting common and coherent curricular goals by providing a framework for measuring whether students are making progress" (O'Day & Smith, 1993 as cited in American Institutes for Research, 2006 p. 3). The usage of SBE approved instructional materials is designed to assist low

performing schools with aligning their instructional program to state standards and providing instructional coherence across the school.

Standards based instruction and instructional coherence is well documented in educational literature. “The Improving America’s Schools Act (IASA) of 1994 which reauthorized the Elementary and Secondary Education Act of 1965 (ESEA) established a core belief that disadvantaged children should have access to challenging academic standards” (Mid-continent Research for Education and Learning (MCREL), 2000, p. 21). Standards provide clear guidance on expectations for student learning and provide a road map that guides instructional goals for educators, families, and students. “Administrators, teachers, students, parents, and the community need a clear vision of what is expected in terms of student learning. Clarity is achieved when districts and schools formally identify standards and then use them consistently throughout the curriculum process” (Carr & Harris, 2001, p. 2). The standards based movement gained momentum in response to the *A Nation at Risk* report published in 1983. The publication stated, “Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world” (National Commission on Excellence in Education, 1983). In their findings, the report states:

> We recommend that schools, colleges, and universities adopt more rigorous and measurable standards, and higher expectations, for academic performance and student conduct, and that 4-year colleges and universities raise their requirements for admission. This will help students do their best educationally with challenging

> materials in an environment that supports learning and authentic accomplishment (National Commission on Excellence in Education, 1983).

Following this report, the standards based movement was strongly encouraged and supported by former Assistant Secretary of Education, Diane Ravitch in her book, *National Standards in American Education: A Citizen's Guide* (Ravitch, 1995).

> Ravitch explains the rationale for standards in a straightforward manner: Americans...expect strict standards to govern construction of buildings, bridges, highways, and tunnels; shoddy work would put lives at risk. They expect stringent standards to protect their drinking water, the food they eat, and the air they breathe.... Standards are created because they improve the activity of life (Ravitch, 1995, p. 89 as cited in Marzano, & Kendall, 1997, p. 2).

Standards were further encouraged by Goals 2000 which called for higher achievement expectations and academic standards. The Goals 2000: Educate America Act was signed into law on March 31, 1994 and provided additional resources to schools to improve student achievement. The act also "established National Education Standards and Improvement Council to examine and certify national and state content, student performance, opportunity-to-learn standards, and assessment systems voluntarily submitted by states" (North Central Regional Educational Laboratory [NCREL], 1994). The standards based reform efforts were taking hold across the nation.

Educational researchers have also supported standards based reform efforts. Elmore in *Building a Structure for School Leadership* (1996) states that "standards based reform is based on a very simple concept; schools should be held accountable for student

learning. Additionally, parents and students should know what students are expected to learn and what teachers are expected to teach" (p. 4).

Standards based instruction is also supported in Marzano's book *What Works in Schools* (2003). The study's meta-analysis identifies a "guaranteed and viable curriculum" (p. 19) as the number one factor influencing achievement. The guaranteed curriculum is what schools define as standards that are essential for all students to learn. A viable curriculum is what we can realistically teach during the time available. A guaranteed and viable curriculum ensures that all teachers know exactly what content to teach and when to teach it (Marzano).

In an article by Schmoker and Marzano (1999) on standards based education, they state that "clear, intelligible standards are a pillar of higher achievement. Aligned with appropriate assessments, they can help us realize the dream of learning for all. They are the heart of the infrastructure for school improvement" (Schmoker & Marzano, 1999, p. 18).

The National Center for Education Achievement identifies instructional programs, practices, and arrangements as part of their best practices framework. This framework recommends that schools provide and use evidence based instructional programs and ensures the use of these programs in every classroom. One of the critical attributes is that the instructional programs that are used in classrooms should be aligned to content standards and learning objectives and provide teachers with the research based materials needed to support student's attainment of standards (Just for the Kids, 1995). The Just for the Kids report also states that an important component of a strong instructional program is that principals ensure that the instructional materials are fully implemented and

provides regular feedback to teachers on instruction and learning (Just for the Kids, 1995).

The *Improving Chicago's Schools* Study (Newmann et al. 2001) published by the Consortium on Chicago School Research identified instructional coherence as critical to schools success. Instructional coherence is when "a common instructional framework guides curriculum, teaching, assessment, and learning climate. This framework combines specific expectations for student learning with specific strategies and materials to guide teaching and assessment" (Newmann et al., 2001, p. 14).

A study of accountability and school reform in Rhode Island found that the highest performing schools had strong alignment between curriculum and state standards (Rhode Island Center on Education Policy, 2008, p. 1).

In light of the standards based reform movement, California established content area standards and frameworks that articulated expectations for student learning and provide criteria for instructional materials. California has also ensured that standards aligned instructional materials have been in place in California classrooms since 2002.

Studies focused on California achievement cite instruction to standards as an important component in school reform. "A recent study of California schools that examines the relationship between educational factors and student achievement finds a strong relationship between the implementation of a coherent curriculum and higher Academic Performance Index (API) scores" (Williams, Kirst, & Haertel, 2005 as cited in American Institutes for Research, 2006 p. 3). Additionally, Lance Izumi, the Director of the Pacific Research Institute for Public Policy (PRI) Center for School Reform, led a study of high-poverty-high-performing schools in California in 2002. The institute

conducted in-depth interviews with eight principals in schools that had at least 80% of their students on free-lunch—an indicator of school poverty levels; a state ranking of 7 out of 10 in academic performance on California's API; and a substantial number of African American and or Hispanic students. The study identified that most of the schools used a Direct Instruction method. "Direct instruction is characterized, generally, by teaching in small, logically sequential steps with student practice after each step, guiding students after initial practice, and ensuring that all students experience a high level of successful practice" (Izumi, 2002, p. 14). These schools also identified standards-focused instruction and made frequent use of assessments as important components for improving student achievement. Standards-based professional development, as well as training on the use of state adopted materials supporting instruction in classrooms supported this goal. "It's not a mystery, Bennet Kew Elementary School teachers know exactly what it is they need to teach. They know exactly what kind of academic achievement must be expected from the kids. And so, they meet these expectations" (Izumi, p. 20). A strong curriculum was also identified as one of the most important factors in improving student achievement.

A second study conducted by O'Neill (2003) examined 28 high-poverty-high-performing schools in California through the use of a questionnaire. The recurring themes of high-poverty-high performing schools are: (a) identifying and setting clear and high academic standards for all students; (b) a strong collaborative professional learning community; and (c) a continuous cycle of monitoring, re-teaching, and assessing students' progress toward meeting standards.

A second component of EPC One is the use of intensive intervention programs for students that are performing more than two years below grade level standards. California instructional materials include intensive interventions for students in grades four through eight that are designed specifically for this purpose.

> Because instructional coherence plays an integral part in successful school improvement efforts (Newmann, Smith, Allenworth, & Bryk, 2001), aligning and articulating intervention materials with core content curriculum and standards is central to supporting student progress toward grade level proficiency. Research suggests that reducing academic content for lower performing students, particularly English learners, can result in tracking of students to below grade-level coursework (Callahan, 2005; Walqui, 2000). Supovitz and Taylor (2005), in their evaluation of systemic reform in a large district, find the district gave special emphasis to increasing the achievement of lower-performing students, provided students not meeting performance standards with a variety of intervention strategies, and assessed individual student data on a regular basis (American Institutes for Research, 2006, p. 3).

The research on interventions focuses on providing an early intervention/prevention model for students at risk and tiers of intervention now known as Response to Intervention (RtI). RtI is a multi-tiered approach to providing early intervention for students and shifts the focus from a discrepancy model to building a system of intervention supports for students. The model's core components are high quality instruction, progress monitoring, research based interventions, fidelity of program implementation, parent involvement and a multi-tiered approach that increases the

amount of time and intensity for students who need additional support (CDE, 2008l). In the Northwest Regional Educational Lab's synthesis of effective schooling practices, they identified that "At-risk students participate in comprehensive programs featuring detailed teachers' manuals, curriculum materials, lesson guides, and other support materials; and they are offered systematic alternatives to traditional instruction" (Northwest Regional Educational Lab (NREL), 1990, p. 22).

EPC One requires schools to use State Board of Education adopted instructional materials that are standards aligned (CDE, 2008d). However, when you examine the research on school reform and high poverty, high performing schools, the research shows practices beyond the use of instructional materials. In other words, the level of implementation matters. The research indicates a focus on standards based instruction, instructional coherence, clear instructional goals, specific practices for English learners, and a response to intervention model to support struggling students as being critical for academic success. The American Institute of Research's (2006) review of the literature on EPC One found:

> A strong curriculum, implemented in a consistent and intensive way, appears most effective for student outcomes when high levels of alignment in curriculum and instruction are combined with the use of assessment data to monitor and evaluate teacher practices (Levin, Haertel, Kirst, Williams, & Perry, 2006). In fact, a large body of research finds a positive relationship between clear goals and student learning outcomes, emphasizing the importance of embedding content standards in curricular materials (Datnow, Borman, & Stringfield, 2000;

> Newmann, King, & Youngs, 2000 as cited in American Institute of Research, p. 3).

*Instructional Time*

The second EPC is instructional time. The APS defines this component as, "adherence to instructional minutes for English/reading/language arts and mathematics (K-8) and high school access to standards-aligned core courses" (CDE, 2008d). The rubric for this component states in order to be proficient an elementary schools:

> complies with and monitors implementation of instructional time for the adopted core programs for reading/language arts, reading intervention, core mathematics, as well as provides additional time for students needing mathematics intervention. This time should be given priority and be protected from interruptions (CDE, 2008d).

In California the instructional minutes are defined in the curriculum frameworks. English Language Arts requires 60 minutes a day in kindergarten, two and a half hours a day in grades one through three and two hours a day in grades four through six. Additionally, within these time blocks is Universal Access which is when teachers work with flexible groups of students based on student need. The English language arts framework also suggests an additional 30 minutes of intervention time for students one to two years below grade level and 30 minutes of English Language development for students acquiring English. Finally, the English Language Arts framework outlines an alternative program for intensive students that are more than two years below grade level in grades four through six. The framework recommends that these students be in an approved intensive intervention program for two to three hours a day. In mathematics,

kindergarten students should have math for 30 minutes a day and the remaining grades should have 60 minutes a day including Universal Access. The framework recommends an additional 15 minutes a day for math intervention. These time frames require schools to focus primarily on English language arts and mathematics.

As stated in the previous section, additional instructional time for struggling students is a recommendation for increased student achievement. In *A Nation at Risk*, one of the recommendations was increasing the amount of time students attend school and more effective use of time for instruction (National Commission on Excellence in Education, 1983). A nation at risk and the RtI model recommends additional time and intensity for students as they progress through the multi-tiered approach. However, Cotton (1990) in her review of the research on instructional time found:

> There is a small positive relationship between allocated time (however measured) and student achievement. A few studies (e.g., Wiley and Harnischfeger 1974; Kidder, O'Reilly, and Keisling 1975) have found a strong positive relationship between quantity of schooling and achievement, and some investigators have found virtually no relationship (e.g., Smith 1979 and some of the studies reviewed by Borg 1980). But most researchers and reviewers have identified a weak, non-statistically significant— but positive—relationship to achievement (Cotton, pp. 84-86).

Cotton's literature review also revealed that increasing time-on-task is more beneficial in the more highly structured subjects, such as mathematics and foreign languages, than in the less structured ones, such as language arts and social studies and increasing time allocations for particular subjects within classrooms can be beneficial to

students needing additional help if that time is devoted to the use of effective instructional strategies (Cotton, 1990). Research also suggests that off-task behavior, dead time, disruption, and some forms of seatwork were negatively related to student achievement (Northwest Regional Educational Lab, 1990, p. 84-86).

Cotton's (1990) findings indicate that we should consider that the important variable is not additional time but rather how time is used with students.

> In the context of the Beginning Teacher Evaluation Studies (see Denham & Lieberman, 1980), the effects of time were studied in great depth. Specifically, time was classified in those studies into four basic types: allocated time, instructional time, engaged time and academic learning time (Borg, 1980 as cited in Marzano, 2000, p. 54).

These four categories support the thinking that it is how time is used that is most critical. According to Borg (1980), instructional time is the amount of time spent teaching, engaged time is the amount of time that students are paying attention, and "academic learning time is the proportion of engaged time during which students are successful at the tasks they are engaged in" (as cited in Marzano, 2000, p. 54).

In another study:

> the variable of time as defined by Scheerens and Bosker includes maximizing the amount of time allocated for instruction, minimizing the amount of instructional time lost to absenteeism and tardiness, and minimizing the amount of instructional time lost to unnecessary extracurricular activities (as cited in Marzano, 2000, p. 54).

Cuban (2008) also supports the concept that it's not the amount of time but how time is used. In his article *The Perennial Reform* he reiterates the idea that how time is used is more important than adding additional time (Cuban, 2008, p. 249).

Schools that show increased student performance understand the above notion. They increase time for student learning while also improving the usage of time. In Reeves report on 90/90/90 schools (2004) which have 90 percent students of poverty, 90 percent students of ethnic minority, and 90 percent of students have met high academic standards, he noted that schools that showed significant improvement reallocated how they used time. "At the elementary level, they routinely devoted three hours each day to literacy, with two hours of reading and one hour of writing" (Reeves, p. 196).

Northwest Regional Education Lab also conducted a study of *Effective Schools Practices* (1990) and found that efficient use of time was one of the components of successful schools. The study recognized that teachers allocated time based on district and school guidelines, had good management routines and short transition times during instruction so that time was maximized and they maintained a brisk rate of instructions. The teachers also monitored student engagement during whole class and small group instruction, and selected appropriate independent work activities for students (Northwest Regional Educational Lab, p. 8). The study also identified that school-wide, administrators minimized disruption of learning time, allocated time based on goals, and non-instructional activities were minimized. Additionally, student pull out programs were minimized, teacher professional development time was focused and high expectations for student behavior, attendance, and engagement were reinforced (Northwest Regional Educational Lab, p. 16).

Similar to EPC One, the research on instructional time indicates a much deeper level of implementation than identified in the APS. It's important to adjust time frames but it is more important to address how time is used. Schools that showed increased student growth effectively used time and minimized distractions.

*School Administrator Training Program- Assembly Bill (AB) 430*

Essential Program Component Three is the School Administrator Training Program. The rubric defines proficiency of this component as:

> The district provides the school's principal and vice-principal(s) with AB 430 Administrator Training Program (ATP), Module 1, Leadership and Support of Student Instructional Programs, through an SBE-authorized provider. Modules 2 and 3 are optional but recommended. This requirement is fulfilled when the principal(s) completes 40 hours of training institute and 40 hours of practicum in the school/district-adopted reading/language arts (elementary school core program K-6), including interventions, and mathematics programs (CDE, 2008d).

AB 430, *Education Code* sections 44510 through 44517; Budget Items 6110-44-0001, 6110-195-0890:

> reauthorizes the Principal Training Program (formerly AB 75), became effective July 1, 2006. It supports professional development that focuses on building principals' and vice principals' leadership skills and the capacity necessary to serve effectively in their critical and complex roles. Federal funding comes from No Child Left behind (NCLB): Title II, Part A, Principal Training (CDE, 2008b).

AB 430 is divided into three instructional modules with a total of 160 hours of professional development. The training modules are written to a specific set of criteria and providers and training materials must be approved by CDE (CDE, 2008b). The goal of the AB 430 training is to develop instructional leaders. The training focuses on establishing and communicating a vision for student achievement and improved instruction, increasing knowledge of state standards and implementation of SBE approved instructional materials, developing professional development plans, use of data and technology, human resources, and implementation of the EPCs (CDE, 2008c).

Module 1: *Leadership and Support of Student Instructional Programs* includes 40 hours of instruction on the content and structure of state board approved instructional materials used at the school site in language arts and math. The criterion for the training requires providers to train on the California frameworks, and all aspects of the instructional program including Universal Access and assessments. The training provides administrators with the knowledge needed to monitor and support the implementation of state approved instructional materials. Participants are then required to complete an additional 40 hours of practicum to help them apply what they learned at their school site. The practicum varies by provider but typically includes classroom observations, data analysis, work with teachers on implementation, additional professional development on related topics, and any aspect of their work related to implementation of the adopted instructional materials.

Module 2: *Leadership and Management for Instructional Improvement* focuses on the leadership skills needed to skillfully implement the use of state board approved instructional materials. This 20 hour module examines how to strategically use your

fiscal resources, personnel, and professional development to improve instruction. Other topics include vision, Single School Plan for Student Achievement (SSPSA) and developing school culture. This module also has 20 hours of practicum centered on implementing key training ideas.

Module 3: *Instructional Technology to Improve Pupil Performance* focuses on using technology in order to improve student achievement. Topics include use of data, technology and instructional leadership, technology resources, and using technology to support the topics in Modules one and two. There is also 20 hours of practicum following this training.

The criteria for AB75/AB 430 were established by the AB 75 Principal Training Program Advisory Group to provide administrators with additional knowledge and skills in instructional leadership. The three Modules work together. This training is one component of California's plan for improving student achievement and work in conjunction with the EPCs, the State Frameworks, and AB 466/SB 472 training for teachers on the instructional programs.

AB 430 is rooted in the idea that principal professional development should be aligned with the tasks they are being asked to perform. If the state's expectation is that schools fully implement the curriculum frameworks, then principals should be knowledgeable about their content and the leadership skills necessary for implementation.

In reviewing the literature, multiple studies highlight the importance of principals as instructional leaders and their critical role in school reform.

> The school site principals serve multiple and interconnected roles. First, and foremost, is the role of instructional leader for the school site. The principal is responsible for establishing the vision for student achievement, fostering commitment across, and providing guidance and support to, teachers and staff, and ensuring the full implementation of effective instructional programs with supporting technology. Ultimately, the principal is accountable for the collection and tracking of, and use of, student achievement data and results by all teachers and staff, providing feedback to teachers and staff on instructional delivery, and making continuous improvement in instruction, as necessary, until all students meet or exceed grade level content standards (CDE, 2008h, p. 1)

In Marzano, Waters, and McNulty's meta-analysis of 69 studies on leadership and student achievement published in *School Leadership That Works* (2005) they articulate three significant findings: (a) There is a relationship between leadership and student achievement — leadership matters; (b) There are 21 leadership responsibilities, each with statistically significant and positive relationships to student achievement; and (c) Leaders perceived as strong do not always have a positive impact on achievement (Waters, n.d., pp. 3-5).

In addition to the finding that leadership matters, the study also identified 21 leadership responsibilities with significant correlations to student achievement. Of these 21 responsibilities, they identified that seven of the twenty one responsibilities were positively correlated with second order change and four were negatively correlated with second order change (Waters & Cameron, 2007, p. 12). Second order change is defined as "a break from the past, inconsistent with prevailing organizational norms, incongruent

with personal values or requiring new knowledge or skill" (MCREL, 2006, p. 33). Of the seven responsibilities, knowledge of curriculum, instruction, and assessment had the highest correlation.

In addition to the above meta-analysis, the effective schools research supports the importance of leadership.

> The literature on effective schools has long focused on the critical role of principals, as both administrative and instructional leaders, in improving student achievement (Edmonds, 1979). School leaders face the challenge of effectively navigating multiple contexts for learning, including a focus on individual student learning, teacher professional development, and the school's progress as a whole. The role of administrators in improving instructional quality through building school capacity—increasing teacher knowledge and instructional skills, instructional program coherence, and resources—is key to developing and sustaining reform (Fullan, 2002). Elmore (2000) describes the role of principals in designing school improvement strategies and professional development activities consistent with the strategies, while simultaneously buffering teachers from non-instructional issues. In their research-based framework for "leading for learning", Knapp, Copland and Talbert (2003) propose five mutually reinforcing goals for improving learning and teaching: establishing a focus on learning; building professional communities; acting strategically and sharing leadership; creating instructional coherence; and engaging external environments (as cited in American Institutes for Research, 2003, p. 5).

Additionally, in 2003, the American Institute for Research concluded that the most important role of principals is to continually increase their skills and knowledge as well as their development as an instructional leader.

> Elmore and Burney (1997), and later Resnick and Fink (2001), examine the various structures used by one school district to provide professional development to principals. Both studies highlight that the importance of continuous development of specific curriculum and instruction knowledge combined with the development of general leadership skills needed to manage a school, is critical to achieving instructional improvement goals. In addition, findings from a study of school capacity in urban elementary schools found a strong association between leadership by principals and comprehensive professional development at the school site, suggesting that principals' own professional development should build their understanding of how to enhance school capacity for reform (Newmann, King, & Youngs, 2000; as cited in American Institutes for Research, p. 5).

Leadership makes a difference and professional development for school leaders has the potential for improving leadership capacity. What is unavailable at this time is research on the effectiveness of AB75/AB430.

*Credentialed Teachers and Teacher Professional Development*

EPC Four is "Fully credentialed, highly qualified teachers and AB 466 (Chapter 737, Statutes of 2001) (Senate Bill [SB] 472, pending) Professional Development Program on SBE-adopted instructional materials" (CDE, 2008o). Program component four has two distinct requirements. First, teachers must be fully credentialed and highly

qualified. Second, teachers must attend SB 472 professional development on their state board approved instructional materials. Proficiency of this program component is defined as:

> The school/district staffs all classrooms with fully credentialed, highly qualified teachers per the requirements of the No Child Left Behind (NCLB) Act of 2001 and the school/district provides the school's teachers (in all grade levels/programs) the SB 472 Professional Development Program through a SBE-approved provider. The training features the district's adopted core program and/or intervention programs for reading/language arts for each teacher's grade level or program level and the school/district provides the school's teachers (in all grade levels) the SB 472-Professional Development Program through a SBE-approved provider. The training features the district's adopted core program for mathematics for each teacher's grade level or program level (CDE, 2008d).

The research related to EPC four falls into three categories: teacher preparation, teacher knowledge and skill, and professional development. There appears to be consensus that effective teachers are important. However, there is not an agreed upon definition of highly qualified or effective teachers in the literature. The National Partnership defines effective teachers as those who are able to consistently assist their students in making significant academic progress (National Partnership for Teaching in At-Risk Schools, 2005, p.6). They also identify command of their subject matter, and understanding of how students learn, and a repertoire of teaching strategies and methods that enable them to meet the diverse needs of their students (National Partnership for Teaching in At-Risk Schools) The report also recommends that teaches have "full

certification in their main teaching field, and the repertoire of instructional skills necessary to be effective with all students" (National Partnership for Teaching in At-Risk Schools, p. 6).

The National Comprehensive Center for Teacher Quality defines teacher quality as contributing to student achievement and teachers, who are qualified in their content area, hold high expectations for student learning, create an effective learning environment, are able to motivate struggling students, help develop the skills of other new teachers and work diligently with special needs students (Goe, 2007, p. 6).

Finally, NCLB requires highly qualified teachers to possess a bachelor's degree and a license or certificate in the subject areas they teach.

Clearly, the task of defining effective teaching is complex and will need additional research and study. What is agreed upon is that teachers make a difference in student achievement. Haycock's 1998 article *Good Teaching Matters…A Lot*, is frequently cited in the research on high quality teachers. She states "The difference between a good teacher and a bad teacher can be a full level of achievement in a single school year" (Haycock, p. 1).

Haycock's (1998) article *Good Teaching Matters…A Lot* identifies several key findings in the area of teacher quality. First, the article claims a connection between teacher quality and student achievement.

> In The *Education Trust National and State Data* Book, we document the clear relationship between low standards, low-level curriculum, under-educated teachers and poor results. We argue, further, that if states and school districts

> work hard on these three issues, they can close the achievement gap (Haycock, 1998, p. 2).

Additionally, she presents a study conducted by William L. Sanders (1996) in Tennessee that concludes that teacher effectiveness effects student achievement.

> He found, on average, the least effective teachers (Q1) produce gains of about 14 percentile points during the school year. By contrast, the most effective teachers (Q5) posted gains among low-achieving students that averaged 53 percentile points… There is also considerable evidence that, at least in Tennessee, the effects of teachers are long-lived, whether they advance student achievement or squash it. Indeed, even two years after the fact, the performance of fifth-grade students is still affected by the quality of their third-grade teacher (Haycock, p. 3).

Haycock's (1998) article also cites two other studies completed in Texas and Boston that have similar findings. The findings concluded that students that have multiple years of an ineffective teacher demonstrated significantly lower results on achievement tests (Haycock, p. 4).

In addition to studying the connection between effective teaching and student achievement, the report studied what influences teacher effectiveness. They found three general themes from the studies they examined, strong verbal and math skills, deep content knowledge, and teaching skill (Haycock, 1998, p. 6).

Finally, the report concluded that students in high poverty, high minority schools were more likely to have underprepared teachers.

> These patterns are clear in national data tabulations on out-of-field teaching specially prepared for the Education Trust earlier this year by Richard Ingersoll, a

> professor at the University of Georgia. As is evident in the table above (as well as in the state tabulations on pp. 8-9) minority and poor youngsters—the very youngsters who are most dependent on their teachers for content knowledge—are systematically taught by teachers with the least content knowledge (Haycock, 1998, p 7).

Additionally, the report found that African American and Latino students were even more likely to have under qualified teachers (Haycock, 1998, p. 8). The report ends with recommending that (a) states should have standard for entering the teacher profession, (b) there should be accountability measures for colleges and universities that prepare teachers, (c) we should provide professional development for existing teachers, (d) assure that poor and minority students have teachers that are at least as qualified as the ones that teach other students, (e) have a parents "right to know" policy, and (f) recruit and reward to attract the best into teaching (Haycock, pp. 12-13). Ultimately, Haycock asserts that "If we only took the simple step of assuring that poor and minority children had highly qualified teachers; about half of the achievement gap would disappear" (p. 2).

Other researchers have also studied the effect of teacher quality on student achievement and have drawn several conclusions.

> William Sanders and other researchers have shown the enormous difference that teachers can make in the achievement of their students. One study in Dallas in the mid-1990s, for example, showed that children assigned to effective teachers for three years in a row scored an average of 49 percentile points higher on a standardized reading assessment than children assigned to three ineffective

> teachers in a row. By providing the same educational opportunities for poor children as for more affluent children—and, in particular, quality teachers—education can indeed become the "great equalizer" that enables all children to succeed (National Partnership for Teaching in At-risk Schools, 2005, p. 3)

According to Richard Ingersoll (1999) there is a difference in content knowledge in schools in affluent schools versus high poverty schools. "He found that when compared with teachers in more affluent schools, significantly more mathematics, science, English, and social studies teachers in high-poverty schools lack a major or a minor in their teaching field" (National Partnership for Teaching in At-risk Schools, 2005, p. 3). Some of the numbers in his study state that 43 percent of math teachers in high-poverty schools lacked a major in mathematics, compared with 27 percent of math teachers in more affluent schools (National Partnership for Teaching in At-risk Schools, p. 3).

The report on teaching in at-risk schools also cited the National Center for Education Statistics that stated that 20 percent of teachers in high-poverty schools have three or fewer years of teaching experience, compared with 11 percent of teachers in low-poverty schools (National Partnership for Teaching in At-risk Schools, 2005, p. 3). "Even when the teachers in high-poverty schools have experience and credentials, they are generally inadequately prepared and supported to handle the enormous instructional challenges they face" (National Partnership for Teaching in At-risk Schools, 2005, p. 3).

*Teacher preparation*. EPC Four requires teachers to be fully credentialed and highly qualified. The research in this area suggests the importance of teacher preparation.

Findings include a relationship between preparation and student achievement, increased teacher retention and teaching skills.

> Research supports the idea that teacher preparation is important. The research is not conclusive but it is suggestive. There is evidence that well prepared teachers outperform those who are not prepared. Available evidence is consistent with the prevailing practice that preparation is helpful. It certainly does not support the idea of no preparation (National Council for Accreditation of Teacher Education, 2005a).

The Education Commission of the States (ECS) reviewed the literature on teacher preparation and summarized key findings. First, they determined that there is moderate support for the importance of subject matter knowledge. Course work and teacher knowledge in the subject area they teach is important. However, the report stated that there is inconclusive evidence regarding the necessity of a subject major or an advanced degree in the subject area they teach (as cited in National Council for Accreditation of Teacher Education, 2005b).

Another report on teacher preparation identified a "positive connection between teachers' preparation in their subject matter and their performance and impact in the classroom" (Wilson, Floden, & Ferrini-Mundy, 2001, p. 1). Additionally, the report stated there is little definitive research on the kinds or amounts of subject matter preparation and additional research is needed and that teacher preparation in math may be more important than other content areas since it is important to understand the mathematical concepts in addition to the procedures of mathematics (Wilson et al, p. 2).

The report on teacher preparation also examined what kind of pedagogical preparation is needed by teachers. "By 'pedagogical preparation' we mean the various courses that teachers take in such areas as instructional methods, learning theories, foundations of education, and classroom management" (Wilson et al, 2001, p. 2). The report found that there is some evidence that pedagogical preparation makes a difference but did not provide any insight regarding which aspects were most critical (Wilson et al, p. 1).

A third question researched regarding teacher preparation asked how much student teaching best prepared teachers for classroom practice. The studies examined had a great deal of variability. However, the study did conclude that "the quality of a teacher's preparation seems to depend on the specific intent and characteristics of the field experience" (Wilson et al, 2001, p. 1) and that "research shows some promising practices can be developed. In field experiences with focused, well-structured activities, more significant learning can occur. Cooperating teachers have a powerful influence on the nature of the student teaching experience" (Wilson et al, 2001, p. 1).

A third study conducted by the National Council for Accreditation of Teacher Education (NCATE, n.d.) also summarized the research on teacher preparation. The summary concluded that teacher preparation, content knowledge, and pedagogical skill are components of teacher effectiveness (NCATE, n.d., p. 16). In their conclusions and policy recommendations the report identified five key findings regarding teacher preparation. They include: teacher preparation helps candidates develop the knowledge and skill they need in the classroom, well prepared teachers are more likely to remain in teaching, well prepared teachers produce higher student achievement, leading

industrialized nations invest heavily in pre-service teacher preparation, and NCATE makes a difference in teacher preparation (NCATE, p. 16).

Additionally, the summary concluded that "available research supports the idea that high quality teacher preparation is important. Well prepared teachers outperform those who are not prepared. No credible research reveals any advantage to students of having teachers without preparation" (NCATE, n.d., p. 16).

The study also stated that state licensure tests were not indicators of teacher effectiveness.

> Daniel Goldhaber, University of Washington researcher, says that 'licensure test performance is clearly not a silver bullet'. Licensing tests are usually paper and pencil tests of subject matter knowledge and on occasion, pedagogical knowledge. This finding argues for a much more comprehensive system for assessing teachers to determine their preparedness to enter the classroom as sole practitioners (NCATE, n.d., p. 16).

The report finally concluded that the two most critical components of teacher preparation are teacher knowledge of the subject they are teaching and their skill in teaching the subject.

> Effective teachers understand and are able to apply strategies to help students increase achievement. They understand and apply knowledge of child and adolescent development to motivate and engage students. They are able to diagnose individual learning needs. They know how to develop a positive climate in the classroom in order to make it a stimulating learning environment (NCATE, n.d., p. 16).

Overall, the NCATE summary identified several findings. These include the importance of teacher preparation, the recognition that prepared teachers tend to remain in teaching longer, and they produce higher student achievement (NCATE, n.d., p. 16).

The summary also concluded that

> high quality pre-service preparation should enjoy strong support from federal, state and local policy. All preparation programs—not just those being studied for research purposes—should provide evidence that they prepare candidates with the foundational knowledge and skills to positively affect student learning, or they should be closed (NCATE, p. 16).

There appears to be general consensus that teacher preparation matters and there are some general recommendations for policy maker and it is generally viewed as one component of school improvement. The issue of teacher preparation calls for more, and better, research.

*Teacher knowledge*. Another theme identified in the research on highly qualified teachers is the importance of teacher knowledge. One report commissioned by the Institute of Education Sciences of the U.S. Department of Education (Firestone, Mangin, Martinez, & Polovsky, 2004) examined teacher knowledge. The report cited several studies that concluded that teachers need to know the subjects they teach, know the facts and procedures of their subject including key ideas and connections within the content area, and have a repertoire of strategies to communicate key concepts to students.

> A few well designed studies suggest that when teachers have a deep understanding of subjects they teach and effective means to help students understand those fields, those students do achieve at higher levels in mathematics

> and social studies (Cohen & Hill, 1998; Fennema, Peterson, & Carpenter, 1989; Newmann, 1996 as cited in Firestone et al., p. 2).
>
> In addition to content knowledge the same report concluded that:
>
> knowledge of subject matter and how to communicate it is usually best supported by classroom management that creates an environment that supports instruction (Carter, 1991). The approaches to classroom management required by direct instruction (Brophy & Good, 1986) and the kind of instruction described by Ball and Cohen (1999) may be quite different. In either case, the teacher must establish the routines and understandings that facilitate teaching and minimize the inevitable disturbances that arise" **(**as cited in Firestone et al., 2004, p. 2).

Again, similar to the research on teacher preparation, the research on teacher knowledge is suggestive but inconclusive. More research is needed regarding the specific knowledge teachers have that contributes to student achievement and teacher effectiveness.

Clearly, teacher quality and teacher effectiveness are important and contribute to student achievement. However, the research identifies several factors that contribute to highly qualified teachers. Education Trust's (2006) summary on teaching inequality concurred with the above research and identified five areas that influence teacher quality.

> 1. Academic knowledge is important. "Each study of teachers' academic skills and knowledge uses a slightly different measure, but the findings are so robust and so consistent that there is broad agreement that teachers' academic skills have a considerable impact on student achievement" (Peske & Haycock, 2006, p. 8).

2. Mastery of Content is important. “The data are especially clear in mathematics and science, where teachers with a major in the subject they teach routinely elicit higher student performance than teachers who majored in something else” (Peske & Haycock, 2006, p. 8).

3. Experience makes teachers more effective. “Most research suggests that teachers are considerably more effective after completing two years on the job” (Peske & Haycock, 2006, p. 8).

4. Pedagogical Skill in addition to content knowledge is an important aspect of effective teaching.

5. Teacher quality is more important in high poverty schools. “Teacher quality turns out to matter a lot. In the highest poverty high schools that had high Teacher Quality Indices (TQI), for example, there were about twice as many students meeting state standards as there were in similarly poor high schools that had low TQIs. In elementary and middle schools, when the TQI increased, so too, did the percentage of students who met or exceeded state standards, even after controlling for students’ background characteristics” (Peske & Haycock, 2006, p. 8).

*Professional development.* “While teacher quality is the foundation for improved classroom instruction, relevant professional development for teachers on the effective implementation of the core program is also necessary to improve student achievement and instructional programs” (Corallo & McDonald, 2002; as cited in Wells, et at., 2006, p. 7). EPC Four requires teachers to attend SB 472 professional development on the California state adopted instructional programs. The training is comprised of 40 hours of instruction on use of the instructional materials and requires an additional 80 hours of

follow-up hours following the training. The intent of the follow-up hours is to provide sustained professional development over time and to provide time for participants to deepen their knowledge and expertise on usage of the materials. Follow up activities include but are not limited to data analysis, planning instruction, professional development, and teacher collaboration. “When teachers receive training that builds on their subject-matter knowledge and deepens their practice, they gain the tools necessary to successfully utilize instructional materials to drive student achievement (Corallo & McDonald, 2002; Marzano, 2003)” (as cited in Wells, et al., 2006, p. 7).

A great deal of research has been conducted on teacher professional development. There is limited information regarding SB 472 and its effect on increasing student achievement. There is research supporting the connections of professional development with the day to day work and the instructional materials teachers use. The Consortium for Policy and Research in Education “found that professional development often lacks a direct link to teachers’ work assignments and is not consistently tailored to their needs (Consortium for Policy and Research in Education, 1997)” (as cited in Wells et al., 2006, p. 7). SB 472 is designed to align to the specific instruction teachers provide in their classroom.

Whitehurst (2003) also conducted a review of the literature on Teacher Preparation and Professional Development and concluded:

> For standards-based reform to work there is reason to think that two additional components are necessary: 1) teachers must be provided with curriculum that is aligned with the standards and assessments; and 2) teachers must have professional development to deliver that curriculum. …. Yet the teachers in the

> strong implementation schools were dramatically more effective than teachers in the weak implementation schools. Thus a main effect of curriculum implementation swamped the effects of individual differences in background among teachers (Whitehurst, 2003, p. 9).

Training on usage of the state board approved instructional programs is important for improved instructional practices and instructional coherence. "Ultimately, students benefit most when a community of qualified teachers, armed with professional development and a collective goal to raise achievement, effectively deliver instructional programming to all students" (Wells et al., 2006, p. 7).

Whitehurst's (2003) review also examined a study conducted by Cohen and Hill (2000) which compared the effects of teacher participation in mathematics professional development. The study found that the more time teacher spent in professional development on the mathematics frameworks in instructional materials the more they were able to incorporate the information in their materials into their classrooms. An additional benefit was that students scored higher on the math concepts that had been taught (Whitehurst, 2003, p. 8).

The American Educational Research Association also summarized their review of the literature on effective professional development in a report titled *Teaching Teachers: Professional Development to Improve Student Achievement*. The policy brief recommends that professional development focus on teaching skills, subject matter, and student learning. Additionally, the recommendation is to provide adequate time for professional development, linking professional development to teacher's real work and

actual curriculum materials and regular district evaluation of professional development effect on teacher practices and student learning (Hill, & Cohen, 2005, p. 4).

In another study conducted by the National Staff Development Council, the researchers examined the professional development at eight public schools that had shown significant gains in student achievement. In these eight schools they found that professional development had shifted to a collaborative process and multiple professional learning opportunities (Educational Projects in Education (EPE) Research Center, 2004, p. 1).

Darling-Hammond and McLaughlin (1995) also examined the research on teacher professional development. They concluded that preservice education and professional development must focus on “deepening teachers' understanding of the processes of teaching and learning and of the students they teach” (p. 1). Also professional development must engage teachers in the art of teaching, analysis of assessment, observation of colleagues and reflection on their practices. Inquiry, reflection, and experimentation should be encouraged and teachers should be provided the opportunity to learn from other teachers (Darling-Hammond, & McLaughlin).

A final theme identified in the research on professional development is the importance of coherence.

> Teachers reported that a focus on content knowledge was one of two elements that had the greatest effect on their knowledge and skills and led to changes in instructional practice. The other element was coherence, which includes building on what teachers already have learned, aligning professional development with state and district standards and assessment, and encouraging communication

> among teachers who are striving to reform their instruction in similar ways (Hill, & Cohen, 2005, p. 4). District coherence is enhanced when there is a clear district direction, and prioritized professional development (Firestone et al., 2004, p. 31).

Clearly teacher quality and professional development are important aspects of school reform especially in high poverty school. Teachers make a difference and hiring the best teachers and providing coherent and sustained professional development focused on standards and instructional materials is well supported in the research. There is some conflicting research in this area and it appears that more research is needed regarding specific areas of teacher quality and professional development that have the greatest effect on student achievement but there is enough convergence in the research to support the importance of these components in conjunction with the other EPCs.

*Student Achievement Monitoring Systems*

EPC Five relates to the use of an assessment and monitoring system. The component is defined by the APS as:

> The school/district has an assessment and monitoring system (e.g., every six to eight weeks) which may include curriculum-embedded assessments available as part of the adopted program. These assessments inform teachers and principals on student progress and effectiveness of instruction in all English/reading/language arts and mathematics classrooms. These curriculum-embedded assessments are based on the adopted English/reading/language arts and mathematics programs. The purpose of these assessments is to provide timely data to teachers and principals to make decisions that will improve instruction and student

> achievement. In addition, they will provide a basis for the monitoring system (CDE, 2008d).

The use of data and assessment is well documented in research and is a common trait in high performing, high poverty schools and school improvement recommendation. Multiple studies show that ongoing use of data helps schools improve instruction and student achievement. “A recent study of California elementary schools underscores this relationship, finding a strong relationship between higher API scores and the extensive use of student assessment data by the district and the principal in an effort to improve instruction and student learning (Williams et al., 2005 as cited in American Institute of Research, 2006, p. 8). Data provides schools with information that assists them with identifying problems, determine interventions for students, and monitor progress toward achievement goals (American Institute of Research, p. 8). Some of the practices identified in case study schools include using data to guide changes in curriculum and instruction, selection of instructional strategies, and identifying areas of focus and intervention.

In Reeves’ (2004) study on *90/90/90 Schools*, he stated, the schools with the greatest improvements in student achievement consistently used common assessments. Reeves defines common assessments as when:

> students are required to complete a task and then very soon—within minutes, hours, or days—they receive feedback that is designed to improve their performance. Effective assessment is what great music educators and coaches routinely provide to their students. Moreover, great educators use assessment

> data to make real-time decisions and restructure their teaching accordingly (Reeves, 2004, p. 199).

In *Dispelling the Myth* published by Education Trust in 2001, the researchers examined high performing, high poverty schools to determine common characteristics. In each of these schools, they found instruction to standards, increased instructional time in reading and math, substantial professional development, comprehensive systems to monitor individual student performance, parental involvement, accountability systems and use of assessments. One of the schools stated, "We assess students continually, every 6 to 8 weeks. Intervention is a must" (Education Trust, p. 3). Another school stated,

> We analyze subgroup performance and strive for at least 25% improvement in struggling subgroups. I sit down individually with each teacher to analyze student performances according to state standards, determining the teacher's strengths and where there is room for improvement (Education Trust, p. 3).

A report conducted by Education Source on California elementary schools titled *Similar Students, Different Results,* identified four common practices identified in schools getting different results. The practices that were strongly correlated with higher school API scores are: “1) prioritizing student achievement; 2) implementing a coherent, standards-based instructional program; 3) using assessment data to improve student achievement and instruction; and 4) ensuring the availability of instructional resources” (Williams, Perry, Studier, & Brazil, 2006, p. 2).

Clearly, use of data and assessments can improve student achievement if the information is used to inform instruction, place students in interventions, monitor achievement goals, and guide school improvement. In order to increase student

achievement, formative assessments must be used regularly and be used to provide immediate feedback to students (Hattie, 2008). In order for this to work effectively, teachers need standards aligned assessment, a data management system that stores and organizes data efficiently and professional development must be provided on usage of the management system.

Having a data management system and assessments is important, however, it is not sufficient. The key to increasing student achievement is using data to adjust placement, programs, and practices as well as providing very specific feedback to students and adults regarding performance. In Marzano book *What Works in Schools* (2003), one of the key factors in effective schools is challenging goals and effective feedback. This practice involves clearly articulating learning expectations to students, regularly measuring their progress, and providing them with specific feedback on learning (Marzano, 2003). Stiggins (2005) also states,

> In addition, classroom assessment significantly supports student learning when clear and appropriate learning targets [are communicated] with students from the beginning of the learning; accuracy of classroom assessments of those targets [are increased]; students have continuous access to descriptive feedback; and continuously [involve students] in classroom assessment, record keeping, and communication processes (p. 67).

The research indicates that EPC Five, use of standards aligned assessments, data management systems, regular monitoring of student achievement, and refining programs and practices based on data is crucial in school improvement efforts.

> Using data to examine student achievement and additional student outcome measures plays a critical part in instructional reform efforts, helping administrators and teachers to assess individual student needs and progress, the implementation of instructional programs, and school-wide progress toward the achievement of California standards (American Institute of Research, 2006, p. 8).

The research on use of data also focuses on the importance of using data to change practices and to provide feedback to students regarding progress toward achievement goals. Unfortunately, according to Stiggins (2002), our current assessments systems are not achieving this goal. “Student achievement suffers because these once-a-year tests are incapable of providing teachers with the moment-to-moment and day-to-day information about student achievement that they need to make crucial instructional decisions” (p. 2). While standards based assessment is important, Stiggins suggest a new way of thinking about the use of data and assessments. He recommends that the educational community shifts from assessment of learning to assessment for learning. He describes this practice as using the classroom assessment process and the continuous flow of information about student achievement to advance, not merely monitor student learning. This could be achieved by involving students in the assessment process by informing students of their achievement goals, building student’s confidence through classroom assessments, using classroom assessments for descriptive feedback versus judgmental feedback and providing them with specific steps toward improvement, and finally, engaging students in self reflection and assessment regarding their learning over time (Stiggins, p. 6). In order to achieve this shift, Stiggins cites policy recommendations from the Committee on the Foundations of Assessment of the National Research Council.

These include instruction in how students learn and how learning can be assessed in preservice and professional development.

> This training should be linked to actual experience in classrooms in assessing and interpreting the development of student competence. To ensure that this occurs, state and national standards for teacher licensure and program accreditation should include specific requirements focused on the proper integration of learning and assessment in teachers' educational experience (Stiggins, pp. 7-8).

The recommendations also include "The balance of mandates and resources should be shifted from an emphasis on external forms of assessment to an increased emphasis on classroom formative assessment designed to assist learning" (Stiggins, pp. 7-8). The final recommendation is "A state must ensure that educators receive professional development focused on how to optimize children's learning based on the results of instructionally supportive assessment" (Stiggins, pp. 7-8).

Like the other essential program components, the use of data is part of a comprehensive plan to improve student achievement and works in conjunctions with the other program components. Success with this component will require a coherent instructional program, interventions, professional development, collaboration, pacing guides, and fiscal support.

*Ongoing Instructional Assistance and Support for Teachers*

EPC Six addresses instructional assistance and support for teachers. The Academic Program Survey defines this component as:

> Schools/districts provide instructional assistance and support to all teachers of reading/language arts and/or mathematics. Elementary and middle school

> teachers, and ninth and tenth grade English-language arts and mathematics (Algebra I, and remedial mathematics) teachers receive ongoing support offered by the school and district. Possible options for providing support include coaches/content experts who work inside the classroom to support teachers and deepen the knowledge about the content and delivery of instruction, and specialists who have experience coaching teachers and who are knowledgeable about the adopted program (CDE, 2008d).

Coaching works interchangeably with the other program components on instructional materials, SB 472 professional development, collaboration, and use of data. It is an important practice to ensure implementation of state board approved instructional materials and sustained professional development. Coaching supports the recommendation from The National Staff Development Council recommendations that suggests professional development should be sustained, collaborative, connected to practice, and substantial (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

Coaching is regularly found as a recommendation to improve student achievement in school reform models. It has increased in popularity in the last 10-15 years.

> The increased use of coaches is due in part to the professional development requirements contained in the No Child Left Behind (NCLB) Act. NCLB requires districts to develop and implement a school improvement plan that includes professional development programs for teachers at schools that fail to make adequate yearly progress (AYP) for two years or more. Specifically, NCLB

> requires that these professional development programs incorporate activities, like coaching, that are provided consistently over time (Kowal, & Steiner, 2007, p. 1).

The practice of coaching is rooted in the research on professional development that was previously discussed under EPC Three. Coaching is based on the recommendation that professional development models be designed to support daily classroom work and implementation of new classroom practices. There are many models of coaching found in the educational field. A few of the most common models include cognitive coaching, content coaching, mentoring, lesson study, literacy coaching, instructional coaching, and peer coaching (Cornett, & Knight, 2008).

Coaches work directly in the classroom with teachers and students to help implement new practices and strategies.

> Teachers learn best by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see. This kind of learning cannot occur in college classrooms divorced from practice or in school classrooms divorced from knowledge about how to interpret practice (Darling-Hammond, 1999).

In order to implement these professional development practices, an instructional content coach must possess knowledge of content, instructional practices, classroom management techniques and coaching strategies.

> Coaching can take a variety of forms, but generally involves sessions that focus on the classroom implementation of curriculum content and analysis of student responses to teaching through technical coaching or team coaching, specifically focused on integrating new teaching practices into classroom instruction through

demonstration and practice (Showers & Joyce, 1996, as cited in American Institutes for Research, 2003, p. 9).

The research available on coaching finds a clear connection between coaching and improved teacher application of new practices. One review of the literature by Elmore and Burney (1997, as cited in American Institutes for Research, 2003) looked at a professional development reform in a large urban district. This study found "a continuous improvement, professional learning model that focuses on specific content areas may be an effective approach to large-scale improvement of instructional practice. Peer coaching is one approach to professional learning that impacts the content and delivery of instruction through individualized support to teachers, particularly beginning teachers" (p. 9).

A literature review conducted by Showers (1984) examined three studies on instructional coaching that documented higher levels of implementation in teachers that received peer coaching. The coaching model examined included theory, demonstration, practice, and coaching. Participants who received all four levels of support showed an 80% transfer of new skills into classroom practice (Showers).

Another component of the coaching literature is the importance of teacher leadership. Chrisman's (2004) study of successful II/SUP schools identified the importance of teacher leadership. One of the characteristics of schools demonstrating significant academic growth is the development of strong teacher leaders. In case study schools, teachers were given the opportunities to make decisions about teaching and learning. They were regularly involved in data analysis, planning interventions, and collaborating with others. The collaborative teams were focused on continuous

improvement through action research. Strategies were implemented and monitored through data analysis and additional professional development was requested based on identified needs in student learning outcomes. Additionally, teachers regularly coached or mentored other staff members and the teams planned lessons as a group and engaged in lesson study. The schools developed a culture of supporting each other in interdependent teams (Chrisman, 2004).

Despite the findings on coaching's effect on improving teaching practices, there is limited research on the linkage between instructional coaching and improved student achievement. This is partially due to the numerous types of coaching models found in school sites (Cornett, & Knight, 2008).

Another study on peer coaching found that:

> there is no conclusive evidence that coaching alone produces increases in academic achievement. Despite the lack of clear proof that coaching leads to increased academic achievement, Neufeld and Roper were quick to point out that coaching does increase the instructional capacity of school and teachers, a known prerequisite for increasing learning (p. v). Their conclusion is shared by many leading researchers in the field (as cited in Foltos, n.d., p. 2).

In addition, another study of three large urban districts showed:

> a trend of overall improved student achievement and a narrowing gap between white and minority students, Snipes, Doolittle, and Herlighy (2003) found that these districts implemented a coherent instructional plan district-wide, including reading and math curricula, and then supported teacher development around the curricula with teacher coaches and grade-level planning periods. Similarly,

> findings from a national study of reading growth in high-poverty classrooms suggest a relationship between research-based instructional practices and student achievement and engagement (Taylor, Pearson, Peterson, & Rodriguez, 2003, as cited in American Institutes for Research, 2003, p. 9).

Even though there is inconclusive research on coaching's effect on student achievement, there is evidence that coaching improves the quality of instruction and there is a direct link between teacher quality and improved student achievement. Therefore, instructional coaching is seen as a promising practice that needs additional research (Cornett, & Knight, 2008). Research has identified that coaching improves teacher's attitudes, impacts teacher's practices, improves teacher's efficacy, and potentially improves student achievement. Further research is needed in what support systems are needed for coaching to be successful, best practices for coaches, coaching focus areas, and impact on student achievement (Cornett, & Knight).

*Teacher Collaboration*

EPC Six focuses on teacher collaboration. This component is defined by CDE as:

> The school/district facilitates and supports teacher grade-level collaboration on a regular and frequent basis for elementary, middle, and high school English/reading/language arts and mathematics teachers to focus on the use of curriculum-embedded assessment data and data review to strengthen implementation of the SBE-adopted English/reading/language arts and mathematics programs. Time must be built into the calendar so that staff has regular opportunities to meet by department and subject matter, review the results of embedded assessments together, discuss the data in meaningful ways, examine

the implications, make instructional decisions, and plan lesson delivery (preferably two, one-hour meetings per month) (CDE, 2008d).

As with the other program components, teacher collaboration works in conjunction with implementation of state board approved instructional programs, SB472 professional development, highly qualified teachers, interventions, use of data, and coaching.

The research on teacher collaboration, like coaching, is also rooted in the research on professional development previously discussed in EPC Four. Professional development studies have clearly established that job embedded, collaborative professional development opportunities have the greatest impact on teaching practices. Northwest Regional Education Laboratory's (1990) update on effective school practices stated that ongoing collegial learning activities are important practices in effective schools. These schools had adequate time set aside for collaboration; staff had input on professional development opportunities, opportunities were provided for teachers to share ideas and practices. Ultimately, collaborative teams had collaboration as an established practice. "Staff members will routinely share ideas and work together toward the end of improving the instructional program" (Northwest Regional Educational Lab, p. 20).

Teacher collaboration is well documented in the research on school improvement. In Reeves' (2004) *90/90/90 Schools*, he found that each of the schools devoted time for teacher collaboration.

This was not merely an exercise in idle discussion nor an attempt to get along in a friendly and collegial fashion. Rather, collaboration meetings were focused on an

> examination of student work and a collective determination of what the word "proficiency" really means (Reeves, p. 195).

Teacher collaboration is also a key component in the research on professional learning communities (DuFour & DuFour, 2008). "The most promising strategy for sustained, sustentative school improvement is building the capacity of school personnel to function as a professional learning community (PLC). The path to change in the classroom lies within and through professional learning communities" (DuFour, DuFour, 2008, p. 26). A professional learning community is defined as:

> educators committed to working collaboratively in ongoing processes of collective inquiry and action research in order to achieve better results for the students they serve. PLCs operate under the assumption that the key to improved learning for students is continuous, job embedded learning for educators (DuFour, DuFour, Eaker, Many, 2006) as cited in DuFour, et al., 2008, p. 29).

The premise behind professional learning communities is to eliminate teacher isolation in order to improve instructional practices.

The research indicates that the high poverty, high performing schools operated as professional learning communities and are characterized by having a student centered focus and a collaborative culture. The collaborative teams worked collaboratively when developing responses to student learning. In a constant effort to ensure learning for all students, collaborative teams were continuously grappling with the following questions: If we think that all students can learn:  What do we want them to learn? How can we be certain that students have learned? How do we as a group respond to students who are not learning?

When an educational team chooses to direct its focus on transforming themselves into a PLC, all stakeholders simultaneously focus on the following components: effective collaboration, developing mission, vision and goals, continuous learning, leadership, school improvement planning, and persistence.

Collaborative teams in the high poverty, high performing schools are made up of teams, grade level and interdisciplinary groups, that work together to identify student needs and then develop research based approaches to address student learning deficiencies. Collaborative groups analyze data to assess student achievement from the previous year and identify strengths and weaknesses as they related to student performance. Teams then select an improvement target, and create SMART goals. SMART goals are targets set by the team containing the following components: a goal that is strategic and specific; reasonably attainable; results oriented; and time bound. High performing, high poverty schools used SMART goals, collaboration, and data to continually refine their instructional practices and improve student achievement.

Next, assessment practices that originate at the classroom level can inform decisions that guide instruction and teacher learning. Teams focused on collective inquiry rather than collective opinions. This collective inquiry drove the collaborative groups to develop a vision statement that ultimately drove the improvement plan. This vision for the school impacted numerous decisions including school improvement planning, budgeting, and staff development (DuFour, DuFour, Eaker, & Karhanek, 2004).

Clearly, teacher collaboration can potentially affect classroom practices and improved student achievement in conjunction with the other program components. In

order for collaboration to be successful, time and support needs to be provided for teachers.

> Darling-Hammond and McLaughlin (1995) suggest implementing an institutional infrastructure will help to build a collaborative environment. This infrastructure supports teachers' professional growth by providing structures for knowledge-sharing based on practice as well as sustained, cooperative experiences that allow teachers to reflect on both the process and on the content of what they are learning (as cited in American Institutes for Research, 2003, p. 10).

*Instructional Pacing*

> EPC Eight addresses instructional pacing. This component is defined by CDE as: The school/district prepares and distributes an annual district/school wide pacing schedule for each grade level (K-8) for the reading/language arts and mathematics program in order for all teachers to know when each lesson is expected to be taught and in what sequence to ensure content coverage (CDE, 2008d).

As with the other program component, instructional pacing is designed to support the implementation of the other program components. Common pacing is essential for having a coherent instructional program, use of time, providing interventions, teacher collaboration and professional development, data analysis, and coaching.

Instructional pacing is rooted in the research on instructional coherence previously discussed in EPC One. An instructional pacing guide provides teachers with common pacing and learning objectives in order to ensure collaborative teams have the foundation needed for a coherent instructional program.

Previous reviews of the literature indentified several studies that examined the use of pacing guides. One review stated,

> While curricular structures vary in the method used for covering content (Posner, 1974), one approach to a pacing schedule that attempts to ensure all students gain mastery of standards is the use of a “spiraled curriculum” in which skills and concepts are revisited and assessed throughout the year. Reyes and Fletcher (2003) identify spiraling and constant review as one of four common instructional elements of a successful mathematics program for migrant students (American Institutes for Research, 2003, p.11).

Another example cited in this review was a study conducted by Sunderman and Mickelsen (2000) “Investigating how Title I schools integrate curricular standards into their school-wide improvement program, Sunderman and Mickelsen (2000) identify instructional pacing and focused instruction for students not meeting standards as two key elements of their high-performing schools” (as cited in American Institutes for Research, 2003, p. 11).

Instructional pacing was also found to be an important practice in district level improvement. The Rand study on the role of districts in fostering instructional improvement identified district curriculum pacing as an essential element in improving achievement (Marsh et al., 2005). The study examined three districts and concluded four key practices for instructional improvement: instructional leadership, school based coaching, curriculum specification, and data use (Marsh et al., p. 22).

Clearly, instructional pacing is an important program component to assist with instruction coherence, collaboration, and data analysis. Without common pacing among classrooms, the other program components will be difficult to implement.

*Fiscal Alignment*

The final program component focuses on fiscal alignment and fiscal support of the other eight EPCs. EPC Nine is defined as "The general and categorical funds of the school or district are used appropriately to support the reading/English-language arts and mathematics program goals in the school plan" (CDE, 2008d).

> Appropriately allocating fiscal resources to support the school-wide plan for student achievement is critical to improved achievement in schools, especially schools serving low-income students. The alignment and allocation of all resources—federal, state, and district funds as well as school resources such as staff, time, materials, and equipment—with instructional goals is necessary for effective instructional program implementation (Corallo & MacDonald, 2002 as cited in American Institutes for Research, 2003, p.12).

As research is making the relationship between school improvement, student achievement, and budgetary funding explicit, educators have realized improvement cannot be sustained unless educational leaders know how to allocate resources effectively in order to lead to long-term achievement.

Even though there is limited literature available on the budgetary practices of schools able to sustain growth in student achievement, there are some studies available supporting the idea that good budgetary practices help sustain growth in student achievement.

One study, done on the Texas public school districts (Alexander et al., 2000), examined how spending on specific programs related to academic performance. The study used fiscal data from 1,042 school districts between 1996-1999. Researchers identified 774 target school districts to be used in the study. Additional data was collected from the Texas Education Agency and interviews were conducted with Texas public school officials from the finance divisions. The finance data allowed researchers to examine any relationships between student performance and fiscal allocations. The interviews provided information on how school districts made budgetary decisions. This study showed that high performing districts spent more money per student than lower performing schools on instruction, instructional resources, school leadership, general administration, co-curricular activities, and total operating expenditures (Alexander, et al.).

Level-one districts spent significantly more in regular education and career and technology education to address the unique needs of the gifted and talented. Special education, compensatory education, and bilingual education were also given high priorities. The results of the study show that allocations to the regular program are strongly linked to performance (Alexander, et al., 2000).

An article by Mid-continent Research for Education and Learning (MCREL, 2006) on Sustaining School Improvement- Resource Allocation states that, “To sustain improvement, schools must devote sufficient resources to fully implement priority goals before moving on to others” (p. 2). More importantly, successful schools know that improvement cannot be sustained unless successful programs are fully implemented. They must know how to allocate resources effectively in order to lead to long-term

achievement. Furthermore, leaders need to regularly re-visit the budget to the resources allocated produce results. “Schools that have authority over their budgets are better able to sustain school improvement efforts because they can direct money to support priority goals and programs” (MCREL, p. 2). Additionally, school leaders need to know the various funding sources and federal regulations to help find ways to combine resources needed to support and sustain school improvement.

An article by Jefferson (2005) shows inconclusive findings on the relationship between spending and student performance. She makes a distinction between expenditure and allocation when investigating spending and student achievement. Jefferson cited many studies showing the importance of resources allocation as an aid to greater student achievement. Among the studies she cited, Greenwald, Hedges, & Laine, (1996) used a meta-analysis of 60 studies to examine the extent of the relationship between school’s use of resources and student achievement. The study showed a broad range of resources to be positively connected to academic achievement. Another study she mentioned by Skandera and Sousa (2002) asserted that cost-per-pupil expenditure is poor measure for student performance. They suggested that it is more important to allocate resources differently rather than increase resources. Studies Jefferson referred to by Odden & Picus (2000) echoed this finding in their 1992 research. Her literature review points to the question of efficient and effective use of funds as the key factor for student achievement. She also referenced a study by Vergsten and King (1998) which included an extensive review and analysis of 35 years of production function research and concluded, “There is substantial agreement in the new research findings that resource inputs can and do make a difference in student’s educational outcomes” (Jefferson, p. 120). In spite of their review

of the literature, they concluded that two major questions still need to be answered: "What particular school resources have been identified that make a difference in pupil achievement, and how and why does money matter in producing education outcome?" (Jefferson, 2005, p.120). Jefferson concluded that money matters. Effective money allocation, however, can enhance educational opportunities. She cited Slavin (1999) who stated,

> It is clear (and obvious) that increased dollars do not magically transform themselves into greater learning. But it is just as clear (and just as obvious) that money can make a difference if spent on specific programs or other investments known to be effective (Jefferson, p.122).

Current educational research indicates a strong correlation between site-based budgetary control and student success when funds are allocated to support program coherence and the essential program components. Even lawmakers recognize the importance of program funding as evidenced by the presence of fiscal flexibility as one of NCLB's main tenets. The studies examined in this review agree on the importance of using funding to implement structures so schools can monitor and create data-driven instructional units and teacher collaboration. The studies also agree that schools must have funding flexibility so funds can go where the site funds are needed. Clearly, research supports the importance of aligning budgetary resources with improving student achievement and improving instruction.

*Summary*

All of the nine EPCs are designed to work interdependently. None of the components are effective independently. They need to work together to accomplish

school reform. There is substantial research behind each of the components and they are very evident in the school reform models. In order to fully understand their significance, however, it is necessary to explore each one in detail. A review of the literature for each component shows a greater depth than is found on the APS. EPC One requires schools to purchase instructional materials but the research advocates the creations of a coherent, standards based instructional program. EPC Two mandates adequate instructional minutes but the research shows that the most important factor is how time is used. EPC Three requires principals to attend professional development on leadership, but the research shows the need for strong instructional leaders knowledgeable in curriculum, instruction, and assessment and leadership skills. EPC Four requires highly qualified teachers and professional development, but the research reflects the need for effective teachers and comprehensive professional development models. EPC Five requires schools to have common assessments and a data management system but the research in this area reflects a need for deep knowledge on how to use data to change classroom practices, modify programs, provide interventions, and provide guidance on decision making at the school site level. EPC Six requires school to develop a system of support for teachers that may include coaching. When you examine the research in this area, the schools with the greatest results had a culture of peer coaching, reflection, and refinement of classroom practices. EPC Seven requires schools to provide collaborative time for teachers, but the research shows the most important characteristic is how teachers use their collaborative time. The research recommends the time be used for reflection and refinement of instructional practices, defining proficiency, examining student work, assessments, and data and collaborative planning of instruction. EPC Eight requires that

schools provide teachers with a pacing guide, but the research shows that the key characteristic is a consistent expectation of learning objectives. Finally, EPC Nine requires schools to fund the EPCs, but the research shows the need for a coherent budget that integrates funding sources needed to achieve very specific school wide goals.

Clearly, the EPCs lay an important foundation for school reform. However, if we want high performing schools, each of these components will need to be implemented at a deeper level.

In addition to the EPC, several other practices are seen in the school reform literature as contributing to student success that are not in the APS. These include:

1. Strong leadership,
2. Capacity building,
3. A culture of student achievement,
4. Teacher expectations of student learning,
5. Teacher efficacy,
6. Safe and orderly environment,
7. Parent involvement,
8. Research based pedagogical practices
9. Practices that support English learners and students with disabilities.

Additionally, there is research validating the important role of schools districts in school reform. School reform cannot be seen as a school level problem. It must be addressed within the context of district reform.

Our nation has a moral imperative to close the achievement gap between low-income students and their more advantaged peers. The No Child Left Behind Act

> makes this a legal requirement as well. Yet improving learning opportunities for all children will require more than individual talents or school-by-school efforts. It will demand a system-wide approach that touches every child in every school in every district across the nation (Togneri, 2003, p. 1).

### *Sustainability of Academic Achievement Growth*

There is a great deal of research on what practices transform underperforming schools and best practices regarding school reform. However, there is less information regarding sustainability of increases in student achievement. Current California accountability requirements under NCLB require schools to sustain at least a 10 percent growth in student achievement in both language arts and math each year for each numerically significant subgroup. This requirement has been challenging for high poverty, underperforming elementary schools. This brings a new question to the forefront of educational research; what practices enable schools to sustain academic achievement growth over time?

Fullan (2004) identifies leadership (not leaders) as the key to creating sustainability, to stretching boundaries in a new change revolution In his book *Leadership and Sustainability* (2004), Fullan outlines several practices critical to sustainability. The practices include a school culture that is focused on improving student learning, a willingness to innovate and change, leadership capacity building, collaborative problem solving, a commitment to problem solving and learning, a focus on results, "cyclical energizing" (Browne-Ferrigno, Allen, Maynard, Jackson, Stalion, n.d., p. 5) and distributed leadership.

Hargreaves & Fink (2004) also wrote on sustainability with a focus on leadership practices.

> Sustainable leadership matters, spreads and lasts. It is a shared responsibility, that does not unduly deplete human or financial resources, and that cares for and avoids exerting negative damage on the surrounding educational and community environment. Sustainable leadership has an activist engagement with the forces that affect it, and builds an educational environment of organizational diversity that promotes cross-fertilization of good ideas and successful practices in communities of shared learning and development (Hargreaves & Fink, p. 3).

Hargreaves and Fink also identified seven principles of sustainability. These include leadership that focuses on learning, leadership development, shared leadership across an organization, leadership that develops the talent of others, continuous learning, and the development of resilient organizations (Hargreaves & Fink, p. 9).

A third review of the literature conducted by Florian (2000) identified four factors that contributed to sustained educational change. These include changing the instructional methods used to attain achievement goals, leaders that are able to manage change, district level support during change, and high quality professional development and support (Florian, p. 4).

Additionally, the literature review found that sustainability of change was more successful when teachers were involved in decision-making and the change initiative was flexible enough to adapt to the needs of the local community. Other factors included: clear goals, succession leadership, staff retention, a focus on continuous improvement, and community support and district monitoring (Florian, 2000).

Another study by Stoll cited in Florian's work found that schools needed to build capacity for ongoing improvement by implementing a systems perspective among staff, high expectations for students, employees who are learning experts, and staff who understand the change process, modifiable structures, and a broad definition of school leadership. Stoll's recommendations for those attempting to develop school capacity from outside are respecting teachers as professionals, supporting ongoing professional development, helping schools interpret and use data, being critical friends, and supporting education in a wider social context (for example, in social and health programs as well as schools (Florian, 2000, p. 5).

Finally, Florian's research synthesis identified five factors that influence sustainability. She identified capacity building, a culture focused on collaboration and continuous learning, policies and structures that align with school goals, and leadership that is able to build positive relationships, and lead the organization toward achievement goals as important behaviors that contribute to sustainability (Florian, 2000, p. 12).

An additional study conducted by Reksten (2009) examined five high achieving Title One elementary schools in California. The case study identified common factors that contributed to sustainable achievement growth. These common factors included high expectations, distributed leadership, developing teacher leaders, a collaborative culture, best first instruction, regular use of data, and targeted interventions (Reksten, pp. 111-120).

Each of these schools implemented these practices in a unique way; however, they all focused on these core elements in order to ensure sustainable achievement growth.

There is limited research in the area of sustainability. However, there are some common themes that have been identified. Creating organizations that are dedicated to continuous improvement and continual learning are critical for sustained achievement growth. Leadership capacity development and dispersed leadership are also important. Finally, practices need to be interconnected with other schools and districts and led by a coherent district focus. In order to sustain learning, schools must identify the specific factors that contributed to the results. This requires schools to engage in action research, inquiry, analysis and reflection. Schools that sustain increases in student achievement become learning communities and focus on continuous improvement.

### *Conclusion*

Turning around underperforming schools and sustaining student achievement growth is a complex process and requires great leadership skills. It can be done, however. There are many examples of schools that have beaten the odds and increased student achievement even when others did not believe they could be successful. High performing, high poverty schools have very similar characteristics.

The common themes found in the II/USP and SAIT studies as well as the literature review on sustainability, the essential program components, and high performing, high poverty schools indicated that sustained achievement growth requires:

1. Continuous deep implementation of the nine EPCs which includes a coherent instructional program, maximized use of time, skillful leadership, coherent professional development, collaboration, and coaching, data driven decision making, and fiscal coherence (American Institute for Research, 2006; Chrisman, 2004; Darling-Hammond, 2009; & DuFour & DuFour, 2008; Education Trust,

2001; Firestone et al., 2004; Hatchuel et al., 2008; Izumi, 2002; Just for the Kids, 1995; Marzano, 2003; MCREL, 2000; National Commission on Excellence in Education, 1983; Newmann et al., 2001; O'Neill, 2003; Parrish et al., 2005; Reeves, 2004; Reksten, 2009).

2. Capacity building and leadership development along with distributed leadership (Florian, 2000; Fullan, 2007; Hargreaves & Fink, 2004; Hatchuel et al., 2008; Parrish et al., 2005; Reksten, 2009;).
3. Collective problem solving, goal setting, reflection, and learning (Cornett & Knight, 2008; DuFour & DuFour, 2008; Fullan, 2007; Reksten, 2009).
4. Commitment to results and continuous improvement (DuFour & DuFour, 2008; Florian, 2000; Fullan, 2007; Goe, 2007; O'Neill, 2003; Parrish et al., 2005; Reeves, 2004; Reksten, 2009).
5. Culture focused on learning and high expectation for student learning (Chrisman, 2004; DuFour & DuFour, 2008; Florian, 2000; Fullan, 2007; Hargreaves & Fink, 2003; Izumi, 2002; O'Neill, 2003; Reksten, 2009 ;).
6. Coherent programs structures and policies (American Institute for Research, 2006; Firestone et al., 2004; Izumi, 2002; Newmann et al., 2001; Parrish et al. 2005).
7. Strong district leadership, support and policies (Chrisman 2004; Firestone et al., 2004; Florian, 2000; Fullan, 2007; Hatchuel et al., 2008; Marsh et al., 2005; Parrish et al. 2005).

The literature review and the evaluations studies of II/USP and SAIT also identified five factors that potentially hinder sustainable achievement growth. These include:

1. Limited external support (Hatchuel et al., 2008; Parrish et al., 2005).
2. Lack of funding or resources (Hatchuel et al., 2008; Parrish et al., 2005).
3. Lack of capacity (Parrish et al., 2005).
4. School culture (Parrish et al., 2005).
5. Changes in leadership (Fullan, 2000).

# Chapter Three: Methods

## *Overview*

This study examined the sustainability of achievement growth in California's elementary schools that were formally in state monitoring. The literature review on schools sustaining achievement growth showed that sustainability in underperforming schools is challenging but achievable. California's Department of Education (CDE) identified 83 elementary schools statewide between 2002 and 2004 as state monitoring schools. Each school was provided additional funding and selected a School Assistance and Intervention Team (SAIT) to help improve student achievement and exit state monitoring within 3 years. Once a school exited state monitoring, SAIT funding and support was eliminated. This study examined the achievement trends for each of these schools for 2 years after exiting state monitoring. Then, the elementary schools with 2 or more years of consecutive increased API growth on California's accountability measure were asked to participate in a semi structured interview with the principal or the principal's designee to determine the principal's perceptions of practices that contributed to their sustained achievement growth. Since principal mobility was a limiting factor at the identified schools, only principals or principal designees that have been assigned to the identified school site for a minimum of 6 months were invited to participate in the interview portion of the study. The interviews were conducted over the telephone and the interviews were recorded and transcribed into word documents and analyzed for themes regarding practices that contributed to sustained achievement growth. Interview participants' confidentiality was maintained and interview notes will be stored in a secure location for 3 years following the conclusion of the study and then shredded to ensure

confidentiality. This chapter will discuss the study design, data collection methods, human subjects, human subject's protections, instrumentation, data reporting, data analysis and the procedures for conducting the study.

*Statement of the Problem*

Statewide, there were 83 elementary schools placed in state monitoring between 2002 and 2004. Once identified these schools contracted for external support from a CDE approved SAIT provider. SAIT providers worked with the school and developed a corrective action plan for the school and monitored the school a minimum of every 3 months regarding progress and implementation of their corrective action plans. Once schools exit state monitoring, however, there is no requirement for monitoring progress. CDE does not require SAIT providers to formally monitor a former state monitored school's academic achievement once they exit state monitoring. Consequently, it is unknown if elementary schools that exited state monitoring can sustain achievement growth after sanctions are completed. The Evaluation Study of the II/USP Accountability Act of 1999 states:

> At this early point, we are unable to assess the actual effectiveness of the SAIT process on improving student outcomes. While a substantial percentage of SAIT schools met their growth targets in the first year of participation (2003-2004), we have minimal evidence at this point to confirm a link between these outcomes and the SAIT process (Parish et al., 2005, p. 9).

It is important to monitor school reform efforts for sustainability because past research shows that school reform efforts frequently fail and are not sustainable. According to Fullan (2000) in his article, *The Three Stories of Educational Reform*:

> It takes about three years to achieve successful change in student performance in an elementary school. Depending on size, it takes about six years to do so in a secondary school. While this is good news, there are two serious problems with this finding. First, these successes occur in only a small number of schools; that is, these reform efforts have not "gone to scale" and been widely reproduced. Second, and equally problematic, there is no guarantee that the initial success will last. Put in terms of the change process, there has been strong adoption and implementation, but not strong institutionalization (p. 1).

### *Purpose*

The purpose of this study was twofold: a) To examine the achievement trends on California's accountability measures of public elementary schools in California after they have exited state monitoring, and b) To identify the practices perceived as contributing to sustainable student achievement growth in former state monitored schools with the highest continuous API growth as reported by the schools' principals.

### *Research Questions*

The following questions guided the study:

1. What are the achievement trends of California public elementary schools on state accountability measures 2 years after they have exited state monitoring?
    a. To what extent, if at all, is there a statistically-significant relationship between the year a school exited state monitoring and API growth?
    b. To what extent, if at all, is there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in English language arts?

c. To what extent, if at all, is there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in mathematics?

2. What practices do principals of the elementary schools with 2 years of positive API growth after exiting state monitoring credit as contributing to sustaining student achievement growth?

*Methodology*

The study used a mixed methodology research approach. This method combined an analysis of achievement trends in elementary schools after state monitoring in combination with the perceptions of the administrators at schools with 2 years of consecutive positive API growth regarding specific practices that contribute to sustained student achievement growth.

First, a quantitative methodology was used to determine the achievement trends on California's accountability measures of public elementary schools in California after they exited state monitoring. Data was publicly accessible and was retrieved from CDE's web site (CDE, 2008p). Data regarding API and overall AYP for English language arts (ELA) and math was collected for all 83 California elementary schools that entered state monitoring between 2002 and 2004. First, any of the 83 elementary schools that closed, did not exit SAIT by 2006, did not have data available on the CDE website or had testing irregularities after exiting state monitoring were eliminated from the study's analysis. Then, a list of SAIT schools that exited state monitoring by 2006 was created and these schools were analyzed for achievement growth trends. The data provided in the study

was limited to schools that exited SAIT by 2006 to ensure 2 years of data following exiting state monitoring was available.

Data collection included overall English language arts (ELA) and mathematics performance on AYP. Additionally, the overall API growth data following exiting state monitoring was downloaded and a 2 year API growth total was calculated by adding the year one and year two API growth together. All of the data retrieved from the CDE website was placed in an Excel spread sheet. Each school's achievement growth was calculated for total API growth and overall ELA and math growth on AYP for the 2 years following exiting from state monitoring and placed in an Excel spread sheet. Analysis of variance was used to determine whether or not any differences were statistically significant. The study used a $P < .05$ confidence level to determine statistical significance.

Secondly, a qualitative methodology was used to determine the practices perceived as contributing to sustainable achievement growth in former SAIT schools with sustained API growth as reported by the schools' principal. An extensive review of the literature on school reform and sustainability indicated six themes necessary for sustained achievement growth. These themes include: a) continuous deep implementation of the nine essential program components (EPCs); b) capacity building and leadership development; c) collective problem solving, goal setting, reflection, and learning; d) commitment to results and continuous improvement, culture focused on learning and high expectation for student learning; e) coherent programs, structures and policies; and f) strong district leadership, support and policies. The principals from the schools that sustained positive API growth for 2 years after exiting SAIT were contacted to participate

in a semi-structured interview. The interviews were conducted with the principal or the principal's designee of the schools that agreed to participate in the study. Each principal or designee was interviewed regarding their perceptions of factors that contribute to sustainability of achievement growth. Interview responses were analyzed to determine the principal's perspectives on practices that contribute to sustained student achievement growth. Principal interviews were chosen for the qualitative aspect of this study in order to gain a better understanding of factors that contribute to sustainability. "Qualitative research is typically used to answer questions about the complex nature of phenomena, often with the purpose of describing and understanding the phenomena from the participants point of view" (Leedy & Ormrod, 2005, p. 94).

### *Study Population*

In order to address the study constraints, the sample population consisted of elementary schools that exited California's state monitoring during 2004-2006. In 2005, CDE published a list of state monitored schools that listed 83 elementary schools in California as state monitored schools in 2002-2005. The list of identified state monitoring schools was provided to County Offices of Education and was used to identify schools for this study. The achievement data for each school available on the CDE website provided the achievement growth data for the 83 schools and was used to identify which schools exited state monitoring between 2004 and 2006. The data was also used to identify data trends for the 2 years following a school's exit from state monitoring. The identified schools were examined for overall growth on API and AYP for ELA and math.

The qualitative portion of the study used a telephone interview with principals or the principal's designee at the elementary schools that sustained continuous growth on

API to determine their perceptions on sustainability of student achievement growth. The research method involved purposeful sampling based on the results from the quantitative research. For the qualitative aspect of this study the schools that sustained continuous overall API growth on California's API for 2 years after exiting state monitoring were selected for principal interviews. These schools were used to collect principal's perceptions regarding practices that contribute to sustaining academic achievement growth. The school district superintendents or designees of the identified schools were contacted for permission to interview the principal (Appendix A). If a school district required additional information to grant permission to do research in their district, the researchers completed the district's application process. Once approval was received from the school district, each of the identified school's principals was contacted by letter (Appendix B) to invite them to participate in the study. Next, a follow-up phone call (Appendix C) was made to determine their willingness to participate. During the follow-up phone call, the participant's informed consent (Appendix D) was reviewed and participants were asked to sign the consent and return the form to the researcher before the interview was conducted. Then, a time was scheduled for the telephone interview. Any of the principals who were unwilling to participate or felt they did not have adequate knowledge of the schools since they were newly appointed or other reasons and were unwilling to provide a designee, were not included in the interview process. Participants were asked to participate in an open-ended interview (Appendix E) that was designed to last approximately 45-60 minutes. The interviews were audio recorded and transcribed into word documents for analysis.

### *Human Subjects Protections*

As the quantitative aspect of this study was based on data available on the CDE website, there were no human subjects. Every school's achievement data was available to download from the CDE website. If state achievement data was unavailable from the previously mentioned website, the school was not included in the analysis.

For the qualitative portion of this study, the human subjects were the elementary principals identified in the quantitative portion of the study. Letters of permission to conduct the study (Appendix A) were sent to the Superintendents of the schools districts where the selected schools were located for district approval of participation in the interviews. Once district approval was received, designated principals were contacted via letter (Appendix B), and a phone call (Appendix C) to determine their willingness to participate in the study. In addition to the IRB application, the researcher used an informed consent for participation in research activities with each participant (Appendix D). Before any information or data was collected, the researcher discussed the consent thoroughly with each participant. In accordance with Pepperdine University requirements, the researcher provided a letter (Appendix B) meeting requirements for the written statement regarding the research, as well as the informed consent form (Appendix D) to the participants requesting their participation in this study. This request was based upon minimal, if any, potential risk to the study participants (Hall & Feltner, 2005). Any potential risk to the participants was discussed in the informed consent form as well as minimized by confidential record keeping and reporting of responses. Potential risks could have included discomfort, and inconvenience. Harm to human subjects was not limited to physical injury, and there were certain risks and discomforts that might be

associated with research. These risks included: psychological, social, economic, and legal risks. Physical risks may be fatigue. Psychological risks may include boredom, embarrassment, and anxiety. I believe the risks of the study were minimized and were reasonable in relation to the anticipated benefits of the study.

Individual responses from the interview process were tape recorded with the individual's permission using an audio recorder and transcribed into a written document and available only to the researcher. All individual responses were consolidated for reporting purposes only in aggregate form. In describing school and subject identity, schools and subjects were known only to the researcher and their identities were protected and kept confidential in manuscript. Each school was assigned a research number known only to the researcher. Confidentiality and anonymity of participants was ensured. Interview notes were stored in a secure location in the researcher's home and will be shredded 3 years after the conclusion of the study when the information is no longer needed. In order to meet Pepperdine University's compliance requirements with federal guidelines for the protection of human subjects, the researcher submitted an application for an exempt review to the Institutional Review Board. As previously stated, this request was based upon minimal, if any, potential risk to human subjects involved in the proposed study.

The IRB examined many elements of a proposed research project including (a) study design, (b) investigator qualifications, (c) risks and potential benefits to participants, (d) the informed consent process, and (e) confidentiality and privacy (Hall & Feltner, 2005, p. 18). As part of the application process, the researcher also completed the Human

Participants Protection Education for Researchers online course, sponsored by the National Institute of Health.

*Instrumentation*

The quantitative instruments in this study were the pre-existing California achievement data used to collect and report school API and AYP scores. The API measures the academic achievement performance and growth of schools in California. It is scaled from 200 to 1000 and is calculated using a complex formula based on individual student achievement scores. Student's individual performances are averaged across all students and content areas in order to calculate a school wide API score. Additionally, API scores are calculated for numerically significant subgroups to measure achievement gaps between different subgroups.

> To be considered 'numerically significant' for the API, a subgroup must have either: (1) at least 50 students with valid test scores who make up at least 15 percent of the total valid scores, or (2) at least 100 students with valid test scores (CDE, 2008q, p. 4).

API is a "cross-sectional look at student achievement. It does not track individual student progress across years but rather compares snapshots of a school or LEA level achievement results from one year to the next" (CDE, 2008a p. 5). The California Department of Education Standards and Assessment Division published a California Standards Technical Report in March 2009. The report analyses California's testing efforts and supports the reliability and validity of the tests. The report includes extensive statistical analysis of California's tests and concludes that the tests are valid and reliable.

Adequate Yearly Progress (AYP) is a statewide accountability system mandated by the No Child Left Behind Act of 2001 requiring each state to ensure that all schools and districts make Adequate Yearly Progress (CDE, 2007b). AYP measures the percent of students that score proficient or above on the California Standards Test (CST) including numerically significant subgroups. The CST measures a student's mastery of California's academic content standards in English-language arts, mathematics, history-social science, and science. Students score at one of five proficiency levels: advanced, proficient, basic, below basic, and far below basic. Title I of NCLB requires each state define AYP criteria. Schools must meet these proficiency standards for all significant student populations yearly as part of each state's accountability assessment. The goal of NCLB is to have 100% of student's proficient by 2014. Beginning in 2002-2003, achievement targets in California were 13.6% for ELA and 16% in mathematics. By 2004-2005 the requirements increased to 24.4% for ELA and 26.5% for math. In 2007-2008 schools were required to attain 35.2% in ELA and 37% in math. In 2008-2009 the requirements increased to 46% for ELA and 47.5% for math. Each year following 2009, achievement targets increase until the accountability requirements are 100% in 2014.

The instrumentation used for the qualitative portion of the study was a semi-structured interview. The interview protocol consisted of ten interview questions. The use of open-ended interview questions was selected to collect perceptions regarding specific practices that contributed to sustained achievement growth in their schools. The interview protocol (Appendix E) that was used during the interviews was generated from the thorough review of the literature on school reform and sustainability found in Chapter Two.

The common themes found in the II/USP and SAIT studies as well as the literature review on sustainability, the essential program components, and high performing, high poverty schools indicated that sustained achievement growth requires a) continuous deep implementation of the nine EPCs; b) capacity building and leadership development; c) collective problem solving, goal setting, reflection, and learning; d) commitment to results and continuous improvement, culture focused on learning and high expectation for student learning; e) coherent programs structures and policies; and f) strong district leadership, support and policies. Additionally, the literature review also identified five factors that potentially hinder sustainable achievement growth. These include a) limited external support, b) lack of funding or resources, c) lack of capacity, d) school culture; and e) changes in leadership. Each of the themes was used to construct the interview protocol used in this study. Table 3 correlates the interview questions and the literature review.

Table 1

*Correlation between Interview Questions and Literature Review*

| Sustainability Theme | Interview Questions | Cited Research |
|---|---|---|
| Changes in leadership can hinder sustainability | How many years have you been the principal at this school? Were you at the school site during the SAIT process? If so, what was your position during SAIT? | Fullan, 2000 |
| Lack of funding or resources can hinder sustainability | Have there been any major shifts in funding or other resources besides the loss of SAIT funds and the current normal budget fluctuation since exiting SAIT? If so, what were they and how have they effected achievement growth? | Hatchuel et al., 2008; Parrish et al., 2005 |

*(table continues)*

| Sustainability Theme | Interview Questions | Cited Research |
|---|---|---|
| Strong district leadership, support and policies | What external support has been provided to your school that has contributed to sustained achievement growth? | Chrisman, 2004; Firestone et al., 2004; Florian, 2000; Fullan, 2007; Hatchuel et al., 2008; Marsh et al., 2005; Parrish et al., 2005; |
| Continuous deep implementation of the nine EPCs which includes a coherent instructional program, maximized use of time, skillful leadership, coherent professional development, collaboration, and coaching, data driven decision making, and fiscal coherence assists with sustainability<br><br>Coherent programs structures and policies | Which Essential Program Components from the Academic Program Survey have contributed most to sustainability of achievement growth? How did they contribute?<br><br>Are there any elements of the Academic Program Survey that you have not substantially implemented at your school? If so, which ones and why? | American Institute for Research, 2006; Chrisman, 2004; DuFour et al., 2008; Education Trust, 2001; Firestone et al., 2004; Hatchuel et al., 2008; Izumi, 2002; Just for the Kids, 1995; Marzano, 2003; MCREL, 2000; National Commission on Excellence in Education, 1983; Newmann et al., 2001; O'Neill, 2003; Parrish et al., 2005; Reeves, 2004; Reksten, 2009 |
| Collective problem solving, goal setting, reflection, and learning | What were your school wide goals from last year? What was the process for selecting these? How did you monitor progress? How often did monitoring occur? What did you learn from your analysis? | Cornett & Knight, 2008; DuFour & DuFour, 2008; Fullan, 2007;Reksten, 2009 |
| Commitment to results and continuous improvement | | DuFour & DuFour, 2008; Florian, 2000; Fullan, 2007; Goe, 2007; O'Neill, 2003; Parrish et al., 2005; Reeves, 2004; Reksten, 2009 |

*(table continues)*

| Sustainability Theme | Interview Questions | Cited Research |
|---|---|---|
| Capacity building and leadership development along with distributed leadership | What role does your leadership team play in improving student achievement? Who is part of your leadership team and how are you developing leadership capacity with your staff? | Florian, 2000; Fullan, 2007; Hargreaves & Fink, 2004; Hatchuel et al., 2008; Parrish et al., 2005; Reksten, 2009 |
| Culture focused on learning and high expectation for student learning | How are learning expectations communicated to teachers, students and families and how do you monitor progress toward these objectives? | Chrisman, 2004; DuFour & DuFour, 2008; Florian, 2000; Fullan, 2003; Fullan, 2007; Hargreaves & Fink, 2004; Izumi, 2002; O'Neill, 2003; Reksten, 2009 |

In addition to the eight questions found in Table 1, two additional questions were included in the principal interviews. Question nine, "In your school, what practices contributed most too sustained achievement growth at your school? What practices were the least helpful?" was included in the interview protocol to ask principals for their perception on the importance and value of practices and their effect on student achievement. Question ten, "What advice would you give another principal regarding how you sustain academic achievement growth?" was included in the interview protocol to collect data regarding what principals considered most important for sustainability of achievement growth. Questions nine and ten also gave participants an opportunity to contribute other practices that have not been mentioned if needed. The ten interview questions were reviewed by two experts in school reform for feedback on the interview protocol and to ensure the interview protocol was clear, unbiased, and measured what the research was asking. The interviews were concluded by thanking participants for their

participation and explaining that once completed, I would send them a copy of the themes identified in the interviews. They were asked the following exit question, “If we were to replicate this protocol in the future, would you recommend any additions or changes to this interview protocol”?

### *Instrument Validity and Reliability*

The validity of this research methodology came from an extensive review of the literature on high performing, high poverty schools and sustainability of increased student achievement. The quantitative aspect of this study relies on data from California’s CST assessment. Because California’s state assessment was developed by Educational Testing services, a nationally recognized standardized testing organization, this researcher assumed that the content validity of California’s state assessments was already established. Additionally, the California Department of Education Standards and Assessment Division published a California Standards Technical Report in March 2009. The report analyses California’s testing efforts and supports the reliability and validity of the tests. The report includes extensive statistical analysis of California’s tests and concludes that the tests are valid and reliable.

The qualitative aspect of this study consisted of semi-structured interviews of principals at former state monitored elementary schools that have sustained achievement growth on California’s API. In order to capture their perceptions on practices that contribute to sustained student achievement growth, an interview protocol was developed around major themes identified in the literature review (Appendix E). The interview questions were designed to collect information regarding the key findings in the literature review as well as principal’s perceptions about practices at their school.

Once the interview protocol was developed, the researcher contacted two experts in the area of school reform for feedback on the interview protocol. The use of experts helped clarify whether the interview protocol was clear, unbiased, and measured what the researcher was asking. Expertise in this area was determined by expertise in working with underperforming schools and SAIT. Additionally, a pilot of the interview questions was conducted with a principal at a non state monitored school that has continually increased API points between 2006 and 2008. The pilot interview allowed the researcher to ensure the interview protocol was clear, unbiased and produced information regarding the research question. Once completed, the researcher asked the participant one final debrief question at the end of the interview. “If we were to replicate this protocol in the future, would you recommend any additions or changes to this interview protocol?” At the end of the interview, the researcher thanked them for their participation and contribution to the study. Participants received a copy of themes identified from the interviews to allow an opportunity for them to confirm the accuracy of the data.

### *Data Reporting and Analysis*

For the quantitative aspect of this study, CST data on 83 elementary schools that entered state monitoring between 2002 and 2004 was examined to determine state wide achievement trends. First, any of the 83 elementary schools that were closed, did not have data available on the CDE website, did not exit state monitoring by 2006, or had testing irregularities after exiting state monitoring were removed from the analysis. Then, a list of former state monitored schools that exited by 2006 was created and these schools were analyzed for achievement growth trends. The data provided in the study was limited to schools that exited state monitoring by 2006 to ensure 2 years of data following

exiting state monitoring is available. The AYP and API data for each area mentioned above was inputted onto an Excel spread sheet.

Once the achievement data was collected, for each school, the total overall API growth for 2 years after the school exited state monitoring was calculated. The same procedure was used to calculate overall achievement growth in AYP for both language arts and math.

A list of schools was developed that indicated which schools made their API growth targets as identified by the state of California. Additionally the school's number of total API points over 2 years following exit from state monitoring was determined. Finally, a ranked list of schools from highest growth to least growth was generated. This list was used to identify the schools with the two years of sustained API growth that were invited to participate in the interview for the qualitative portion of this study.

API and AYP data was analyzed and summarized for statewide data trends. NCSS software was used to calculate an ANOVA to determine if statewide AYP trends were statistically significant. The study used a $p < .05$ confidence level to determine statistical significance.

The qualitative portion of the research included semi-structured interviews with the principals at the schools with sustained achievement growth over 2 years on API. In order to collect qualitative data, the researcher requested approval to collect data for the proposed study from the school districts with sustained API growth schools as well as from Pepperdine University. Once permission was granted, the researcher contacted prospective principals by letter (Appendix B), and conducted a follow up phone call (Appendix C) to advise them of the topic and purpose of the study and to ask for their

participation. Additionally, prospective participants received a copy of the informed consent. If a prospective principal accepted the invitation to participate in the study, the researcher scheduled a time for the interview and reviewed the informed consent with them (Appendix D). Participants were asked to return the informed consent prior to the interview. The informed consent (Appendix D) addressed the procedures for the study, potential risks, benefits, voluntary participation, and provided the required contact information. A copy of the interview questions were sent to participants prior to the scheduled interview time to allow time for them to consider their answers and get input from key staff members (Appendix E).

Interviews were conducted over the telephone unless otherwise requested and audio recorded for accuracy. The audio recordings were transcribed into text documents for analysis.

A semi-structured interview format was used. An interview, in a quantitative study, is "essentially a vocal questionnaire" (McMillan & Schumacher, 2001, p. 267). All participants were asked the same questions (Appendix E). At the beginning of the interview the researcher reviewed the purpose of the interview, reason their school was selected, the interview questions, confidentiality, and answered any questions the participants had.

The interviews were introduced with the following interview script:

> The purpose of this interview is to explore your perceptions regarding your school's practices that contribute to sustained achievement growth on California's API. During this interview I would like you to think about the specific practices implemented at your school that helped your school sustained achievement

growth (Appendix E).

During the interview, follow up questions were asked as needed for further clarification. Interview notes were recorded on an audio recording device and the researcher took personal notes on the computer during the interview. Once the interview data was collected, participant's responses were analyzed for common themes within each of the research questions. Interview data and themes were reviewed by a professional colleague with expertise on school reform to prevent researcher bias and increase research credibility. A follow up thank you letter (Appendix F) which summarizes the key findings was sent to participants following the interviews in order to allow participants the opportunity to confirm the findings.

### *Procedures*

The following procedures were used to conduct the study:

1. Create an Excel spread sheet that lists the 83 elementary schools that entered SAIT in 2002-2004. Assign each school an identification code to ensure confidentiality.
2. Data regarding API and AYP was collected for the 83 California elementary schools that entered state monitoring between 2002 and 2004. API information was downloaded from 2002 through 2008 in order to determine the year the schools entered and exited SAIT. Any school that was closed, did not exit state monitoring by 2006, did not have data available on the CDE website or had testing irregularities after exiting SAIT was removed from the analysis. Then, a list of SAIT schools that exited state monitoring by 2006 was created. The schools on this list were the focus of the quantitative study. Data collection for these

schools included API growth and percent proficient for overall ELA and mathematics performance on AYP.

3. Each identified school's achievement growth for 2 years after exiting state monitoring was calculated for overall API and added together to produce a 2 year growth total.
4. Each identified school's achievement growth for 2 years after exiting state monitoring was calculated for overall ELA and math on AYP and added together to produce a 2 year growth total.
5. Each school's achievement growth on API and AYP growth was displayed in a summary table (Appendix G and H).
6. API and AYP data was analyzed and summarized for statewide data trends with all schools identified for the study. NCSS software was used to calculate an ANOVA to whether or not any differences were statistically significant. The study used a $p < .05$ confidence level to determine statistical significance.
7. A list of schools was developed that indicated which schools sustained positive API growth for 2 years after exiting state monitoring. This list was used to identify the schools invited to participate in principal interviews.
8. Letters of permission (Appendix A) were sent to the Superintendents of the school districts where the selected schools are located for district approval of participation in the interviews. Once district approval was received, designated principals were contacted via letter (Appendix B), and a follow up phone call (Appendix C) was used to determine their willingness to participate in the study.

9. Once permission to participate was provided, each principal was contacted to schedule a time to interview them. A copy of the interview questions was sent to participants at least 1 week prior to the scheduled interview time to allow time for them to consider their answers and get input from key staff members (Appendix E).
10. A semi-structured interview was conducted using an interview protocol (Appendix E).
11. Interview responses were audio recorded during the interview with participant's permission and transcribed to a text document for analysis.
12. At the end of the interview, an interview debrief question was asked. Each participant was asked for feedback on the interview instrument for further studies. "If we were to replicate this protocol in the future, would you recommend any additions or changes to this interview protocol?" At the end of the interview, the researcher thanked them for their participation and contribution to the study. Participants received a copy of themes identified from the interviews to allow an opportunity for them to confirm the accuracy of the data.
13. Interview notes were coded and analyzed for themes within each interview question. Interview data and themes were reviewed by a professional colleague with expertise on school reform to prevent researcher bias and increase research credibility.
14. A follow up thank you letter (Appendix F) was sent to participants following the interview that summarized the studies key findings and allowed interview participants to confirm the accuracy of the analysis.

*Summary*

This chapter outlined the research methodology that was used to examine the achievement trends on California's accountability measures of public elementary schools in California after they have exited state monitoring; and to identify the practices perceived as contributing to sustainable achievement growth in former SAIT schools with sustained API growth as reported by the schools' principals. The study utilized a mixed methodology research approach in order to provide information regarding these two research questions.

Also included in this chapter was an outline of the research design and the methods that were utilized, the population that was studied, the data collection procedures, instruments for the study, human subject's protection, study procedures and the analytical techniques.

# Chapter Four: Results

## *Overview*

This study examined the achievement trends of 58 California public elementary schools that exited state monitoring as of 2006, and identified school wide practices principals perceived as contributing to sustainable student achievement growth.

Two primary research questions guided the study. The first question examined the statewide achievement trends on California's Academic Program Index (API) and Adequate Yearly Progress (AYP) for the 2 years after 58 elementary schools exited state monitoring. API and AYP data was collected for the 58 elementary schools that exited state monitoring as of 2006. All data was retrieved from the California department of Education (CDE) website. The achievement data sets from these schools were then analyzed for performance trends. The research questions that guided this portion of the study were:

1. What were the achievement trends of California public elementary schools on state accountability measures two years after they have exited state monitoring?
    a. To what extent, if at all, was there a statistically-significant relationship between the year a school exited state monitoring and API growth?
    b. To what extent, if at all, was there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in English language arts?
    c. To what extent, if at all, was there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in mathematics?

The second research question examined practices contributing to sustained achievement growth in four former state monitored elementary school. The 26 elementary schools that sustained 2 years of positive API growth after exiting state monitoring were invited to participate in the second portion of the study. Eight of the 26 school districts granted permission for their district to participate in the study. Of the eight schools, four principals responded to the invitation to participate. Two of the principals were in southern California and two were from northern California. The principals in these four schools were interviewed through a semi-structured interview process over the phone to identify the practices they believed contributed to their school's success. The research question that guided this portion of the study was:

2. What practices did principals of the elementary schools with two years of positive API growth after exiting state monitoring credit as contributing to sustaining student achievement growth?

This chapter is organized into two sections. The first section addresses research question 1 and includes descriptive and inferential data related to statewide data trends on API and overall AYP. This chapter described statewide trends on API and AYP 2 years after the 58 schools exited state monitoring. Since the schools exited state monitoring in different years, the study compared the findings in an analysis of variance program to make sure the years exited did not distort the sample. Analysis of variance uses differences among sample means to estimate the variance of the population. If the samples all come from populations with the same mean, the differences between sample means should be relatively small.

The second section addresses research question 2 and provides a summary of the principal interviews, what they credit as contributing to sustaining student achievement growth and identifies sustainability themes.

*Research Question One*

The first part of the study dealt with research question one and its three sub-questions. Eighty-three elementary schools entered state monitoring between 2002 and 2004. Sixty of the 83 schools exited state monitoring as of 2006. Of these 60, 2 were closed between 2006 and 2008 leaving a total of 58 schools in the sample. This analysis focused solely on the 58 schools with 2 years of state assessment data after exiting state monitoring.

*Research Question 1A*

To determine API growth 2 years after exiting state monitoring, each school's API growth for the first and second year after exiting state monitoring was retrieved from the CDE's website. The 2 years of growth numbers were then combined to get a 2 year total API growth number. California adjusts its API each year making it impossible to make direct year-to-year comparisons. This study combines 2 years of data to provide a more realistic picture of how the schools performed.

Initial analysis of the 2 year API data from the 58 elementary schools found in Appendix G indicated that 37 of the 58 schools (57%) demonstrated positive API growth 2 years after exiting state monitoring. The mean API growth for the 58 schools was 15 with a standard deviation of 33.7. The lowest score was –62 and the highest was 86, providing a range of 148 API points. Five out of five (100%) of the schools that exited in 2004 had positive growth. Seven out of 11 (64%) of the schools that exited in 2005 had

positive growth. Twenty-five of 42 (60%) schools that exited in 2006 demonstrated positive API growth. Of the 37 schools showing positive growth at the end of 2 years, 26 schools (44%) improved in each of the 2 years studied.

The next step in the data collection was to run an analysis of variance to determine any statistical significance between the school's achievement data and the year the school exited state monitoring. Inspection of the chart below shows the mean growth on API for the schools that exited state monitoring in 2004, 2005, and 2006.

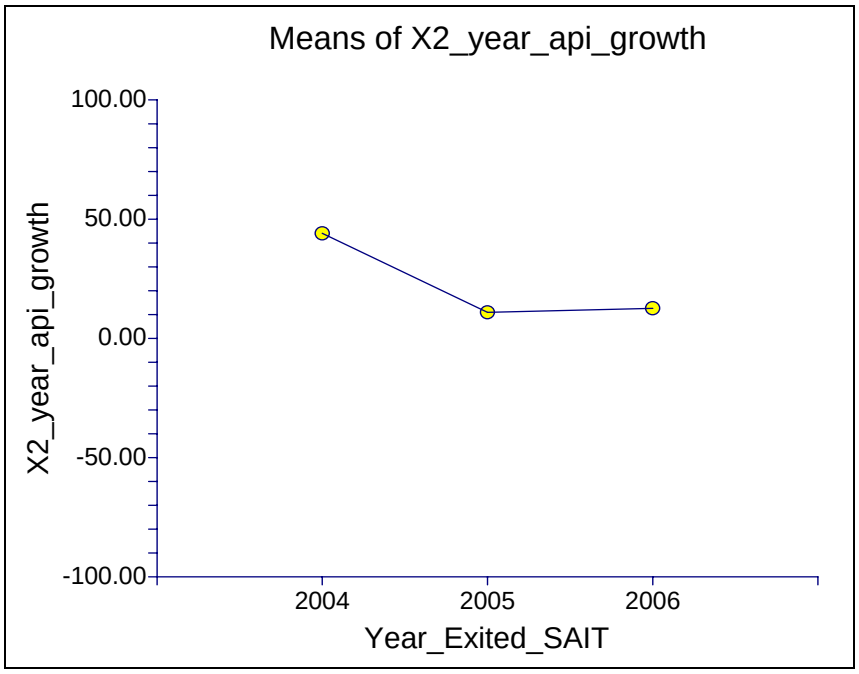


*Figure 3.* Mean of two year API growth, for 2004, 2005, and 2006 schools.

Figure 3 shows year-to-year performance on API. The analysis of variance below shows that the sample means for the 3 years were similar and probably did not significantly distort the API findings.

Table 2

*Two year API Growth Summary*

| Groups | Count | Sum | Average | Variance |
|---|---|---|---|---|
| 2004 | 5 | 220 | 44 | 803 |
| 2005 | 11 | 120 | 10.90909 | 1211.691 |
| 2006 | 42 | 530 | 12.61905 | 1120.925 |

Table 3

*Two year API Growth ANOVA Calculations*

| Source of Variation | SS | df | MS | F | P-value | F criteria |
|---|---|---|---|---|---|---|
| Between Groups | 4627.186 | 2 | 2313.593 | 2.076264 | 0.135116 | 3.164999 |
| Within Groups | 61286.81 | 55 | 1114.306 | | | |
| Total | 65914 | 57 | | | | |

Table 2 shows the year to year analysis of variance from 2004 to 2006 on California's API. Table 3 shows the calculations to determine ANOVA. The ANOVA compares the means of the 3 years studied (i.e., 2004, 2005, and 2006) to determine if the means of these groups are similar or different. The ANOVA is usually considered the best tool for comparing means of multiple groups given the assumption that the groups are normally distributed. Using .05 as our P-value, the table shows there was no statistically significant difference in the means of the three groups. Additionally, the tests of assumptions indicated the following:

Table 4

*Test of Assumptions for API Growth*

| Assumption | Test Value | Probability Level | Decision (0.05) |
|---|---|---|---|
| Skewness Normality of Residuals | 0.0330 | 0.973665 | Accept |
| Kurtosis Normality of Residuals | -0.1629 | 0.870599 | Accept |
| Omnibus Normality of Residuals | 0.0276 | 0.986282 | Accept |
| Modified-Levene Equal-Variance Test | 0.2454 | 0.783216 | Accept |

Inspection of Figure 4 shows the midpoint and the range of API scores for the schools that exited state monitoring in 2004, 2005, and 2006.


*Figure 4.* Range of API growth for 2004, 2005, and 2006 schools.

*Research Question 1B*

The study of English language arts AYP was conducted in the same way as the API study. Two years of data was retrieved from the CDE website and combined to get a total AYP growth amount for the 2 years after exiting state monitoring. When examining the overall AYP growth in language arts found in Appendix H , 42 of 58 schools (72%) had cumulative positive AYP growth in English language arts over 2 years after exiting state monitoring. The mean growth was 3.19655172 and the standard deviation was 6.19507347. The range was -9.5% to 16.5% change. Of the 42 schools showing positive growth at the end of 2 years, 19 (45%) had 2 years of consecutive positive English language arts AYP growth after exiting state monitoring.

Inspection of Figure 5 shows the mean growth on ELA AYP for the schools that exited state monitoring in 2004, 2005, and 2006.

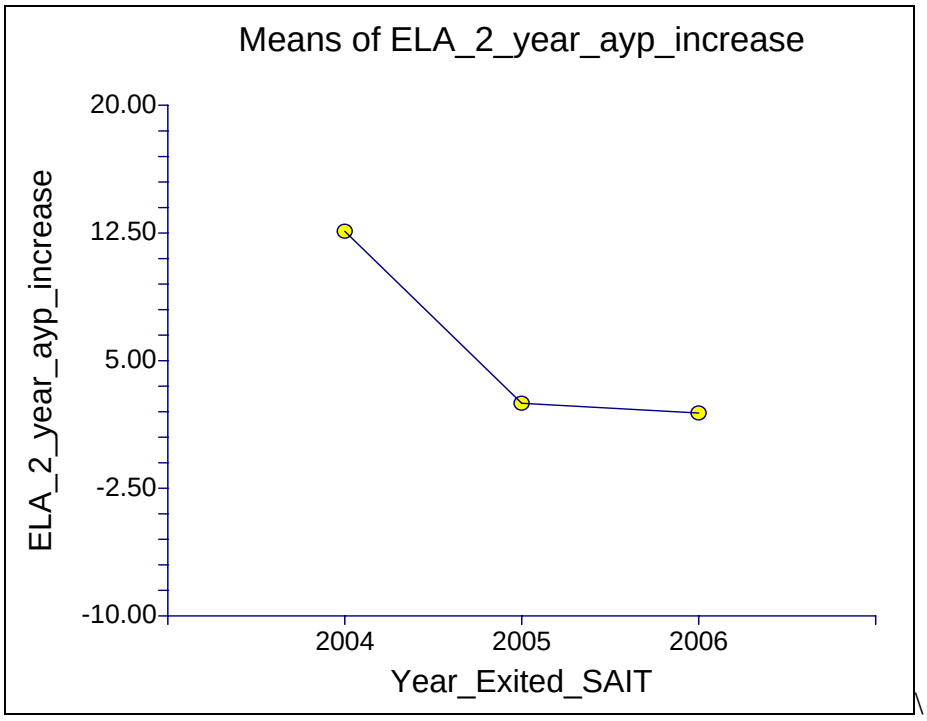


*Figure 5.* Mean of two year ELA AYP growth for 2004, 2005, and 2006 schools.

Table 5

*Two year ELA AYP Growth Summary*

| Groups | Count | Sum | Average | Variance |
|---|---|---|---|---|
| 2004 | 5 | 63 | 12.6 | 19.135 |
| 2005 | 11 | 27.4 | 2.490909 | 29.47091 |
| 2006 | 42 | 80.5 | 1.916667 | 35.3463 |

Table 6

*Two year ELA AYP ANOVA Calculations*

| Source of Variation | SS | df | MS | F | P-value | F criteria |
|---|---|---|---|---|---|---|
| Between Groups | 512.7769 | 2 | 256.3884 | 7.746098 | 0.001087 | 3.164999 |
| Within Groups | 1820.447 | 55 | 33.09904 | | | |
| Total | 2333.224 | 57 | | | | |

Table 5 shows the year to year analysis of variance from 2004 to 2006 on California's AYP for English language arts. Table 6 shows the calculation to determine ANOVA. The ANOVA compares the means of the 3 years studied (i.e., 2004, 2005, and 2006) to determine if the means of these groups are similar or different. ANOVA is usually considered the best tool for comparing means of multiple groups given that the assumption the groups are normally distributed. Using .05 as our P-value, the table shows there was a statistically significant difference in the means of the three groups. Additionally, the tests of assumptions indicated the following:

Table 7

*Test of Assumptions for ELA AYP Growth*

| Assumption | Test Value | Probability Level | Decision (0.05) |
|---|---|---|---|
| Skewness Normality of Residuals | 1.2679 | 0.204822 | Accept |
| Kurtosis Normality of Residuals | 1.4018 | 0.160979 | Accept |
| Omnibus Normality of Residuals | 3.5727 | 0.167574 | Accept |
| Modified-Levene Equal-Variance Test | 0.2539 | 0.776677 | Accept |

Additionally, inspection of Figure 6 shows the midpoint and the range of ELA AYP scores for the schools that exited state monitoring in 2004, 2005, and 2006.

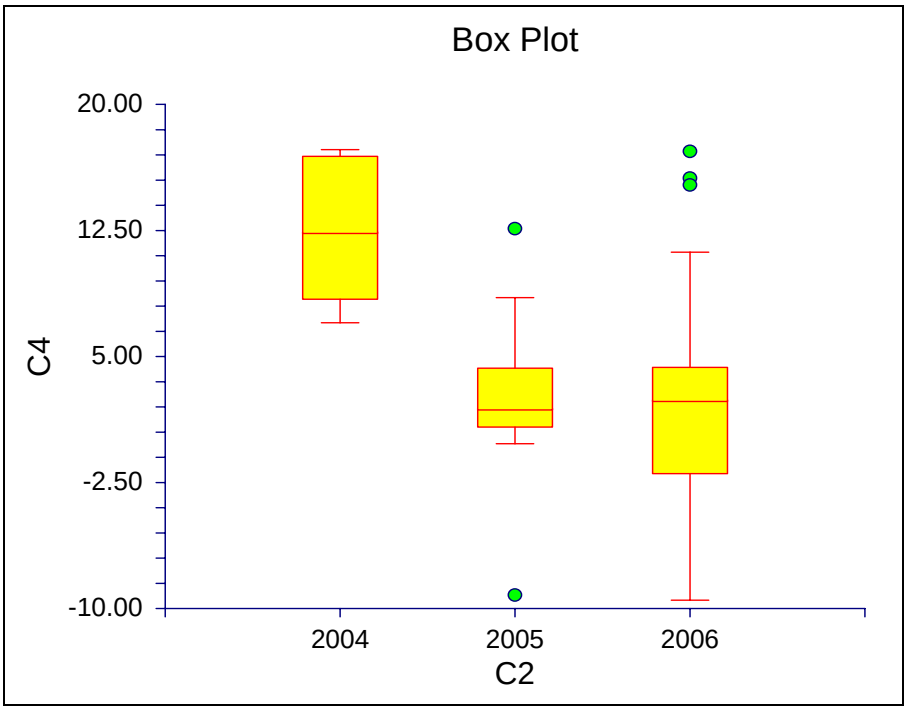


*Figure 6.* Range of ELA AYP Growth for 2004, 2005, and 2006 schools.

*Research Question 1C*

The study in mathematics performance was conducted in the same way as the API and English language arts studies. Forty-six out of 58 schools (79%) had a cumulative positive AYP growth in mathematics over 2 years after exiting state monitoring. The mean growth was 6.260344828 and the standard deviation was 9.466855788. The range was -14.1 to 38.7. Of the 46 schools showing positive growth at the end of 2 years, 34 out of 58 schools (58%) had 2 years of consecutive positive AYP growth in mathematics.

Inspection of Figure 7 shows the mean growth on math AYP for the schools that exited state monitoring in 2004, 2005, and 2006.

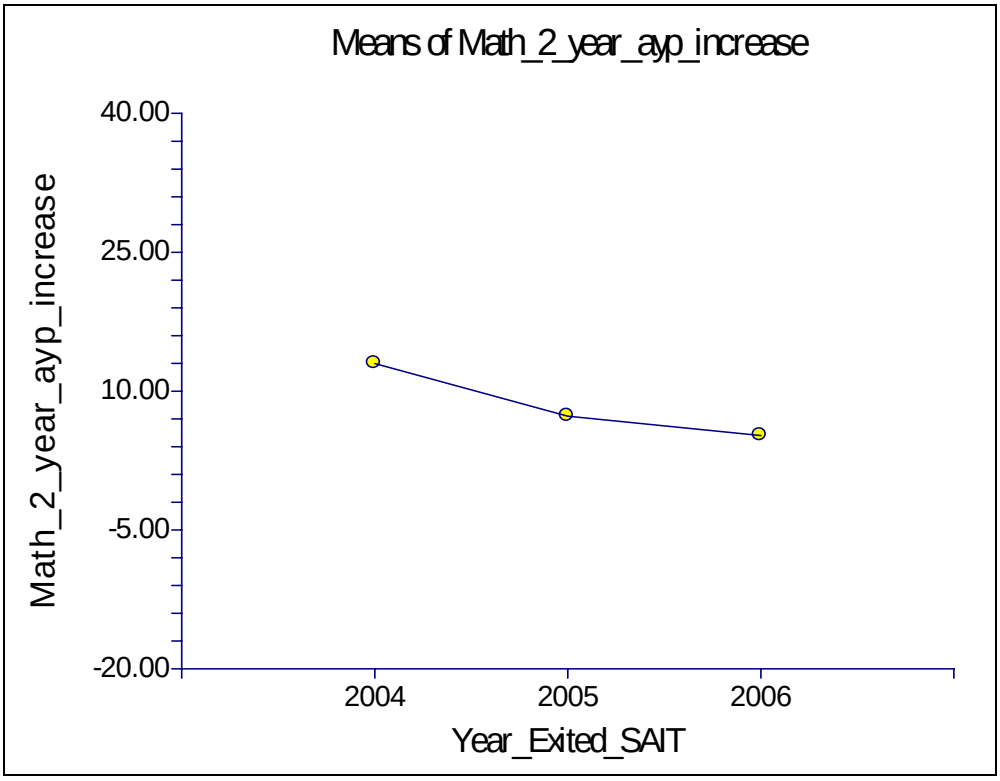


*Figure 7.* Mean of Two Year Math AYP Growth for 2004, 2005, and 2006 schools.

An analysis of variance study was also conducted for research question 1C. Here the means of the 3 years were similar and the 2004 findings probably did not distort the overall findings.

Table 8

*Two Year Math AYP Growth Summary*

| Groups | Count | Sum | Average | Variance |
|---|---|---|---|---|
| 2004 | 5 | 64.9 | 12.98 | 340.547 |
| 2005 | 11 | 80.2 | 7.290909 | 47.74091 |
| 2006 | 42 | 218 | 5.190476 | 74.94918 |

Table 9

*Two Year Math AYP ANOVA*

| Source of Variation | SS | df | MS | F | P-value | F criteria |
|---|---|---|---|---|---|---|
| Between Groups | 285.5255 | 2 | 142.7628 | 1.598357 | 0.211478 | 3.164999 |
| Within Groups | 4912.513 | 55 | 89.31842 | | | |
| Total | 5198.039 | 57 | | | | |

Table 8 shows the year-to-year analysis of variance from 2004 to 2006 on California's math AYP. Table 9 shows the calculation to determine ANOVA. The ANOVA compares the means of the 3 years studied (i.e., 2004, 2005, and 2006) to determine if the means of these groups are similar or different. ANOVA is usually considered the best tool for comparing means of multiple groups given the assumption that the groups are normally distributed. Using .05 as our P-value, the table shows there was no statistically significant difference in the means of the three groups. Additionally, the tests of assumptions indicated the following:

Table 10

*Test of Assumptions for Math AYP Growth*

| Assumption | Test Value | Probability Level | Decision (0.05) |
|---|---|---|---|
| Skewness Normality of Residuals | 0.5357 | 0.592131 | Accept |
| Kurtosis Normality of Residuals | 0.1524 | 0.878911 | Accept |
| Omnibus Normality of Residuals | 0.3102 | 0.856313 | Accept |
| Modified-Levene Equal-Variance Test | 4.1175 | 0.021560 | Reject |

Inspection of the Figure 8 shows the midpoint and the range of math AYP scores for the schools that exited state monitoring in 2004, 2005, and 2006.

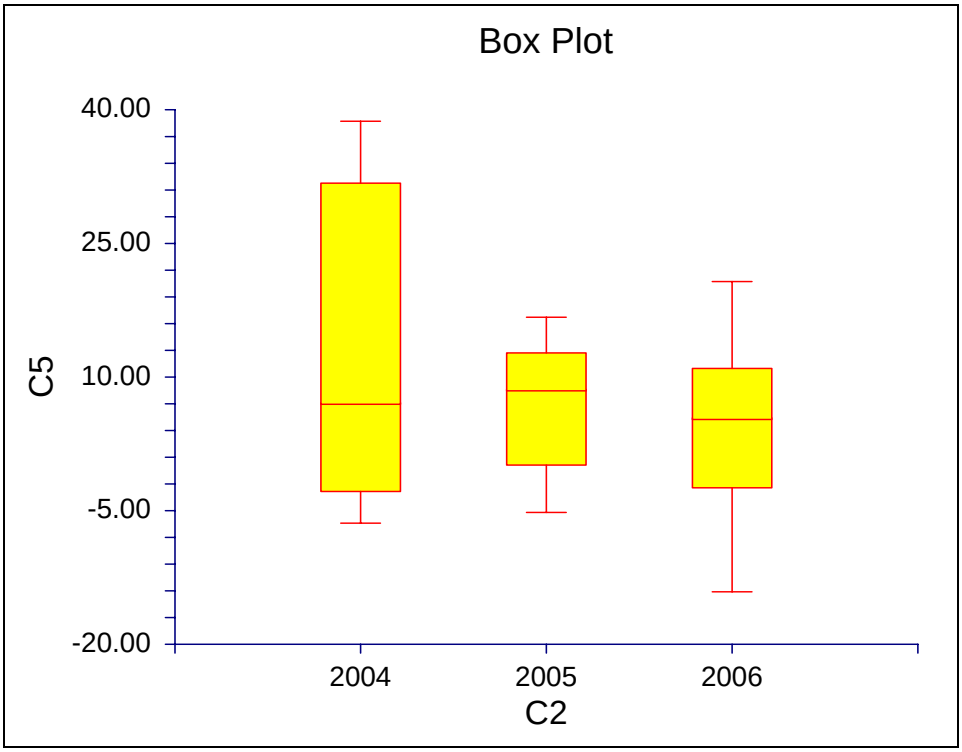


*Figure 8.* Range of Math AYP Growth for 2004, 2005, and 2006 schools.

*Summary*

Overall, most of the schools demonstrated positive achievement growth over the 2 years after they exited state monitoring. A larger percentage of schools maintained positive growth on AYP in English language arts (72%) and math (79%) than they did on API (58%). When you examine the data regarding 2 years of consecutive positive growth, the number of schools decreases to 32% in English language arts AYP, 58% in math AYP and 44% in API. Additionally, the data demonstrates that there is a large range in achievement growth among the sample indicating that some schools perform much better than others.

Results from the analysis of variance show that the scored distributions in the AYP in math and API were not statistically significant. The ELA scored distribution in AYP was statistically significant and that the group of schools exiting in 2004 may have influenced the statewide findings.

*Research Question Two*

The second research question examined principal's perceptions of factors that contributed to sustained achievement growth. The study included interviews with four elementary principals from former state monitored schools that sustained 2 years of positive growth on California's Academic Program Index (API). The purpose was to gather their perceptions of practices contributing to sustained student achievement growth.

Participants were asked 10 interview questions based on the literature review found in chapter two. The 10 interview questions were:

1. How many years have you been the principal at this school? Were you at the

school site during the SAIT process? If so, what was your position during SAIT?

2. Have there been any major shifts in funding or other resources besides the loss of SAIT funds and the current normal budget fluctuation since exiting SAIT? If so, what were they and how have they effected achievement growth?
3. What external support has been provided to your school that has contributed to sustained achievement growth?
4. Which Essential Program Components from the Academic Program Survey have contributed most to sustainability of achievement growth? How did they contribute?
5. Are there any elements of the Academic Program Survey that you have not substantially implemented at your school? If so, which ones and why?
6. What were your school wide goals from last year? What was the process for selecting these? How did you monitor progress? How often did monitoring occur? What did you learn from your analysis?
7. What role does your leadership team play in improving student achievement? Who is part of your leadership team and how are you developing leadership capacity with your staff?
8. How are learning expectations communicated to teachers, students and families and how do you monitor progress toward these objectives?
9. In your school, what practices contributed most to sustained achievement growth at your school? What practices were the least helpful?

10. What advice would you give another principal regarding how you sustain academic achievement growth?

Then, key ideas were drawn from the interview transcriptions and organized around the 10 interview questions (Appendix G). Then, responses from the 10 interview questions were sorted and fell into 13 categories which are discussed below.

*Presentation of Data and Reports of Findings*

*Clear focus and goals.* When asked for advice on how to sustain achievement growth, all of the principals mentioned the importance of having a clear, narrow focus. For example, one principal stated, "Set very clear goals in the most critical areas. Stay focused. Establish your focus, stay true to it and don't deviate year after year" (Principal A, personal communication, November 12, 2009). Principal A also recommended that principals focus on actions and behaviors that are measureable. Their advice was to stay focused on outcomes, things that the school could change, and the change process.

Each principal reiterated two key ideas, a) don't deviate from your focus and, b) narrow down your priorities. One principal emphasized the importance of using data to identify priorities and including staff in priority development. Two of the principals stated that they developed a list of behaviors and outcomes with their staff that defined implementation of their priorities. The fourth principal mentioned that a clear focus was a key contributor to sustained achievement growth. "We had a focus on direct instruction. Everyone was trained, everyone was going to do it, and everyone was monitored on it" (Principal C, personal communication, November 23. 2009). The other principals stated different priorities as key to their sustainable achievement growth. One principal said that focusing on standards based instruction and structured language production opportunities

were important. Another school focused on student interaction and student engagement with a focus on meeting Annual Measurable Objectives (AMAOs) for English learners. The third principal focused on implementing Guided Language Acquisition and Design (GLAD) strategies and Bloom's taxonomy. All of the principals believed their areas of focus contributed to sustained achievement growth.

*Improved instruction.* All of the schools highlighted the importance of improving instructional practices. "It's just about instruction, talking about it, and acting on it" (Principal C, personal communication, November 23, 2009).

Each school implemented different instructional practices. One principal stated, "We focused on standards and objectives, standards based teaching, student interaction, pair share, and sentence frames" (Principal D, personal communication, November 24, 2009). All of the schools mentioned the importance of practices that engaged students and allowed them to interact with learning and produce language. All of the schools provided professional development, collaboration, and coaching around their instructional priorities. They also encouraged teachers to visit each other's classrooms during instruction. Specific instructional practices included: Direct instruction, GLAD, pair share, sentence frames, Bloom's taxonomy, structured student response, instructional delivery, research based practices, culturally responsive instruction, standards based teaching, comprehension, student interaction, and learning objectives. One principal best summarized the focus on improving instruction. "Every minute needs to be worthy of the student's time. If my child went to this school, would it be worthy of their time? Is it worthy of my teacher's child's educational time" (Principal D, personal communication, November 24, 2009)?

*Collaboration.* All of the principals identified collaborative practices as an essential element of the Essential Program Components (EPCs) that contributed to sustained achievement growth. Collaboration was the linchpin at each of the schools. All of the schools provided teachers time to plan instruction, analyze data, establish goals, analyze assessment, identify instructional strategies, and plan interventions. "Collaboration drives everything" (Principal D, personal communication, November 24, 2009). All of the schools collaborated two to four times a month. They also provided additional teacher release days for data analysis, goal setting, and planning. Weekly collaborative time primarily focused on planning instruction and discussing instructional practices.

All of the schools analyzed data at an individual student level and identified specific interventions. "Last year we met by grade levels and identified the specific needs of individual children. We got the greatest results when data analysis focused on individual students" (Principal A, personal communication, November 12, 2009). Data was also used to identify goals and monitor progress towards these goals.

*Monitoring, accountability and feedback.* All of the principals stressed the importance of monitoring and accountability.

> A key practice was walkthroughs with the principal, coach, district, county and Reading First personnel. Over time, we were not just looking for what wasn't there. By the end of last year the walkthroughs were looking at explicit instructional practices and student behavior. I think the feedback given was a really key practice (Principal A, personal communication, November 12, 2009).

Another principal said,

> Clear expectations, regular monitoring, and holding everybody accountable were important practices. Accountability was important for everyone including myself, the coaches, and the staff. The teachers know I'm going to stop by; I'm going to look around and give regular feedback (Principal D, personal communication, November 24, 2009).

All of the principals discussed frequent classroom visits and feedback regarding implementation of the school's priorities. One of the schools included leadership team members and other staff in the occasional walkthroughs designed to monitor implementation of grade level goals. All of the external consultants also used walkthroughs and feedback as part of the support for the school.

Monitoring and accountability practices also included regular data analysis. All assessments were analyzed and used to monitor the school's and team's progress toward established goals. Grade level teams set SMART goals which were specific, measurable, attainable, results oriented, and time bound. In addition, collaborative teams identified specific strategies they would use to achieve the goals. Teachers were held accountable for implementation of the identified strategies. One school mentioned using data to validate the effectiveness of identified strategies for target student populations, and two of the schools stated they publicly posted grade level goals and achievement data. One of the schools expected goals and data to be posted in classrooms and they communicated this information to parents in the monthly newsletter.

*Outside support.* All of the schools received assistance from outside personnel. Two schools specifically mentioned support from district personnel in achieving their

goals and all of the schools mentioned the assistance of outside consultants. Outside consultants played similar roles in each school. They developed school level capacity by coaching coaches and teachers, providing professional development and demonstration lessons, working with teachers on planning instruction, and monitoring. The consultants in three of the schools worked regularly with staff on the coaching cycle of presentation, demonstration, debriefing, application, and a second debrief.

Two of the schools mentioned the importance of district support with common assessments, data management, and pacing guides. One of the schools stated that the district assisted them with selecting their school wide priorities. Another school focused on implementation of district wide initiatives.

*Teachers learning from each other and coaching.* All of the schools discussed practices that provided opportunities for teachers to learn from each other. "If I see an exceptional practice, I ask the teacher to demonstrate to the staff or ask staff to visit the classroom. I ask teachers to visit other teachers while I cover their class. Its pair-share for adults" (Principal D, personal communication, November 24, 2009). This principal also teaches staff to coach each other. Another school focused on lesson study. Lesson study includes planning a lesson collaboratively, and watching a teacher deliver the lesson. They then debrief and adjust the lesson based on student response. "We have been doing lesson studies this year and it's so powerful to give them that time to plan and watch each other teach and have that dialogue" (Principal C, personal communication, November 23, 2009). Additionally, all of the schools had instructional coaches to support teachers.

*Professional development.* All of the schools mentioned professional development as a key practice at their school. One principal recommended, "Lots of staff development.

Don't just throw something out there. You have to revisit it, coach it, work it, and be in the classrooms daily and give feedback" (Principal B, personal communication, November 12, 2009). Each principal defined professional development as training, demonstration, collaborative planning, and coaching. Two of the principals stated the importance of continually revisiting professional development goals.

*Changing culture.* Three of the schools mentioned culture change as critical to sustained achievement growth. "We basically worked to change the culture at our school. We became more student based rather than teacher based" (Principal B, personal communication, November 12, 2009). Another school stated, "Our culture shifted from blaming to problem solving" (Principal D, personal communication, November 24, 2009).

*Making changes to the school's structures.* Two of the principals mentioned changes they made in the school's structures. Both of them reallocated time for teacher collaboration. One of them mentioned the need to strategically move unsuccessful teachers to different grade levels and provide new opportunities for success. This principal also noted the importance of having grade level classrooms close to each other to foster collaboration. One of the principals mentioned the importance of regrouping for English language development (ELD). The school began the practice of teaching ELD based on language proficiency levels.

*Relationships with staff.* Two principals mentioned the importance of strong relationships with their staff. They emphasized the importance of expressing care and support to staff members and listening to them. "Culture will change when you focus on attainable goals, and attend to adult learning and success (Principal A, personal

communication, November 12, 2009). Finally, both principals emphasized the importance of building from success.

*Targeted interventions.* Two schools mentioned the importance of interventions. One school identified interventions as the most important EPC for their site. Both schools stated that interventions were based on data and were targeted and specific. “We learned that children receiving very narrow, specific interventions focused on their specific needs built on their own success. The interventions must be prioritized and focused” (Principal A, personal communication, November 12, 2009). Two schools mentioned that targeted interventions were not the strongest component of their instructional program.

> We were just giving students extra time. We weren’t really effectively teaching during the rest of the day so the additional 30 minutes of teaching was not going to make a difference. We had to strengthen our regular instructional methods first” (Principal C, personal communication, November 22, 2009).

*Leadership team capacity.* All of the schools had leadership teams consisting of grade level representatives and other support staff. Each team met once or twice a month to plan agendas, examine data and problem solve. Two schools spoke to the importance of developing the capacity of their leadership team, and all of the schools discussed developing the capacity of their entire staff. One of the principals stated, “The leadership team did an outstanding job. I look at the tasks they had to assume as grade level leaders. Teacher leadership is a pretty powerful model” (Principal A, personal communication, November 12, 2009). Leadership team capacity was developed through professional development, book chats, coaching, and leadership opportunities.

All of the leadership teams were involved in regular data analysis. They established and monitored goals. One of the schools also used leadership team members to monitor implementation of classroom practices school wide.

*Communication with parents.* All of the schools communicated expectations to parents through newsletters, parent nights, and conferences. Two of the schools said they needed to improve in this area.

*Summary.* The principal interviews were characterized by many common themes. The frequency tables in Table 11 provide a summary of the frequency of responses.

Table 11

*Themes Identified in Principal Interviews*

| Theme | Frequency |
|---|---|
| Clear Focus and goals | 4 |
| Improved Instruction | 4 |
| Collaboration | 4 |
| Monitoring, Accountability, and Feedback | 4 |
| Outside Support | 4 |
| Teachers learning from each other and coaching | 4 |
| Professional Development | 4 |
| Changing Culture | 3 |
| Making changes to the schools structures | 2 |
| Relationships with staff | 2 |
| Targeted Intervention | 2 |

*(table continues)*

| Theme | Frequency |
|---|---|
| Leadership Team Capacity | 2 |
| Communication with parents | 1 |

Table 12

*Themes Identified in Principal Interviews by School*

| Theme | School 1 | School 2 | School 3 | School 4 |
|---|---|---|---|---|
| Clear Focus and goals | x | x | x | x |
| Improved Instruction | x | x | x | x |
| Collaboration | x | x | x | x |
| Monitoring, Accountability, and Feedback | x | x | x | x |
| Outside Support | x | x | x | x |
| Teachers learning from each other and coaching | x | x | x | x |
| Professional Development | x | x | x | x |
| Changing Culture | x | x | | x |
| Making changes to the schools structures | x | | | x |
| Relationships with staff | x | | | x |
| Targeted Intervention | x | x | | |
| Leadership Team Capacity | x | | x | |
| Communication with parents | | | | x |

# Chapter Five: Conclusions and Recommendations

The purpose of this study was twofold: a) To examine the achievement trends on California's accountability measures of public elementary schools in California after they have exited state monitoring, and b) To identify the practices perceived as contributing to sustainable student achievement growth in former state monitored schools with the highest continuous API growth as reported by the schools' principals.

The following questions guided the study:

1. What are the achievement trends of California public elementary schools on state accountability measures two years after they have exited state monitoring?
    a. To what extent, if at all, is there a statistically-significant relationship between the year a school exited state monitoring and API growth?
    b. To what extent, if at all, is there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in English language arts?
    c. To what extent, if at all, is there a statistically-significant relationship between the year a school exited state monitoring and the percent of students scoring proficient or above in mathematics?
2. What practices do principals of the elementary schools with 2 years of positive API growth after exiting state monitoring credit as contributing to sustaining student achievement growth?

The study used a mixed methodology research approach. This method combined a quantitative analysis of achievement trends in 83 California elementary schools that entered state monitoring between 2002 and 2004 in combination with a qualitative

analysis of the perceptions of the administrators at four schools with 2 years of consecutive positive API growth and who consented to being interviewed regarding specific practices that contribute to sustained student achievement growth.

## *Summary of Findings*

Analysis of the statewide achievement data showed that some SAIT schools continued to increase student achievement after state monitoring ended. A majority of schools, however, did not sustain continuous academic achievement growth. This finding indicates that the SAIT process did help some schools sustain growth but not all of them. In order to determine factors that contributed to sustained growth, this study examined methods used by schools sustaining achievement growth to gain insight regarding factors perceived as contributing to sustainability. Analysis of the principal interviews indicated that all of the schools continued with strong implementation of the Essential Program Components (EPCs). Additionally, all of the schools had skillful leaders able to create a system with a clear focus on improved instruction and student learning, the leadership skills to change the schools culture to one of high expectations of student learning and a strong focus on accountability, monitoring, and feedback. Each school also implemented a sustainability plan after exiting SAIT.

### *Implementation of the Essential Program Components*

The principals identified strong implementation of the EPCs as a factor contributing to sustained achievement growth. These schools went beyond basic implementation and continued to refine their practices in each of the nine areas.

In addition to purchasing and implementing SBE approved instructional materials in language arts and math (EPC 1), the schools focused on clear learning objectives,

standards based instruction (American Institute of Research, 2006; Carr & Harris, 2001; Elmore, 1996; Just for the Kids, 1995; National Commission on Excellence in Education, 1983; Marzano, 2003; Newmann et al., 2001; North Central Regional Educational Laboratory (NCREL), 1994; Parrish et al., 2005; Ravitch, 1995; Reeves, 2004; Schmoker & Marzano, 1999; Williams, et al., 2006) and strong instructional practices designed to support diverse learners (Darling-Hammond, & McLaughlin, 1995; Haycock, 1998; Marzano; National Partnership for Teaching in At-risk Schools, 2005; Peske & Haycock, 2006; Whitehurst, 2003). Instructional practices were paramount.

The schools recognized the importance of quality instructional practices and consistency of implementation (Haycock, 1998; Schmoker, 2006; Williams, et al., 2006). All of the schools in the study focused specifically on an instructional delivery model and specific pedagogical practices designed to close the achievement gap and assist students with language acquisition. Specific practices included direct instruction, oral language production opportunities, sentence frames, cultural proficiency (Lindsey, Robins, Terrell, 2003), and Guided Language Acquisition and Design (GLAD). Each school selected a different instructional practice but they all centered their time and energy on consistent school wide implementation. This was achieved through professional development and coaching regarding expected instructional techniques. The principal gave collaborative teams time to plan lesson, set goals, discuss application, problem solve, and calibrate their practice (Chrisman, 2004; DuFour, et al., 2004; Northwest Regional Educational Lab, 1990). Finally, the principals' walkthroughs stressed monitoring implementation of the school's focus and providing helpful feedback to teachers regarding observations and next steps (Hattie, 2008; Just4Kids, 1995b; Marzano, 2003).

The principals stressed effective use of instructional time (EPC 2) and implementing student engagement practices (Northwest Regional Educational Lab, 1990). Opportunities for language production were an integral part of the school's instructional focus. Ensuring adequate time within the school day was only the first step toward improving student achievement. Ensuring that students were engaged in learning was a critical factor in sustainability. Frequent opportunities to share learning with other students, interact with objectives, and oral explanations were used to increase engagement. The literature on instructional time confirms this practice (Cotton, 1990; Cuban, 2008; Marzano, 2000; Northwest Regional Educational Lab, 1990; Reeves, 2004). Adding more time to an instructional day does not guarantee increased achievement. However, increased engagement is strongly supported in the research as an important contributing factor to increased learning.

The schools went beyond providing training for principals and teachers (EPC 3 and 4). The school's principals demonstrated instructional leadership through articulating expectations, aligning resources, and providing regular accountability, monitoring, and feedback (Marzano, et al., 2005; Education Trust, 2001; Just4Kids, 1995b). They also provided staff development on instructional practices and leadership skills (Firestone et al., 2004; Fullan, 2007; Hargreaves & Fink, 2004; Haycock, 1998; National Partnership for Teaching in At-risk Schools, 2005; Parrish et al., 2005; Waters & Cameron, 2007) at all levels of the organization through a comprehensive professional development plan (Chrisman, 2004; Florian, 2000; Parrish et al., 2005; Whitehurst, 2003). Professional development utilized the expertise of outside consultants and coaches and included support for planning and implementation.

All the schools used data for decision making (EPC 5) and identified specific learning needs of individual students (American Institute of Research, 2006; Education Trust, 2001; Marzano, 2003; Parrish et al.; Reeves, 2004; Stiggins, 2005; Williams, et al., 2006). They used data at all levels of the organization. They stressed determining priorities, and monitoring student learning and implementation of instructional practices. The leadership teams monitored data to measure the school's progress toward overall goals. The collaborative teams continually monitored student achievement data and used collaborative time to develop a response to the data. The principals developed the staff's data analysis and collaboration skills over time to create a culture of sharing, learning, and accountability (Northwest Regional Educational Lab, 1990; Fullan, 2007). Each school established measurable goals and determined the specific strategies they would use to implement goals and priorities as well as to monitor progress. In addition to regular collaborative time, the principals provided additional time for teachers to analyze data at the individual student level and to design appropriate interventions (Stiggins, 2002, 2005).

Collaborative time and instructional coaching (EPC 6 and 7) were an integral part of the school's reform process. Principals provided teachers with opportunities to observe other teachers implement the instructional expectations as well as engage in collaborative lesson planning, demonstration, and co-teaching (American Institutes for Research, 2003; Chrisman, 2004; Darling-Hammond, 1999; DuFour, et al., 2004; Northwest Regional Educational Lab, 1990; Reeves, 2004; Reeves, 2008; Showers, 1984). Learning from each other was a critical behavior in each of the sustaining schools. The principals created a culture of continuous learning and refinement of instructional

practices. A school's ability to continually learn, change, and refine their practices is a major component of the research on sustainability (Fullan, 2007; Hargreaves & Fink, 2004; Florian, 2000).

Finally, the schools created a coherent and aligned instructional program (EPC 8 and 9) for all students (American Institute of Research, 2006; Chrisman, 2004; Marsh et al., 2005; Parrish et al., 2005; Williams, et al., 2006). The principals aligned the school's resources to support common objectives (Firestone et al., 2004; Jefferson, 2005; MCREL, 2006; Odden & Archibald, 2000). Alignment of school resources provided the support needed to achieve school wide goals. The principals prioritized their use of time, personnel, and fiscal resources in a manner that supported the implementation of the school's goals. Everyone knew the goals and expectations and everyone worked toward achieving these goals.

*Leadership Practices*

Each school had an instructional leader able to clearly communicate the school's practices that contributed to student achievement. Each participant identified one or two data based focus areas (Parrish et al., 2005). The principals built a coherent system that supported their school wide goals by aligning resources and identifying clear outcomes (American Institute of Research, 2006; Chrisman, 2004; Education Trust, 2001; Florian, 2000; Marzano, 2003; Marzano, et al., 2005; Parrish et al., 2005; Reeves, 2008; Waters & Cameron, 2007). The principals demonstrated several key leadership practices. They included systems thinking, managing culture change, and providing accountability, monitoring, and feedback (American Institutes for Research, 2003; Chrisman; Firestone

et al., 2004; Florian, 2000; Marzano, 2003; Marzano et al., 2005; Reeves, 2008; Waters & Cameron).

*Systems thinking.* System thinking requires the ability to see things or systems as wholes rather than made up of different individual parts (Senge, 1990). Each principal guided their organization and centered their priorities on a few key initiatives (Firestone et al., 2004; Parrish et al., 2005) and aligned their systems in order to improve student achievement. Staff continually examined different types of data and identified change priorities. The school's goals and instructional practices were collaboratively selected by the leadership teams based on data analysis and communicated to all stakeholders. All staff knew the expectations. The principal aligned professional development, collaboration, monitoring, coaching, outside consultants, and fiscal support to ensure success (Chrisman, 2004; Firestone et al.; Hill, & Cohen, 2005; MCREL, 2006; Northwest Regional Educational Lab, 1990; Parrish et al.; Reeves, 2004; Whitehurst, 2003). The principal's ability to see the big picture and align the systems at their school were significant factors contributing to sustainability.

*Managing culture change.* Schools that go through the SAIT process experience tremendous change. Ultimately, the goal is to change a school's culture to one of high expectations and a focus on student learning. Change leadership requires a complex set of skills. According to Michael Fullan in the *Six Secrets to Change* (2008), there are six conditions for sustainable change: a) Investing in the development of staff members, b) strengthening peer interaction, c) capacity building, d) learning together, e) transparency of results, and f) continual learning (Fullan, 2008). The principals applied each of these change practices. The leaders developed the capacity of their staff members through

collaboration, professional development, coaching, and leadership opportunities. They also nurtured the development of staff members through feedback and coaching. Ultimately, through continual learning and monitoring of results, the schools changed their cultures to one focused on high expectations and a collective belief that they could make a difference in student achievement. This change in culture was due to the schools ability to experiment, change, learn, and share. “Implementing change requires focus, clarity, and monitoring—qualities that will place you among the very best change leaders in the world” (Reeves, 2009, p. 123).

*Accountability, monitoring, and feedback.* Principals were regularly in classrooms communicating expectations, monitoring implementation, and providing feedback to teachers regarding progress (Hattie, 2008; Just4Kids, 1995b; Reeves, 2008). “Feedback allows people to set reasonable goals and to track their performance in relating to their goals, so that adjustments in effort, direction, and even strategy can be made as needed (Locke & Lathem, 1990, p. 197 as cited in Hattie, 2008, p. 247). All the principals were in classrooms ever day monitoring instruction and student learning. They used monitoring and feedback to communicate expectations regarding instructional practices. They also monitored data regularly to measure student learning. The principals regularly communicated expectations regarding implementation of school wide initiatives and all staff were held accountable for implementation. Accountability was a dominant theme: leadership accountability, teacher accountability, and student accountability. “If we wish to maximize the power and influence of feedback, then we must provide feedback more frequently at every level—students, teachers, and leaders” (Reeves, 2008, p. 79). These principals understood the importance of implementation. “90% of the teachers of any

particular school must demonstrate full implementation of any agreed upon strategy in order to produce significant results" (D. Reeves, personal communication, February, 2006).

The leadership practices to navigate a school through reform and sustainable achievement growth were complex. As one principal stated, "It's a masterful dance. It's a masterful juggling of all of the plates, knowing which plates to throw up in the air and being agile enough to keep then going" (Principal A, personal communication, November 12, 2009). Ultimately, however, the principals recognized that change could not be dependent on one leader. Over time they develop leadership capacity throughout their entire staff in order to ensure future sustainability.

*Sustainability Plans*

The schools in this study had a clear sustainability plan after exiting state monitoring. The schools selected a few specific areas of improvement and developed a coherent plan to implement them (Chrisman, 2004; Florian, 2000; Hargreaves & Fink, 2004; MCREL, 2006; Parrish et al., 2005; Whitehurst, 2003). The schools focused on closing the achievement gap and practices for diverse student populations. Fullan (2007) outlines eight practices critical to sustainability. The eight practices include a school culture that is focused on improving student learning, a willingness to innovate and change, leadership capacity building, collaborative problem solving, a commitment to problem solving and learning, a focus on results, "cyclical energizing" (Browne-Ferrigno et al., n.d., p. 5) and distributed leadership (Browne-Ferrigno et al.). Each used outside consultants as well as a coherent professional development plan to develop the eight

sustainability factors. The process was supported through a strong collaborative process and use of data. Each leader used a systematic approach to improve student achievement.

Ultimately, the greatest change at the schools was a change in culture. Each principal discussed changing their school's culture to one focused on students and learning. The schools continually refined their practices and used data to determine if practices were working or needed adjustment. The capacity of all staff members was developed over time and collaboration was a critical component at all levels of the organization (Chrisman, 2004).

*Summary*

The principals perceived several key behaviors as contributing to sustained achievement growth. Each continued their implementation of the Essential Program Components. In addition, they centered their energy around a clear focus on improving instructional practices by aligning resources, providing collaborative time and support, and regularly monitoring implementation and providing feedback. Each school's journey was unique. The principal's clear message regarding expectations and their ability to change the school's culture has resulted in sustained achievement growth.

The findings from this study are consistent with previous studies on II/USP and SAIT schools. Valerie Chrisman's study on II/USP schools concluded that schools able to exit II/USP demonstrated strong teacher, site, and district leadership, professional development on strong teaching practices and teacher collaboration focused on developing lessons focused on teaching grade level standards. Other characteristics of the performing II/USP schools were the staff's belief that they could improve student achievement and their ability to specifically identify how they were able to achieve

growth. A school wide focus on student achievement was evident and successes were celebrated (Chrisman, 2004, p. 81).

These findings are echoes in the SAIT evaluation study conducted in 2008. Findings showed that SAIT providers had a positive impact on school achievement, especially when they focused on instructional leadership, improving classroom instruction, and working collaboratively with the school. Building trust and relationships with schools, assisting them with tasks they did not have the capacity to perform, principal coaching, direct support for each of the EPCs, and working with the district to provide support also improved achievement (Hatchuel et al., 2008).

Finally, these findings are also consistently found in the literature review on sustainability. A review of the literature identified seven sustainability factors: a) continuous deep implementation of the nine Essential Program Components (EPCs); b) capacity building and leadership development; c) collective problem solving, goal setting, reflection, and learning; d) commitment to results and continuous improvement, culture focused on learning and high expectation for student learning; e) coherent programs structures and policies; and f) strong district leadership, support and policies. Each principal implemented the suitability practices found in the educational literature and the principals provided specific examples of how these principles were implemented.

### *Conclusions and Discussions*

This study was designed to examine the sustainability of achievement growth in California's elementary schools that were formerly under state monitoring. The results of the study can be used to guide policy and practice in work with underperforming schools. Findings from the study support the following conclusions:

SAIT is a very important intervention and support model for underperforming schools. However, it's not a guarantee that schools will exit sanctions or sustain achievement growth. Once funding, support, and monitoring were removed, achievement trends varied. Of the original 83 schools that entered state monitoring between 2002 and 2004, 60 schools exited state monitoring as of 2006 and 26 of these schools sustained 2 years of positive API growth after exiting. The SAIT process did, however, provide the foundation for continuous growth for some of the schools in California. The mean API growth for the 58 schools was 15 with a standard deviation of 33.7. The lowest score was –62 and the highest was 86, providing a range of 148 API points. There were several possible factors contributing to these results. Once state monitoring ended, the external monitoring, accountability, and support ended. Lack of external monitoring and accountability could be one factor (Parrish et al., 2005). Other factors could be reduction in funding or lack of leadership capacity to sustain achievement growth and the ability to manage change (Jefferson, 2005; MCREL, 2006; Parrish et al.). Implementation of the EPCs assisted some schools, but the schools in this study also had strong consistent leadership, the ability to manage change, improved instruction, high levels of monitoring and feedback, and the ability to change the culture.

The essential program components lay the foundation for achievement growth. The agreed upon practices have to be implemented at a high level and all levels of the organization (Reeves, 2006). Everybody needs to be on the same page. It is important to follow up on performance and adjust practices based upon the success of your efforts. Implementing program improvement is not a static activity. It requires continuous learning and adjustments based on data and observation of performance (Chrisman, 2004;

Florian, 2000; Just4Kids 1995b; Hargreaves & Fink, 2004; Parrish et al., 2005; Whitehurst, 2003). The EPCs are important but there are additional practices beyond basic implementation. Additional core practices that also need to be present include strong leadership practices (Marzano, 2003; Marzano, et al., 2005; Waters & Cameron, 2007), accountability and monitoring (Reeves, 2008; Hattie, 2008; Just4Kids 1995b) and a sustainability plan (California School Reform and Improvement, 2006; Chrisman; Florian; Hargreaves & Fink; MCREL, 2006; Parrish et al.; Whitehurst) that takes implementation of the EPCs to a deep level and changes the culture at the school.

Schools with high numbers of English learners that are able to sustain results have a strategic plan for meeting the needs of diverse learners (American Institutes for Research, 2006; O'Neill, 2003). Focusing on improving student learning for all student populations and closing the achievement gap is a key practice (Togneri, 2003). A key factor is focusing on oral language development and research based strategies for English learners.

Instructional leaders must be knowledgeable and highly skilled when implementing the EPCs (Marzano, 2003; Marzano, et al., 2005; Waters & Cameron, 2007). One can also conclude the principals were knowledgeable and skillful on leading change. The principals used the seven leadership practices contributing to second order change found in *School Leadership that Works* (Marzano et al.). These practices include knowledge of curriculum, instruction and assessment, optimizer, intellectual stimulation, change agent, monitoring/evaluating, flexibility, and ideals and beliefs. Part of the SAIT process should focus on building leadership skills on leading change, building capacity and changing culture (Florian, 2000; Fullan, 2007; Hargreaves & Fink, 2004).

Produce a plan for sustainability. Schools that are able to sustain performance have consistency in leadership and a comprehensive plan (Chrisman, 2004; Florian, 2000; Fullan 2000; Hargreaves & Fink, 2004; Parrish et al., 2005; Whitehurst, 2003) to continue growth. Maintaining strong leadership and consistent support from outside experts is important for sustainability (Hatchuel et al., 2008; Parrish et al.).

### *Recommendations for Policy and Practice*

This study was designed to determine achievement trends in California elementary schools after exiting state monitoring and to identify practices perceived as contributing to sustaining achievement growth in schools that have continued achievement growth. The findings from this study can be used to inform school reform practices as well as policy recommendations.

1. External consultants engaged in schools reform should continue their use of the Academic Program Survey. Additionally, they should assist schools with continued refinement of the EPCs, developing strong leadership, improving instructional practices, systems thinking, capacity building, monitoring and feedback, and teaching schools how to refine their collaborative processes.
2. Future school reform efforts should extend over a longer period of time or require schools to develop a sustainability plan. The inconsistent achievement growth in on API and AYP after schools exit state monitoring suggests that periodic monitoring and support after exiting sanctions is also important.
3. Leadership development models should include leadership practices in leading culture change, capacity building, monitoring and feedback, and knowledge

regarding deep implementation of the EPCs. Leadership coaching should also be an integral part of leadership training and development.

*Recommendations for Further Study*

1. A study of the sustainability of secondary SAIT schools and principal's perceptions of practices that contributed to sustained achievement growth.
2. A longitudinal study of all of the state monitored schools for five years after they exit SAIT to identify sustainability trends.
3. A study regarding practices at former state monitored schools that have not sustained achievement growth to better understand the underlying factors that inhibit sustainability or additional needs to assist with sustainable growth.
4. A study of sustainability of achievement growth in schools that have been able to sustain achievement growth on Adequate Yearly Progress.

*Final Thoughts*

Sustained achievement growth can happen and there are many examples of high poverty schools that are beating the demographic odds. There is also a convergence of research that tells us what specific practices make a difference in student achievement. Our issue, however, is a knowing, doing gap. We know what needs to be done but many schools are not able to achieve sustainable success. As educators, we have a moral responsibility to change this discouraging pattern. Therefore, the more we study specific practices at schools that have demonstrated sustained growth the more we can identify key behaviors.

There are many individual routes to sustained student achievement; however, a few key practices can make a difference in sustainability. Clearly, leadership makes a

difference. School leaders that are able to change the culture of their schools to one of high expectations for student learning and a common belief that the staff can make a difference in improving student achievement produce sustainable results. Developing a strong, coherent, standards aligned instructional program based on strong pedagogical practices and supported through strong collaborative practices also contributes to student achievement. These factors are the intent of the nine Essential program components found in California's Academic Performance Survey and current school reform efforts. In order to achieve these practices, educational leaders must assist schools with new possibilities. In order to achieve this goal, development of leadership capacity will be very important. We must assist leaders with the specific skills needed to implement the EPCs, manage change, utilize systems thinking, and use monitoring, accountability, and feedback to leverage change. Each of these leadership practices works interdependently to facilitate sustainable change within an organization.

# References

Alexander, C. D., Boyer, H., Brownson, A. B., Clark, C., Jennings, J., & Patrick, E. S. (2000). *Resource allocation practices and student achievement: An examination of district expenditures by performance level with interviews from twenty-one districts.* Retrieved from Southwest Educational Development Laboratory (SEDL) and Charles A. Dana Center, The University of Texas at Austin: http://www.sedl.org/pubs/catalog/items/pol24.html

American Institutes for Research. (2003). *California's public schools accountability act: Evaluation findings and implications. Evaluation brief.* Retrieved from http://www.edsource.org/?id=148&order=10315&pid=1570&auth= UlVSVFFNVE V3TWpNPTBVeE1qTXdPVEk1TlRVdw%3D%3D

American Institutes for Research. (2006). *Research summary supporting the nine essential program components and academic program survey*. CA: WestEd. Retrieved from http://www.shastacoe.org/uploaded/Dept/is/PI/aps _research_summary.pdf

Aspen Institute. (2007). *Beyond NCLB: Fulfilling the promise of our nation's children.* Retrieved from http://www.aspeninstitute.org/site/c.huLWJeMRKpH/b.938015 /k.40DA/Commission_on_No_Child_Left_Behind.htm

Browne-Ferrigno, T., Allen, L., Maynard, B., Jackson, J., Stalion, N., (n.d.). *Fullan's sustainability elements as a framework to assess the lasting impact of systemic leadership development efforts.* Retrieved May 7, 2009 from http://cnx.org/content/m14508/latest/brownefinal.pdf

California Department of Education. (2002a) *Public schools accountability act of 1999.* Retrieved from Education Code 52050-52050.5.

California Department of Education. (2002b). *Standards-based reform in California.* Retrieved from http://www.hobel.org/lwved/Standards-Based%20Reform%20in%20California.htm

California Department of Education. (2007a). *Exit criteria for II/USP*. Retrieved from http://www.cde.ca.gov/ta/lp/iu/exitcriteria.asp

California Department of Education. (2007b). *Glossary of terms*. Retrieved December 15, 2008 from http://www.cde.ca.gov/

California Department of Education. (2008a). *Academic program index reports*. Retrieved from http://www.cde.ca.gov/ta/ac/ap/documents/infoguide09.pdf

California Department of Education. (2008b). *Administrator training.* Retrieved from http://www.cde.ca.gov/fg/fo/profile.asp?id=1107

California Department of Education. (2008c). *Administrator training FAQs.* Retrieved from http://www.cde.ca.gov/fg/fo/r12/atp08faqs.asp

California Department of Education. (2008d). *Essential program components*. Retrieved from http://www.cde.ca.gov/ta/lp/vl/essentialcomp.asp

California Department of Education. (2008e). *Glossary of terms*. Retrieved November 25, 2008 from http://www.cde.ca.gov/ta/ac/ap/glossary08f.asp

California Department of Education. (2008f). *High Priority/interventions.* Retrieved from http://www.cde.ca.gov/ta/lp/

California Department of Education. (2008g). *High priority schools*. Retrieved from http://www.cde.ca.gov/ta/lp/hp/

California Department of Education. (2008h). *Historical overview of AB 75*, Retrieved http://www.cde.ca.gov/fg/fo/r12/atp07rfa.asp).

California Department of Education. (2008i). *Overview of California's 2008-2009 accountability progress reporting system*. Retrieved from http://www.cde.ca.gov/ta/ac/ap/documents/overview09.pdf

California Department of Education. (2008j). *Public schools accountability act.* Retrieved from http://www.cde.ca.gov/ta/ac/pa/

California Department of Education. (2008k). *Resources.* Retrieved from http://www.cde.ca.gov/sp/el/er/

California Department of Education. (2008l). *Response to instruction and intervention.* Personal communication. Retrieved from http://www.cde.ca.gov/nr/el/le/yr08ltr1114att.asp

California Department of Education. (2008m). *SAIT corrective actions, title 1.* Retrieved from http://www.cde.ca.gov/fg/fo/profile.asp?id=1179

California Department of Education. (2008n). *SAIT and SAIT corrective actions.* Retrieved from http://www.cde.ca.gov/ta/lp/sm/saitgen.asp

California Department of Education. (2008o). *School assistance and intervention teams.* Retrieved from http://www.cde.ca.gov/ta/lp/sm/sait.asp

California Department of Education. (2008p). *Academic program index reports*. Retrieved from http://www.cde.ca.gov/ta/ac/ap/documents/infoguide09.pdf

California Department of Education. (2008q). *Overview of California's 2008-2009 accountability progress reporting system*. Retrieved from http://www.cde.ca.gov/ta/ac/ap/documents/overview09.pdf

California Department of Education. (2008r). *Improvement tools.* Retrieved from http://www.cde.ca.gov/ta/lp/vl/improvtools.asp

*California Education Code 52050-52050.5.* Retrieved from http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=52001-53000&file=52050-52050.5

Carr, J. F. & Harris, D. E. (2001). *Succeeding with standards: Linking curriculum, assessment, and action planning*. Alexandria, VA: ASCD.

Center for California School Reform and Improvement. (2006). *Subgroup performance and school reform*. Retrieved from http://www.centerforcsri.org/index.php?option=com_content&task=blogsection&id=3&Itemid=5

Chladek, P. J. (2002). *Table discussion, national conference on teacher compensation and evaluation.* Chicago, IL. Retrieved from http://cpre.wceruw.org/conference/nov02/chladek.doc

Chrisman, V. (2004). Sustaining improved student test scores in formerly low performing schools. (Doctoral dissertation, University of California, Los Angeles, 2004).

Cornett, J., & Knight, J. (2008). *Research on coaching*. Retrieved from http://www.instructionalcoach.org/tools/Cornett_Knight_2008.pdf

Cotton, K. (1990). *Expectation and student outcomes. School improvement research series #7.* Retrieved from Northwest Regional Educational Laboratory. Portland, OR: http://www.nwrel.org/archive/sirs/4/cu7.html

Cuban, L., (2008, December). The perennial reform. Fixing schools time. *Phi Delta Kappan.* Retrieved from http://www.pdkintl.org/kappan/k_v90/k0812cub.htm

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership, 53*(6), 4-10.

Darling-Hammond, L. (1999). *Teacher learning that supports student learning: What teachers need to know*. Retrieved from http://www.edutopia.org/teacher-learning-supports-student-learning

Darling-Hammond, L., & McLaughlin. M. (1995, April). Policies that support professional development in an era of reform. *Phi Delta Kappan.* Retrieved from http://www.middleweb.com/PDPolicy.html

Darling-Hammond, L., Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession*. Retrieved from National Staff Development Council. Stanford University: http://www.nsdc.org/news/NSDCstudy2009.pdf

DuFour, R., & DuFour R. (2008, May 1-2). *Leading Professional Learning Communities*. Lecture presented for Riverside County Office of Education.

DuFour, R., DuFour R., Eaker, R., & Karhanek, G. (2004). *Whatever it takes*. Bloomington, IN: Solution Tree Press.

Educational Projects in Education (EPE) Research Center. (2004). *Professional development.* Retrieved from http://www.edweek.org/rc/issues /professional-development/

Education Trust. (2001). *Dispelling the myth.* Retrieved from http://www.exodusnews.com/education/education032.htm

Elmore, R. (1996) *Building a new structure for school leadership*. Washington D.C.: The Albert Shanker Institute.

Elmore, R. (2000) *Building a new structure for school leadership*. The Albert Shanker Institute. Retrieved from http://www.shankerinstitute.org/Downloads /building.pdf

Firestone, W., Mangin, M., Martinez, M., & Polovsky, T. (2004). *Content and coherence in district professional development*. Rutgers University Publication Series Number 3 page 2. Retrieved from http://www.eric.ed.gov/ERICDocs/data /ericdocs2sql/content_storage_01/0000019b/80/1b/a4/cc.pdf

Florian, J. (2000). *Sustaining education reform: Influential factors*. Mid-Continent Research for Education and Learning, Aurora, CO. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql /content_storage_01/0000019b/80/17/14/ae.pdf

Foltos, L. (n.d.) *Peer coaching: Changing classroom practice and enhancing student achievement.* Retrieved from Puget Sound Center for Teaching, Learning, and Technology: http://anon.us.innovativeteachers.us/Documents/peercoachinglf.pdf

Fullan, M. (2000). The three stories of educational reform. *Phi Delta Kappan.* Retrieved from http://www.pdkintl.org/kappan/kful0004.htm

Fullan, M. (2001). *Whole school reform: Problems and promises*. Retrieved from http://www.michaelfullan.ca/Articles_01/06_01.htm

Fullan, M. (2004). *Leadership and sustainability: Systems thinkers in action. Thousand* Oaks, Ca. Corwin Press.

Fullan, M. (2007). *Learning to lead change. Building system capacity.* Retrieved from http://www.michaelfullan.ca/resource_assets/ms_annotations/fullan3.pdf

Fullan, M. (2008). *The six secrets of change.* San Francisco, Ca: Josey-Bass.

Goe, L., (2007). *The link between student outcome and achievement. Retrieved from the* National Comprehensive Center for Teacher Quality: http://www.tqsource.org /link.php

Greenwald, R., Hedges, L. V., & Laine, R. D. (1996). The effect of school resources on student achievement. *Review of Educational Research, 66,* 361-396.

Hall, S. & Feltner, M. (2005). *Protection of Human Participants in Research: Policies and Procedures Manual.* Pepperdine University.

Hargreaves, A., & Fink, D. (2004, April). The seven principles of sustained leadership. *Educational Leadership, 61(7),* pages 8-13.

Harr, J., Parrish, T., Socias, M., & Gubbins, P. (2007). *California's Public Schools Accountability Act: Evaluation findings and implications.* Retrieved from American Institutes for Research: http://www.air.org/publications/documents/Final%20Year%202%20HP%20Report.pdf

Hatchuel, Tabernik, & Associates. (2008). *Evaluation Study of California's School Assistance and Intervention Team Process.* Berkley: CA. Hatchuel, Tabernik, and Associates. Retrieved from http://www.cde.ca.gov/ta/lp/sm/documents/saiteval08.pdf

Hattie, J. (2008). *Visible learning*. London: Routledge.

Haycock, K. (1998, Summer). Good Teaching Matters…. A Lot. *Thinking K-16, 3,* (2 A) Retrieved from Publication of The Education Trust: http://www2.edtrust.org/NR /rdonlyres/0279CB4F-B729-4260-AB6E-359FD3C374A7/0/k16_summer98.pdf

Hill, H., & Cohen, D. (2005). *Research points*. Washington, DC: American Educational Research Association. Retrieved from http://www.aera.net/uploadedFiles /Journals_and_Publications/Research_Points/RPSummer05.pdf

Ingersoll, R. M. (1999). The problem of underqualified teachers in American secondary schools. *Educational Researcher, 28*(2), 26–37.

Ingram, Alan J. (2005). No Child Left Behind: A study of policy, planning and program implementation in an urban district with high poverty schools. Ed.D. dissertation, The University of Oklahoma, United States--Oklahoma. Retrieved December 5, 2010, from Dissertations & Theses: Full Text. (Publication No. AAT 3163313).

Izumi, L.T. (2002). *They have overcome: High-poverty, high-performing schools in California.* San Francisco, Ca. Retrieved from Pacific Research Institute: http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage _01/0000019b/80/1a/82/96.pdf

Jefferson, A. L. (2005). Student performance: Is more money the answer*? Journal of Education Finance, 31*(2), 111-124.

Just for the Kids. (1995). Retrieved from http://www.nc4ea.org/index.cfm/e/areas_of _focus.core_practice_framework

Kowal, J., & Steiner, L. (2007). *Instructional Coaching.* Retrieved from The Center for Comprehensive School Reform and Improvement: www.centerforcsri.org

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research.* (8th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Lindsey, R., Robins, K., Terrell, R. (2003). *Cultural proficiency. A manual for school leaders*. Thousand Oaks, Ca: Corwin Press.

Marsh, J.A., Kerr, K.A., Ikemoto, G.S., Darilek, H., Suttorp, M., Zimmer, R.W., et al. (2005). *The role of districts in fostering instructional improvement.* Santa Monica, Ca: Rand Corporation. Retrieved from www.rand.org

Marzano, R. J., & Kendall, J. S. (1997). *The fall and rise of standards-based education: A national association of school boards of education (NASBE) issues in brief.* Aurora, CO: Mid-continent Research for Education and Learning. Retrieved from http://www.mcrel.org/PDF/Standards/5962IR_FallAndRise.pdf

Marzano, R. J. (2000). *A new era of school reform: Going where the research takes us.* Aurora, CO: Mid-continent Research for Education and Learning. Retrieved from http://www.mcrel.org/topics/products/81/

Marzano, R. J. (2003). *What works in schools: translating research into action.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results.* Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved from http://www.mcrel.org/product/212/

McMillan, J. H., & Schumacher, S. (2001). *Research in education.* (5th ed.). New York: Longman.

Mid-continent Research for Education and Learning (MCREL). (Ed.). (2000). *Including at-risk students in standards-based reform: A report on MCREL's Diversity Roundtable II.* Aurora, CO: Author. Retrieved from http://www.mcrel.org /topics/products/57/

Mid-continent Research for Education and Learning. (MCREL). (2003). *Leadership folio series: Sustaining school improvement.* Aurora, CO: Author. Retrieved from http://www.mcrel.org/topics/products/137/

Mid-continent Research for Education and Learning (MCREL). (2006). *Balanced leadership: school leadership that works. Managing change.* Denver, CO: MCREL.

National Council for Accreditation of Teacher Education. (2005a). *Research Supporting the Effectiveness of Teacher Preparation.* Retrieved from http://www.ncate.org /public/summaryData.asp?ch=48

National Council for Accreditation of Teacher Education. (2005b). *Research supporting the effectiveness of teacher preparation.* Retrieved from http://www.ncate.org/public/conc1.asp?ch=48

National Council for Accreditation of Teacher Education. (n.d.). *What makes a teacher effective?* Retrieved from http://www.ncate.org/public/teachereffective.asp?ch=48

National Commission on Excellence in Education. (1983). *A nation at risk*. Retrieved from http://www.ed.gov/pubs/NatAtRisk/recomm.html

National Partnership for Teaching in At-Risk Schools. (2005). Washington D.C. Retrieved from NPTARS@learningpt.org

Newmann, F. N., Smith, B., Allensworth, E., & Bryk, A. (2001). *School instruction program coherence: Benefits and challenges*. Chicago: IL. Consortium on Chicago School Research.

North Central Regional Educational Laboratory (NCREL). (1994). *Summary of goals 2000.* Retrieved from http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw0goals.htm

Northwest Regional Educational Lab. (1990). *Effective schooling practices: A research synthesis 1990 update.* Portland: Northwest Regional Educational Lab.

Odden, A., & Archibald, S. (2000). Reallocating resources to support higher student achievement: An empirical look at five sites. *Journal of Education Finance, 25,* 545-564.

Office of the Governor. (2002). *Governor Davis announces governor's performance awards.* Retrieved June 29, 2009 from http://governor.ca.gov/state/govsite/gov_htmldisplay.jsp?BV_SessionID=@@@@1044168343.1246209646@@@@&BV_EngineID=ccccadegfmdjifmcfngcfkmdffidfnf.0&sFilePath=%2Fgovsite%2Fpress_release%2F2002_07%2F20020729_PR02413_Performance_Awards.html&sTitle=GOVERNOR+DAVIS+ANNOUNCES+GOVERNOR'S+PERFORMANCE+AWARDS+7%2F29%2F2002&sSubCat=null&sCatTitle=Press+Release&iOID=34843

O'Neill, D. M. (2003). Exploration of high-performing, high-poverty California elementary schools. Ed.D. dissertation, University of La Verne, United States – California. Retrieved December 5, 2009 from Dissertations & Theses: Full Text. (Publication No. AAT 3096260).

Parish, T., Bitter, C., Perez, M., & Gonzalez, R. (2005). *Evaluation study of the immediate intervention/underperforming schools program of the public schools accountability act of 1999.* California Department of Education. Retrieved from http://www.air.org/publications/documents/IIUSP%20Report%20FINAL%209-30-05.pdf

Peske, H., & Haycock, K. (2006). *Teaching inequality*. Retrieved from Education Trust: http://www2.edtrust.org/NR/rdonlyres/010DBD9F-CED8-4D2B-9E0D-91B446746ED3/0/TQReportJune2006.pdf

Ravitch, D. (1995). *National standards in American education: A citizen's guide.* Washington, DC: Brooking Institute.

Reeves, D. (2004). *90/90/90 study*. Retrieved from http://www.leadandlearn.com/90-90-90.

Reeves, D. (2008). *Reframing teacher leadership.* Alexandria, VA: ASCD.

Reeves, D. (2009). *Leading change in your school.* Alexandria, VA: ASCD.

Reksten, L. (2009). *Sustaining extraordinary student achievement.* Thousand Oaks, Ca:

Corwin Press.

Rhode Island Center on Education Policy. (2008). *Lessons from the classroom level. Federal and state accountability in Rhode Island.* Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/42/ca/5d.pdf

Schmoker, M. (2006). *Results now*. Alexandria, VA: ASCD.

Schmoker, M., Marzano, R. (1999, March). Realizing the promise of standards-based education. *Educational Leadership, 56* (6), 17-21. Retrieved from http://www.ascd.org/publications/educational_leadership/mar99/vol56/num06/Realizing_the_Promise_of_Standards-Based_Education.aspx

Senge, P. (1990). *The fifth discipline. The art and practice of the learning organization*. New York, NY: Doubleday.

Showers, B. (1984). *School improvement through staff development.* University of Oregon.

Skandera, H. M., & Sousa, R. (2002). *Does improved student achievement require increased resources?* Retrieved from http://www.heartland.org/education/feb02/resources.ht

Stiggins, R. J. (2002). Assessment Crisis: The absence of assessment *for* learning. *Phi Delta Kappan.* Retrieved from http://www.pdkintl.org/kappan/k0206sti.htm

Stiggins, R. J. (2005). Assessment for learning: Building a culture of confident learners. In R. DuFour, R. Eaker & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 65-83). Bloomington, IN: National Education Service.

Togneri, W. (2003). *Beyond islands of excellence*. Learning First Alliance. Retrieved from http://www.ccsso.org/content/PDFs/Beyond%20Islands%20of%20Excellence.pdf

United States Department of Education. (2004). *Four pillars of NCLB.* Retrieved from http://www.ed.gov/nclb/overview/intro/4pillars.html

Vergsten, D.A.,& R.A. King. (1998). The relationship between school spending and student achievement: A review and analysis of 35 years of production function research. *Journal of Education Finance, 24*(2), 243-262.

Waters, T. (November 7-9, 2003) *School leadership that works. What we can learn from 25 years of research.* CCSSO Fall Policy Conference, Indianapolis, IN. Retrieved from http://www.ccsso.org/content/pdfs/APF03SchoolLeadershipMcREL.pdf.

Waters, T., & Cameron, G., (2007). *Balanced leadership: Connecting vision with action.* Denver, CO: MCREL.

Wells, S., Pearson, D., & Sousa, L. (2006). *Show me the research: A brief review of the underlying factors in the nine essential program components.* Lake Elsinore: CA. Key Data Systems. Retrieved from http://www.rcoe.k12.ca.us/materials /index.html

Whitehurst, G. J. (2003). *Research on teacher preparation and professional development*. White House Conference on Preparing Tomorrow's Teachers. Retrieved from http://www.ed.gov/admins/tchrqual/learn /preparingteachersconference/whitehursthtml

Williams, T., Perry, M., Studier, C., & Brazil, N. (2006). *Similar students, different results*. Retrieved from Mountain View, Ca. EdSource: http://www.edsource.org/ assets/files/SimStu05.pdf

Wilson, S., Floden, R., & Ferrini-Mundy, J. (2001). *Teacher preparation research: Current knowledge, gaps, and recommendations.* Retrieved from Michigan State University: http://depts.washington.edu/ctpmail/PDFs/TeacherPrep-WFFM-02-2001.pdf

# Appendix A

## Superintendent or Designee permission to Conduct Study

TO: _____

FROM: Molly McCabe

DATE: June 23, 2009

SUBJECT: Superintendent or Designee Permission to Conduct Study

I would like your permission to conduct a research study at _____Elementary School as part of my doctoral dissertation at Pepperdine University. I am researching elementary schools that successfully exited state monitoring (SAIT) and demonstrated sustained achievement growth on California's API for the two years following their exit.

The purpose of the study is to identify successful practices at schools that were able to sustain positive API growth after exiting state sanctions. The study will focus on principals' perceptions regarding specific practices that have contributed to sustained achievement growth. Once key practices are identified, the themes will provide recommendations for other schools striving to sustain academic achievement growth. Your district's participation in the study will contribute to knowledge and practices surrounding sustaining academic achievement growth in California elementary schools. California identified 83 elementary schools to enter state monitoring between 2002 and 2004. Analysis of statewide API data indicate 26 of the 83 elementary schools exited SAIT by 2006 and sustained positive achievement growth on California's API for two years following exit from state monitoring. I selected _____ Elementary School as a possible site for this study because it sustained a positive API point growth in the two years after exiting SAIT.
If the school's principal agrees to participate, the principal will be asked to participate in a 45-60 minute interview regarding the school's practices that contributed to sustained achievement growth.

The interview will take place over the phone at the convenience of the site principal. I will tape record the interviews and transcribe the notes to ensure accuracy. Participant's identities will remain confidential and the interview notes and recordings will not be shared with others. The interview notes will be examined for common themes and used to identify principals' perceptions of practices that contribute to sustainable growth.

Participation in this study is voluntary. Participants who decide to participate are free to withdraw their consent or discontinue participation at any time. A copy of the informed consent and the interview protocol are attached for your information...

Please sign and return your approval by July 6, 2009. If you are unable to respond by that date, please send this approval as soon as possible.
Please return one copy of this signed form to:

Molly McCabe
xxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxx.

You may also fax the signed form to xxx-xxx-xxxx or email it to xxxxxxxxx@xxxxxxxxx. If you have any questions regarding this study please feel free to contact me at xxx-xxx-xxxx or xxxxxxx@xxxx.xx. If you have any additional questions or concerns regarding this study, you may also contact the researcher's supervisor Dr. Linda Purrington at 949 223-2568 or linda.purrington@pepperdine.edu.

Your signature indicates that you have read and understood the information provided above, that you willingly agree for me to invite your site and staff to participate in this study, and that you have received a copy of this form.

Respectfully,

_____
Molly McCabe

Attachments:
Copy of Superintendent or Designee Permission to Conduct Study;
Informed Consent for Participation in Research Activities;
Principal Interview Protocol and Questions

I hereby consent to my school district's participation in the research described above.

_____
School District

_____
Superintendent or Designee Signature

_____
Please Print Superintendent or Designee's Name

_____
Date

# Appendix B

## Cover Letter for Principal informed Consent

TO:

FROM: Molly McCabe

DATE:

SUBJECT: Research Request

I am researching elementary schools that successfully exited state monitoring (SAIT) and demonstrated sustained achievement growth on California's API for the two years following their exit as part of my doctoral dissertation at Pepperdine University. The purpose of the study is to identify successful practices at schools that were able to sustain positive API growth after exiting state sanctions. The study will focus on principals' perceptions regarding specific practices that have contributed to sustained achievement growth. Once key practices are identified, the themes will provide recommendations for other schools striving to sustain academic achievement growth. Your school's participation in the study will contribute to knowledge and practices surrounding sustaining academic achievement growth in California elementary schools.

California identified 83 elementary schools to enter state monitoring between 2002 and 2004. Analysis of statewide API data indicate 26 of the 83 elementary schools exited SAIT by 2006 and sustained positive achievement growth on California's API for two years following exit from state monitoring. I selected Elementary School as a possible site for this study because it sustained a positive API point growth in the two years after exiting SAIT. If you agree to participate, you or your designee will be asked to participate in a 45-60 minute telephone interview regarding the school's practices that contributed to sustained achievement growth. The interview will take place over the phone and scheduled at your convenience. I will tape record the interviews and transcribe the notes to ensure accuracy. Participant's identities will remain confidential and the interview notes and recordings will not be shared with others. The interview notes will be examined for common themes and used to identify principals' perceptions of practices that contribute to sustainable growth.

Participation in this study is voluntary. If you decide to participate you are free to withdraw your consent or discontinue participation at any time. A copy of the informed consent and the interview protocol are attached for your review.

I will contact you in the next week to answer any questions you may have and to schedule an interview time.

You will be asked to return one copy of the signed consent form prior to the telephone interview to:

Molly McCabe
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

You may also fax the signed form to xxx-xxx-xxxx or email it to xxxxxxxxxxxx@xxxxxxx If you have any questions regarding this study please feel free to contact me at xxx-xxx-xxxx or xxxxxxxx@xxxxxxxx. If you have any additional questions or concerns regarding this study, you may also contact the researcher's supervisor Dr. Linda Purrington at 310-258-2568 or Linda.purrington@pepperdine.edu.

Respectfully,

_____
Molly McCabe

Attachments:

Informed Consent for Participation in Research Activities;
Principal Interview Protocol and Questions.

# Appendix C:

## Request to Participate Phone Call Protocol

I will follow the following steps to answer the following questions when contacting a principal to schedule an interview.

1. Review why their school was selected and the purpose of the study.
2. Information regarding the interview procedures found in the informed consent.
3. Answer any questions they have.
4. Ask to schedule an interview.
5. Ask participants to sign and return the informed consent prior to the interview.

Appendix D

Informed Consent for Participation in Research Activities

Participant: _____

Principal Investigator: Molly McCabe

Title of Project: Sustaining School Improvement after State Monitoring in California's Elementary Schools

1. I, _____ , agree to participate in the dissertation research study conducted by doctoral student Molly McCabe, from the Educational Leadership and Policy Program at Pepperdine University. I understand that I may contact Ms. McCabe's supervisor Dr. Linda Purrington at 310-258-2568 or linda.purrington@pepperdine.edu if I have any questions or concerns regarding the study.

2. The overall purpose of this research is to identify the practices perceived as contributing to sustainable achievement growth in former state monitored (SAIT) schools with the highest API growth as reported by the schools' principals. I have been asked to participate in this study because the elementary school I am assigned to has demonstrated consistent API growth for the two years after exiting state monitoring.

3. I understand that my participation will involve one 45-60 minute interview regarding school wide practices that sustain academic achievement growth.

4. My participation in the study will be from the date listed above to December, 30, 2009. The interview shall be conducted over the phone and tape recorded in order to ensure the accuracy of the interview notes. The researcher will convert the audio files to written text and will use the interview content to identify principal's perceptions of practices that contribute to sustainability of achievement growth.

5. I understand that the possible benefits to myself or society from the research are increased knowledge about practices surrounding sustaining academic achievement growth in California elementary schools. I understand that I may not benefit at all from my participation.

6. I understand that the researcher will work with me to ensure there is minimal risk, discomfort, and inconvenience, identifying and addressing any concerns I may have. I understand that harm to human subjects is not limited to physical injury, and that there are certain risks and discomforts that might be associated with research. These risks include: psychological, social, economic, and legal risks. Physical risks may be fatigue. Psychological risks may include boredom,

embarrassment, and anxiety. I believe the risks of this study are minimized and are reasonable in relation to the anticipated benefits of the study. I understand that I have the right to refuse to answer any question, and to discontinue participation at any time.

7. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the project or any activity at any time without penalty or loss of benefits to which I am otherwise entitled. I also understand that the researcher may find it necessary to end my participation in this study.

8. I understand that the investigator(s) will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project. The confidentiality of my records will be maintained in accordance with applicable state and federal laws. Under California law, there are exceptions to confidentiality, including suspicion that a child, elder, or dependent adult is being abused, or if an individual discloses an intent to harm him/herself or others.

9. If the findings of the study are published or presented to a professional audience, no personally identifying information will be released. I understand that the interviews will be tape recorded only with my permission prior to each interview. The raw data gathered will be stored on the researcher's personal computer and transcribed interviews will be stored in locked file cabinets to which only the investigator will have access. The possibility exists that the data may be used in future research. If this is the case, the data will be used without any personally identifying information so that I cannot be identified, and the use of the data will be supervised by the investigator listed above. The raw data will be maintained in a secure manner for three years at which time the raw data will be destroyed. I do not anticipate the need to share uncoded data with others, and would do so only with your permission.

10. I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Molly McCabe at xxx-xxx-xxxx or xxxxxxx@xxxxxxx, if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Dr. Linda Purrington, Pepperdine University Graduate School of Education and Psychology, 6100 Center Dr. 5th Floor, Los Angeles CA, 90045. If I have questions about my rights as a research participant, I may contact Dr. Doug Leigh, chairperson of the Pepperdine University Graduate and Professional Schools Institutional Review Board (GPS IRB) at (310) 568-2389.

11. I will be informed of any significant new findings developed during the course of my participation in this research which may have a bearing on my willingness to continue in the study.

12. I understand I will not receive any compensation, financial or otherwise, for participating in this study.

13. I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand.

I hereby consent to participate in the research described above.

---

Participant's Signature

---

Date

---

Witness

---

Date

I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

---

Principal Investigator

---

Date

# Appendix E

## Principal Interview Protocol and Questions

I will review the following information prior to our interview.

You have been chosen for this study because this elementary school has demonstrated consistent API growth during the two years after exiting state monitoring.

I will be conducting research regarding your perception of practices that contribute to sustainable achievement growth in former SAIT schools.

I will be conducting one 45-60 minute interview with you. I will record notes of our conversation during the interview and the interview will be tape recorded with your permission.

I will not be excessive in demands and will be sensitive to your needs. I will attempt to be the least disruptive as possible.

The findings will be published and shared with the educational community.

I assure you of confidentiality that names will not be used in the manuscript, and individual identities will be disguised through coding of data. No one will have access to the transcriptions, recordings, and field notes except me.

Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with the researcher or your school or district.

You may withdraw your consent at any time and discontinue participation without penalty.

Original documents and recordings of interviews will be safeguarded and not shared with others. They will be stored for three years, after which they will be destroyed.

Do you have any questions before we begin?

# Interview Questions

The purpose of this interview is to explore your perceptions regarding your school's practices that contribute to sustained achievement growth on California's API. During this interview I would like you to think about the specific practices implemented at your school that helped your school sustained achievement growth.

General Background Information:

1. How many years have you been the principal at this school? Were you at the school site during the SAIT process? If so, what was your position during SAIT?

2. Have there been any major shifts in funding or other resources besides the loss of SAIT funds and the current normal budget fluctuation since exiting SAIT? If so, what were they and how have they effected achievement growth?

3. What external support has been provided to your school that has contributed to sustained achievement growth?

Essential Program Components of the Academic Program Survey:

4. Which Essential Program Components from the Academic Program Survey have contributed most to sustainability of achievement growth? How did they contribute?

5. Are there any elements of the Academic Program Survey that you have not substantially implemented at your school? If so, which ones and why?

Sustainability:

6. What were your school wide goals from last year? What was the process for selecting these? How did you monitor progress? How often did monitoring occur? What did you learn from your analysis?

7. What role does your leadership team play in improving student achievement? Who is

part of your leadership team and how are you developing leadership capacity with your staff?

8. How are learning expectations communicated to teachers, students and families and how do you monitor progress toward these objectives?

9. In your school, what practices contributed most to sustained achievement growth at your school? What practices were the least helpful?

10. What advice would you give another principal regarding how you sustain academic achievement growth?

# Appendix F

## Thank you Letter

To: XXXXXXXXXXX
From: Molly McCabe
Date: TBD
Subject: Thank You Letter

Dear XXXXXXXX,

Thank you for your participation in my doctoral study on sustainability of achievement growth in elementary schools after exiting state monitoring. The analysis of the principal interviews identified several significant themes regarding sustainability that you may be interested in. The interviews revealed each of the schools focused on deep implementation of the Essential Program Components from the Academic Program Survey, creating coherent systems around a common goal, facilitating culture change, and regular accountability, monitoring, and feedback.

Thank you again for you willingness to participate in this research study. It was a pleasure meeting you and hearing your perspective on improving student achievement.

Sincerely,

Molly McCabe

Appendix G

Academic Performance Index Growth Data

| Research ID Number | API Growth in first year after exiting state monitoring | API Growth in second year after exiting state monitoring | Two year positive API growth after exiting state monitoring | Two year total API growth after state monitoring |
|---|---|---|---|---|
| 1 | -32 | 33 | 0 | 1 |
| 2 | -24 | -38 | 0 | -61 |
| 3 | -28 | 18 | 0 | -10 |
| 5 | -25 | 10 | 0 | -15 |
| 7 | 46 | 19 | 65 | 65 |
| 8 | 6 | -48 | 0 | -42 |
| 10 | 36 | -38 | 0 | -2 |
| 11 | -10 | 5 | 0 | -5 |
| 12 | 41 | 30 | 71 | 71 |
| 14 | 29 | 43 | 72 | 72 |
| 15 | -1 | 19 | 0 | 18 |
| 16 | -32 | 8 | 0 | -24 |
| 17 | 12 | 34 | 46 | 46 |
| 18 | -5 | -3 | 0 | -8 |
| 19 | 2 | -9 | 0 | -7 |
| 20 | 44 | 7 | 0 | -8 |
| 21 | -2 | -11 | 0 | -13 |
| 22 | 16 | -11 | 0 | 5 |
| 24 | 17 | 22 | 39 | 39 |
| 25 | -32 | 32 | 0 | 0 |
| 26 | -8 | 9 | 0 | 1 |
| 29 | 21 | -44 | 0 | -23 |
| 31 | 79 | 7 | 86 | 86 |
| 33 | 47 | -6 | 0 | 41 |
| 34 | 24 | -4 | 0 | 20 |
| 35 | -21 | 20 | 0 | -1 |
| 36 | 18 | 15 | 33 | 33 |
| 37 | 36 | 48 | 84 | 84 |
| 38 | -23 | -29 | 0 | -52 |
| 39 | 24 | 38 | 62 | 62 |
| 40 | 7 | 47 | 54 | 54 |
| 41 | 3 | 37 | 40 | 40 |
| 42 | 8 | 37 | 45 | 45 |
| 43 | 25 | 20 | 45 | 45 |
| 44 | -17 | 46 | 0 | 29 |
| 45 | 3 | 17 | 20 | 20 |

*(table continues)*

| Research ID Number | API Growth in first year after exiting state monitoring | API Growth in second year after exiting state monitoring | Two year positive API growth after exiting state monitoring | Two year total API growth after state monitoring |
|---|---|---|---|---|
| 47 | 6 | 44 | 50 | 50 |
| 48 | -7 | 26 | 0 | 19 |
| 50 | 44 | 15 | 59 | 59 |
| 58 | 6 | 14 | 20 | 20 |
| 59 | -20 | -22 | 0 | -44 |
| 61 | 14 | 2 | 16 | 16 |
| 62 | 1 | 12 | 13 | 13 |
| 63 | 11 | 12 | 23 | 23 |
| 64 | 30 | 10 | 40 | 40 |
| 66 | 10 | -8 | 0 | 2 |
| 67 | 18 | 21 | 39 | 39 |
| 68 | 21 | 10 | 31 | 31 |
| 69 | 18 | 21 | 39 | 39 |
| 71 | 17 | -65 | 0 | -48 |
| 72 | 54 | -27 | 0 | 27 |
| 74 | -25 | 13 | 0 | -12 |
| 75 | 14 | 2 | 16 | 16 |
| 78 | 4 | 24 | 28 | 28 |
| 79 | -20 | 7 | 0 | -13 |
| 80 | -6 | -13 | 0 | -29 |
| 86 | 30 | -34 | 0 | -4 |
| 88 | 21 | -18 | 0 | 3 |

Appendix H

Adequate Yearly Progress English Language Arts and Mathematics Growth

| Research ID Number | Year 1 increase in percent proficient on ELA AYP | Year 2 increase in percent proficient on ELA AYP | 2 year increase on ELA AYP after exiting state monitoring | Year 1 increase in percent proficient on math AYP | Year 2 increase in percent proficient on math AYP | 2 year increase on math AYP after exiting state monitoring |
|---|---|---|---|---|---|---|
| 1 | -3.5 | 7.7 | 4.7 | -3.3 | 3 | -0.3 |
| 2 | -0.4 | -7.6 | -8 | 6.3 | 2.2 | 8.5 |
| 3 | -7.3 | 4.8 | -2.5 | -1.3 | 1.7 | 0.1 |
| 5 | 0.7 | 2.1 | 2.8 | 0.2 | -10.8 | -10.6 |
| 7 | -1 | 3.1 | 2.1 | 4.1 | 0.9 | 5 |
| 8 | 3.3 | -12.8 | -9.5 | -0.4 | 2.7 | 2.3 |
| 10 | 7 | -7 | 0 | 17.2 | 0.3 | 17.1 |
| 11 | -4 | 1 | -3 | 0 | 0 | 0 |
| 12 | 7 | 9.9 | 16.5 | -3.8 | -1.9 | -5.7 |
| 14 | 3.9 | 13.4 | 17.3 | -0.2 | 4 | 3.8 |
| 15 | 2.1 | -1.3 | 0.8 | 1.3 | 4.7 | 6 |
| 16 | -6.3 | 7.1 | 0.8 | 14.6 | -12.4 | 1.5 |
| 17 | 3.9 | 0 | 3.9 | -3.8 | 9.2 | 5.4 |
| 18 | -1.5 | 0.6 | -0.9 | 22 | -1.9 | 20.1 |
| 19 | 1.7 | -7.7 | -6 | -1.8 | -0.5 | -2.3 |
| 20 | 4.6 | 3.9 | 8.5 | 18.4 | -6.7 | 11.7 |
| 21 | -0.1 | 1.2 | 1.1 | 5.4 | -5.4 | 0 |
| 22 | 5.9 | -4.1 | 1.8 | 7.1 | -5.3 | 1.8 |
| 24 | 1 | 2.5 | 3.5 | -3.3 | -3.7 | -7 |
| 25 | -5.3 | 5.1 | -0.2 | 6.1 | -7.6 | -1.5 |
| 26 | -1.3 | 3.1 | 1.8 | 13.7 | 1.9 | 15.6 |
| 29 | 4.6 | -8 | -3.4 | -0.9 | 3.6 | 2.7 |
| 30 | 6.8 | -1.5 | 5.3 | 6.1 | -2.2 | 3.9 |
| 31 | 13.4 | 1.8 | 15.2 | 5.5 | 0 | 5.5 |
| 33 | 9.6 | 0.2 | 9.8 | 9.9 | 9.5 | 19.4 |
| 34 | 6.8 | -3.4 | 3.4 | 1.7 | 13.6 | 15.3 |
| 35 | -5.6 | 4.6 | -1 | -2.6 | 9.9 | 7.5 |
| 36 | 0.8 | 2.5 | 3.3 | 6.9 | -3.6 | 2.8 |
| 37 | 8.5 | 4.1 | 12.6 | 7.2 | 11.7 | 18.9 |
| 38 | -1.3 | -3.7 | -5 | 0 | 0 | 0 |
| 39 | 10.7 | 6.5 | 17.2 | -4.4 | 5.7 | 1.3 |
| 40 | -1.3 | 4 | 2.7 | 2.2 | 2.2 | 4.4 |
| 41 | 7.2 | 0 | 7.2 | -2.3 | 9.9 | 7.6 |
| 42 | 1.6 | 9.6 | 11.2 | 4.4 | 9.4 | 13.8 |

*(table continues)*

| Research ID Number | Year 1 increase in percent proficient on ELA AYP | Year 2 increase in percent proficient on ELA AYP | 2 year increase on ELA AYP after exiting state monitoring | Year 1 increase in percent proficient on math AYP | Year 2 increase in percent proficient on math AYP | 2 year increase on math AYP after exiting state monitoring |
|---|---|---|---|---|---|---|
| 43 | 1.5 | 4.4 | 5.9 | -2.6 | 5.1 | 2.5 |
| 44 | -5.2 | 4.3 | -0.9 | -10.4 | 1.5 | -8.9 |
| 45 | 1.7 | 1.7 | 3.4 | 7.9 | -0.9 | 7 |
| 47 | -0.7 | 4.7 | 4 | 5.1 | 2.9 | 8 |
| 48 | -3 | 7.3 | 4.3 | 3.4 | -2.5 | 0.9 |
| 50 | 6.9 | -2.4 | 4.5 | -4.4 | 4.7 | 0.3 |
| 58 | -1.4 | 5.5 | 4.1 | 17.6 | 9.4 | 27 |
| 59 | -8 | -0.3 | -8.3 | 0.4 | 3.6 | 4 |
| 61 | 2.2 | -1.9 | 0.3 | -0.9 | 6.5 | 5.6 |
| 62 | -4.1 | 2.3 | -1.8 | 10 | -5.6 | 4.4 |
| 63 | 5 | -2.3 | 2.7 | 4.4 | 0.8 | 5.2 |
| 64 | 0.9 | 3.4 | 4.3 | 6.7 | 1 | 7.7 |
| 66 | 4 | -2.8 | 1.2 | 4.7 | 4.6 | 9.3 |
| 67 | 4.5 | 2.4 | 6.9 | 1.1 | -3.3 | -2.2 |
| 68 | 7.8 | -0.8 | 7 | 12 | 0.9 | 12.9 |
| 69 | 7.6 | -4.8 | 2.8 | 0.6 | 11.6 | 12.2 |
| 72 | 14.9 | -2.5 | 12.4 | 14 | 10.1 | 24.1 |
| 74 | -0.6 | -2.5 | -3.1 | 1.6 | 1.2 | 2.8 |
| 75 | 3.4 | 1.1 | 4.5 | 15.4 | 1.3 | 16.7 |
| 78 | 0.9 | 1.1 | 2 | -5.5 | -2.3 | -7.8 |
| 79 | -1.7 | -4.2 | -5.9 | 1 | 5.4 | 6.4 |
| 80 | 10.9 | 4.7 | 15.6 | 2.8 | -1.3 | 1.5 |
| 86 | 6.1 | -2.5 | 3.6 | 4.4 | 5.1 | 9.5 |
| 88 | 6.9 | -5 | 1.9 | 2.6 | -3.3 | 0.1 |

Appendix I

Interview Summary

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Changes in leadership can hinder sustainability | How many years have you been the principal at this school? Were you at the school site during the SAIT process? If so, what was your position during SAIT? | All principals have been at the school for at least five years. All of the principals were at the school during the SAIT process. |
| Lack of funding or resources can hinder sustainability | Have there been any major shifts in funding or other resources besides the loss of SAIT funds and the current normal budget fluctuation since exiting SAIT? If so, what were they and how have they effected achievement growth? | All of the schools have encountered loss of state and federal funding due to California's current budget crisis. Two of the schools are currently QUIA schools, one school formally received a Title 7 grant and one school mentioned receiving ACES funding. |
| Strong district leadership, support and policies | What external support has been provided to your school that has contributed to sustained achievement growth? | All received external support from their district or external consultants. The external support included: Professional development, coaching, demonstration lessons, planning, and monitoring and feedback. Two schools hired external consultants, two schools utilized the county office, and two schools mentioned district support.<br><br>Two of the schools mentioned the district resources like assessments and data management as being helpful. |

*(table continues)*

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Continuous deep implementation of the nine EPCs which includes a coherent instructional program, maximized use of time, skillful leadership, coherent professional development, collaboration, and coaching, data driven decision making, and fiscal coherence assists with sustainability | Which Essential Program Components from the Academic Program Survey have contributed most to sustainability of achievement growth? How did they contribute? | All schools stated they have substantially implemented all of the EPCs and have continued their implementation after SAIT. When asked which EPC contributed most to achievement growth, each principal gave a different answer: interventions, instruction, and two identified collaboration.<br><br>All of the schools identified improving instructional practices or collaboration as key practices for sustaining achievement growth. They each focused on a different instructional practice but they had a clear instructional focus and expectation that everything centered around. One school mentioned leveling for English language development. |
| Coherent programs structures and policies | Are there any elements of the Academic Program Survey that you have not substantially implemented at your school? If so, which ones and why? | All of the schools had sustained implementation of all of the EPCs. |

*(table continues)*

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Collective problem solving, goal setting, reflection, and learning | What were your school wide goals from last year? | All of the schools were focused on achieving AYP targets in their school plans. The goals they all worked on were related to improving instruction. Examples include: Direct instruction, strategies to engage all learners, research based instructional practices, clear learning objectives, structure student talk, culturally responsive instruction and cultural proficiency, instructional delivery, Bloom's Taxonomy, and GLAD. Each school has large numbers of English learners so their main focus was on improving instructional practices in order to increase student achievement for all learners and closing the achievement gap. |
| Commitment to results and continuous improvement | What was the process for selecting these? How did you monitor progress? How often did monitoring occur? What did you learn from your analysis? | All of the schools used data regularly. Data was used to identify goals and priorities, and to monitor progress toward their goals. Data analysis focused on individual student needs and the school's or grade level team's response. |

*(table continues)*

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Capacity building and leadership development along with distributed leadership | What role does your leadership team play in improving student achievement? Who is part of your leadership team and how are you developing leadership capacity with your staff? | All of the schools had a leadership team that consisted of team leaders from grade level and various support personnel<br>All of the leadership team discussed schools goals, monitored data, and engaged in problem solving and discussion.<br>One of the schools indicated the leadership team played a large role in their school.<br>All of the schools were focused on building the capacity of all of their staff members through professional development and coaching.<br>Two of the schools indicated that developing their leadership team would be an area to work on. |

*(table continues)*

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Culture focused on learning and high expectation for student learning | How are learning expectations communicated to teachers, students and families and how do you monitor progress toward these objectives? | <u>Parents:</u><br>All schools communicated expectations to parents through parent nights, conferences, written documents, and parent committees.<br>2 schools indicated that was a current area of need<br><u>Teachers:</u><br>All of the schools communicated expectations through professional development and collaboration, and monitoring and feedback.<br>All of the schools regularly used data to monitor student learning. They all conduced data analysis days where teachers were provided release time to analyze benchmark assessments and identified priorities, goals, and interventions.<br><br>Data analysis was at the individual student level at all of the schools.<br><br>All of the schools regularly examined data during their collaborative time in addition to their data analysis release days.<br>All of the schools used data to prioritize and set goals.<br><u>Students:</u><br>Three of the schools mentioned expecting learning objectives to be posted for students. |

*(table continues)*

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Principal's perspectives on practices that contribute to sustained student achievement growth | In your school, what practices contributed most to sustained achievement growth at your school? | Each of the schools identified different factors: However, the dominant themes were instruction, collaboration, monitoring and feedback, and changing culture.<br><br>School One: High expectations for teacher and student success, changing the culture so that teachers believed they could make a difference, monitoring and feedback, and outside support.<br><br>School Two: Changed the culture from teacher based to student based, focus on student learning with Bloom's Taxonomy and GLAD strategies.<br><br>School Three: A strong focus on instruction. Time for articulation.<br><br>School Four: Collaboration, accountability and feedback, and clear expectations |
| | What practices were the least helpful? | Only two schools identified practices that were not helpful. Both of these schools selected the 30 minutes of additional intervention in ELA as not being a power practice at their school. |

*(table continues)*

| Sustainability Theme | Interview Question | Summary of Findings |
|---|---|---|
| Advice for other principals regarding sustainability | What advice would you give another principal regarding how you sustain academic achievement growth? | All the schools recommended having a clear narrow focus. They all had one or two priorities that were selected through data analysis that they stayed focused on over time and connected all of their actions around. They all prioritized around a few critical areas.<br>They all mentioned the importance of accountability, monitoring, feedback, coaching, and support.<br>Other key points identified were providing opportunities for teachers to collaborate and learn from each other, focus on improving instruction, focus on outcomes and what you can control, being there for your staff, helping them prioritize, and celebrate success.<br>One mentioned the importance of listening and being there for the staff and celebrating successes. |